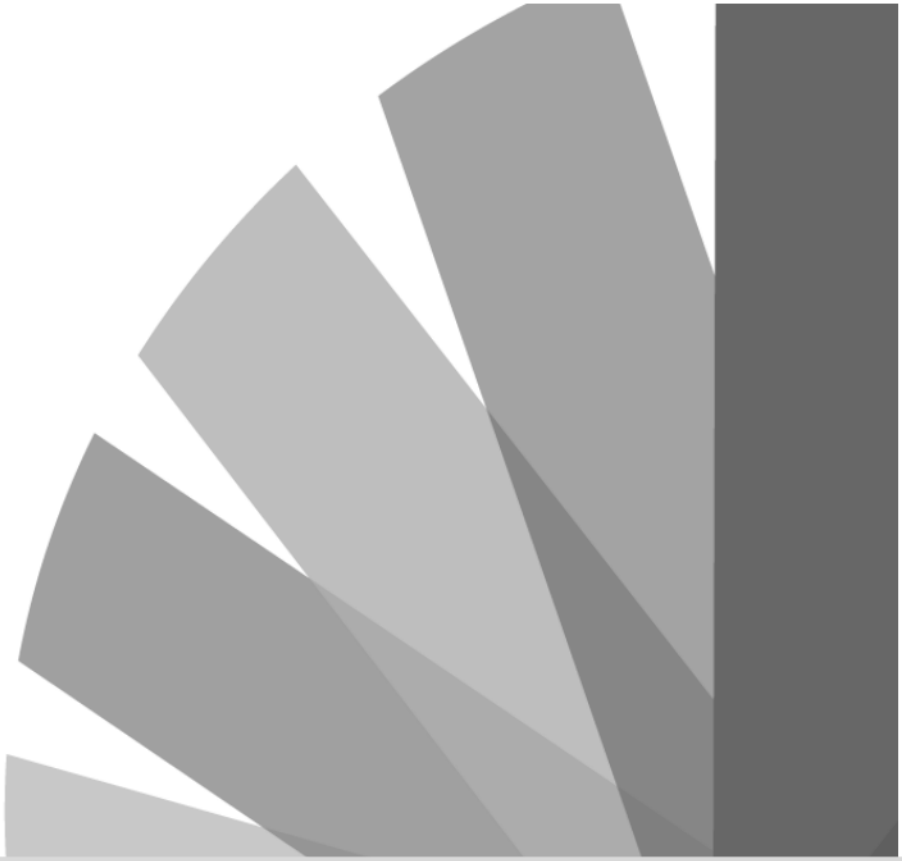
ENERGY STEPCODE

BUILDING BEYOND THE STANDARD



Zachary May
A/Executive Director
Building and Safety Standards Branch

UDI Webinar – Update on Energy Step Code
and Carbon Pollution Standards
September 13, 2021





Upcoming Changes to Provincial Building Regulations:

1. 20% improvement to energy efficiency in 2022 (Energy Step Code)

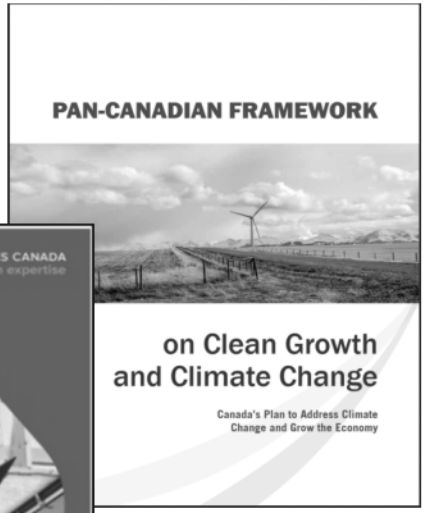
2. Carbon pollution standards for new construction (New)

Provincial & National Policy



CleanBC (2018)

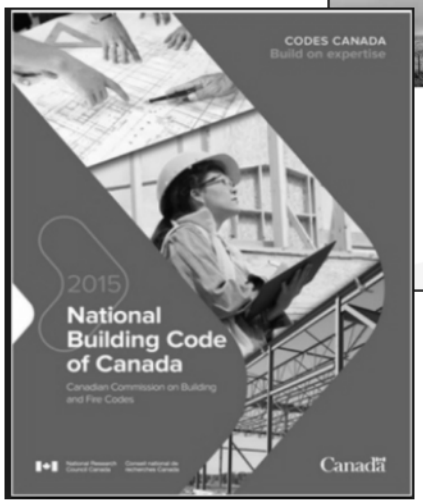
Net Zero Energy Ready by 2032
in BC Building Code



Pan-Canadian Framework (2016)

Net Zero Energy Ready by 2030 in
National Codes

Reconciliation Agreement on Construction Codes (2020)



CleanBC & Energy Step Code

	PART 9 BUILDINGS	PART 3 BUILDINGS	NET-ZERO ENERGY-READY UP TO:
2032	STEP 5	STEP 4	80%
2027*	STEP 4	STEP 3	40%
2022*	STEP 3	STEP 2	20%

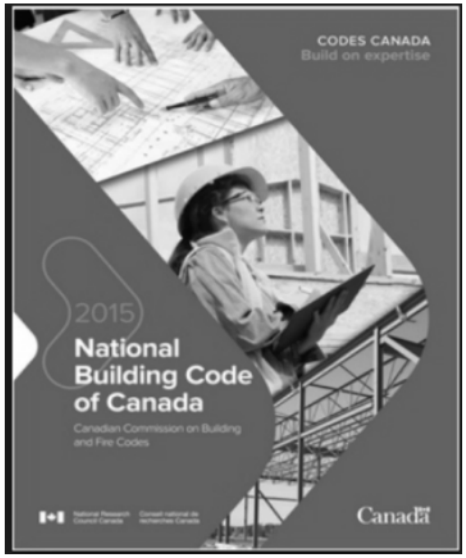
*NEW TARGET DEADLINES

Energy-efficiency improvement above 2018 BC Building Code requirements

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

20% Improvement in 2022





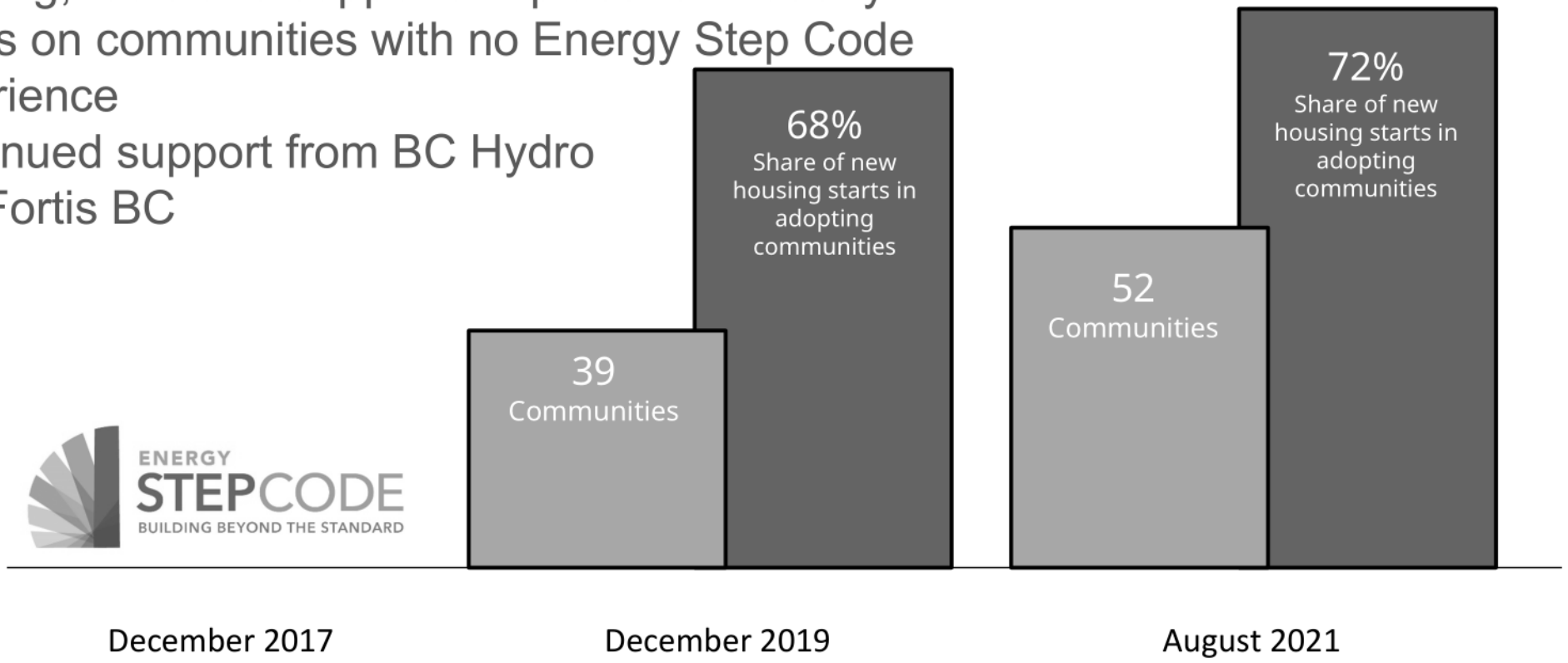
20% Improvement in Energy Efficiency in 2022:

- Build on success of the Energy Step Code
  - Step 3 for Part 9 housing
  - Step 2* for Part 3 buildings
- Support improved harmonization with national codes
- Develop recommendations through the Energy Step Code Council
- Impact analysis currently underway

*pending technical analysis to determine which step achieves 20% improvement

Preparing for Success

- Significant capacity development by local governments who are ready for 2022
- Training, tools and supports in place for industry
- Focus on communities with no Energy Step Code experience
- Continued support from BC Hydro and Fortis BC



ENERGY STEPCODE
BUILDING BEYOND THE STANDARD



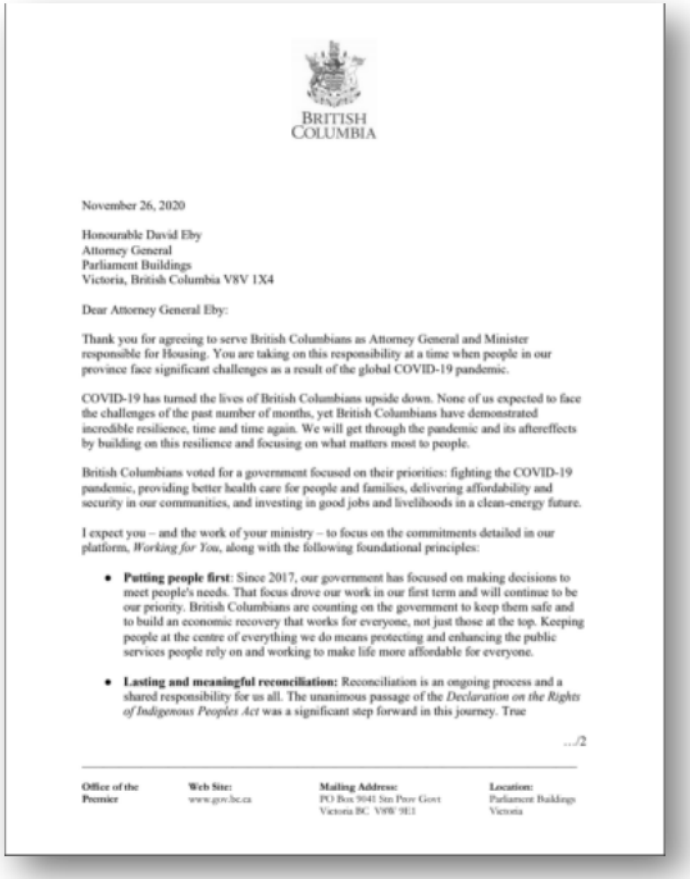


Upcoming Changes to Provincial Building Regulations:

1. 20% improvement to energy efficiency in 2022 (Energy Step Code)

2. Carbon pollution standards for new construction (New)

Mandate Letter – Carbon Pollution



BRITISH COLUMBIA

November 26, 2020

Honourable David Eby
Attorney General
Parliament Buildings
Victoria, British Columbia V8V 1X4

Dear Attorney General Eby:

Thank you for agreeing to serve British Columbians as Attorney General and Minister responsible for Housing. You are taking on this responsibility at a time when people in our province face significant challenges as a result of the global COVID-19 pandemic.

COVID-19 has turned the lives of British Columbians upside down. None of us expected to face the challenges of the past number of months, yet British Columbians have demonstrated incredible resilience, time and time again. We will get through the pandemic and its aftereffects by building on this resilience and focusing on what matters most to people.

British Columbians voted for a government focused on their priorities: fighting the COVID-19 pandemic, providing better health care for people and families, delivering affordability and security in our communities, and investing in good jobs and livelihoods in a clean-energy future.

I expect you – and the work of your ministry – to focus on the commitments detailed in our platform, *Working for You*, along with the following foundational principles:

- **Putting people first**: Since 2017, our government has focused on making decisions to meet people's needs. That focus drove our work in our first term and will continue to be our priority. British Columbians are counting on the government to keep them safe and to build an economic recovery that works for everyone, not just those at the top. Keeping people at the centre of everything we do means protecting and enhancing the public services people rely on and working to make life more affordable for everyone.
- **Lasting and meaningful reconciliation:** Reconciliation is an ongoing process and a shared responsibility for us all. The unanimous passage of the *Declaration on the Rights of Indigenous Peoples Act* was a significant step forward in this journey. True

.../2

Office of the Premier | Web Site: www.gov.bc.ca | Mailing Address: PO Box 9041 Stn Prov Govt Victoria BC V8W 9E1 | Location: Parliament Buildings Victoria

Attorney General and Minister Responsible for Housing:

"[…] supporting local governments to set their own carbon pollution performance standards for new buildings."

Other commitments and priorities:

- Homes for BC – 10-year housing plan
- Sectoral targets and engagement on CleanBC related to carbon pollution
- Existing Buildings Code by 2024

Carbon Pollution Standards



Carbon Pollution (GHG) Standards:

- Several local governments already addressing carbon pollution in some form
- Establish a standardized provincial approach similar to Energy Step Code
- Carbon requirements in addition to energy efficiency requirements
- Consulting with Energy Step Code Council to seek input on appropriate performance levels and enforcement

Carbon Pollution Standards





Technical Considerations:

- Considering performance levels from ‘measure only’ to full decarbonization
  - space heat and hot water will be most directly impacted
- Focus on performance codes that provide flexibility and allow for future innovation
  - same energy modelling as Energy Step Code
- Working to provide long term certainty on how codes address carbon pollution

Other Building Code Activities



Projects and Commitments Related to the Code:

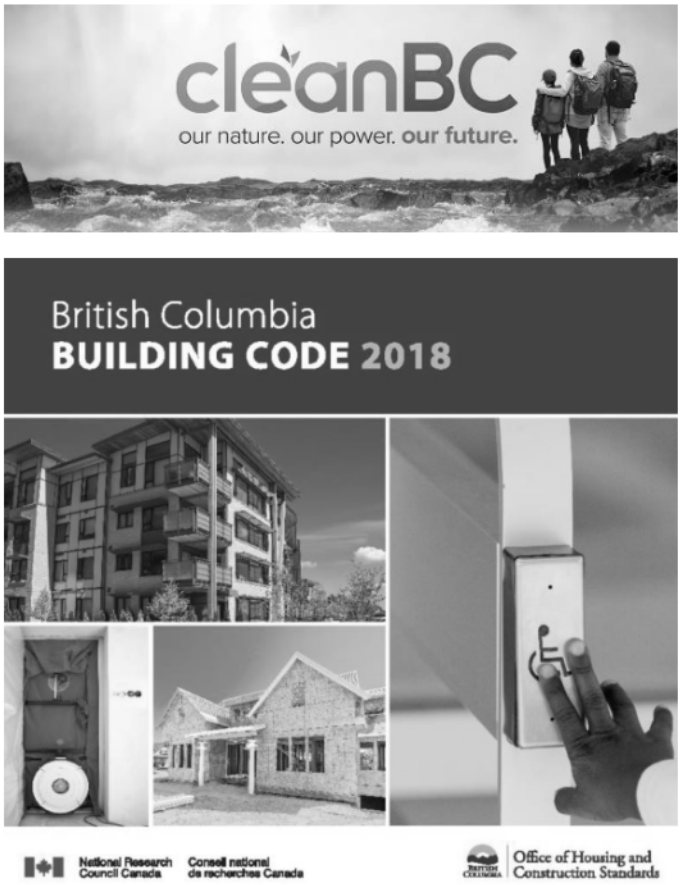
- Reconciliation Agreement on Construction Codes
- Existing Buildings (CleanBC)
- Accessibility
- Next edition of the BC Building Code

ENERGY STEPCODE

BUILDING BEYOND THE STANDARD

Jun'ichi Jensen
A/Executive Director
Building and Safety Standards Branch

UDI Webinar - BC Hydro and Clean BC
Roadmap to 2030
November 30, 2021



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Provincial & National Policy



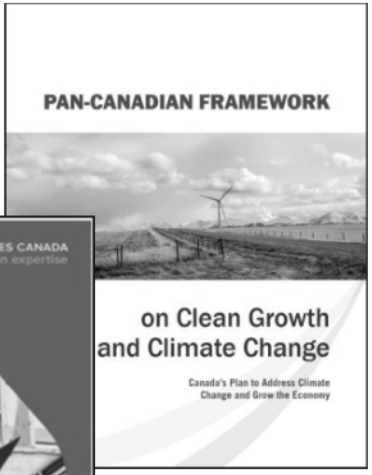


CleanBC (2018)

Net Zero Energy Ready by 2032 in BC Building Code

CleanBC Roadmap to 2030

Zero Carbon New Buildings in BC by 2030
Phasing Carbon Pollution Requirements into BCBC Beginning in 2024



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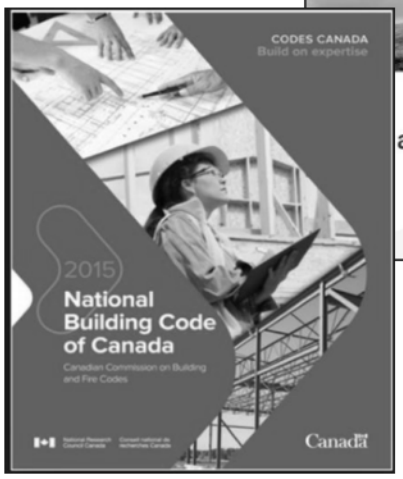
National Codes

Reconciliation Agreement on Construction Codes (2021)



20% Improvement in 2022



20% Improvement in Energy Efficiency in 2022:

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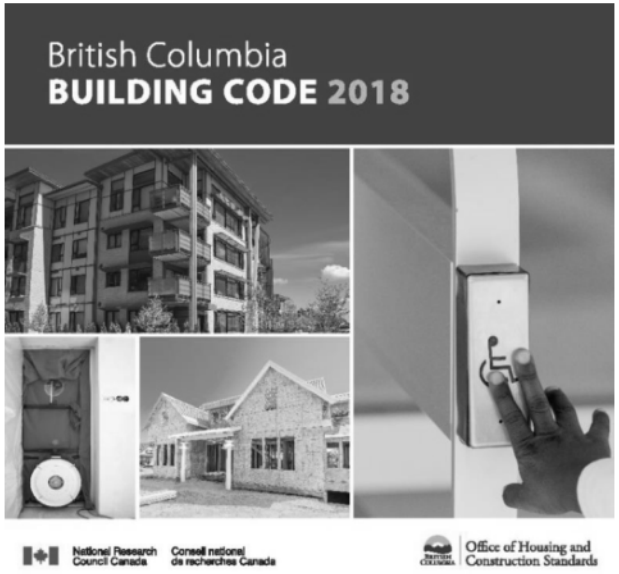
**pending technical analysis to determine which step achieve 20% improvement.*

20% Improvement in 2022





Carbon Pollution (GHG) Standards:

- Establish a standardized provincial approach, similar to Energy Step Code
- Carbon requirements in addition to energy efficiency requirements
- Consulting with Energy Step Code Council to seek input on appropriate enforcement levels and enforcement

Existing Buildings

Existing Buildings Standard by 2024:

- Engagement on energy efficiency, carbon emissions and climate resilience ongoing
- ‘What We Heard’ Report following the last session on January 11, 2021

CleanBC Roadmap	August 4, 2021
Flood	September 28, 2021
Water Conservation	October 6, 2021
Wildfire	October 19, 2021
Energy Efficiency Regulation	November 30, 2021
Overheating and Air Quality	December 2, 2021
Energy Efficiency Supporting Measures	December 8 , 2021
Integrating Mitigation and Adaptation	January 11, 2022

ESCC Meeting Oct 4, 2019 - Follow-up Email #1

From:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To:	dschioler@boabc.org, Catherine Ernst <catherine.ernst@boabc.org>, sean.pander <sean.pander@vancouver.ca>, nconnolly <nconnolly@richmond.ca>, Maxwell.Sykes@surrey.ca, Megan Lohmann (CEA) <mlohmann@communityenergy.bc.ca>, J.Madden@ubc.ca, Jason Jung <jjung@asttbc.org>, Maura Gatensby <mgatensby@aibc.ca>, warrenp@bccassn.com, muneesh@boma.bc.ca, bdeeks@rdcfinehomes.com, Joe Hart <joe.iconhomes@shaw.ca>, Kelly Reid <kelly@hkrbuilders.com>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, mark@havan.ca, Todd.cumiskey@icba.ca, Jeff Fisher <jfisher@udi.org>, Christian Cianfrone <christian@zebx.org>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wark, Robyn <Robyn.Wark@bchydro.com>, Bains, Bea <bea.bains@fortisbc.com>, christine.gillis@canada.ca, Wilma Leung <wileung@bchousing.org>, Berkhout, Tom EMPR:EX <Tom.Berkhout@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, toby.lau@bchydro.com, nconnolly@newwestcity.ca, nheap <nheap@richmond.ca>, Vanessa Joehl <vanessa@chbabc.org>, Mary McWilliam <mmcwilliam3@bcit.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Maya Chorobik <mchorobik@communityenergy.bc.ca>, Lisa.Mak@bchydro.com, Enright, Patrick <patrick.enright@vancouver.ca>, SHorsburgh@rdn.bc.ca, Wells, Ralph <ralph.wells@ubc.ca>, Hamer, Gary <gary.hamer@bchydro.com>, Christopher McLellan (NRCan) <christopher.mclellan@canada.ca>, Christopher Frye <christopher.frye@canada.ca>, Hold - 230929 - Starkl-Moser, Miriam MUNI:EX <Miriam.Starklmoser@gov.bc.ca>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc:	May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Sandham, Kylie HOUS:EX <Kylie.Sandham@gov.bc.ca>, Sinclair, Emily OHCS:EX <Emily.Sinclair@gov.bc.ca>
Sent:	October 8, 2019 9:35:05 AM PDT
Attachments:	Backgrounder3_Building Officials and Local Governments.docx, Step Code Council Oct 4 2019 W.Acheson-DO NOT SHARE.ppt, Backgrounder5_NGOs.docx, Backgrounder2_Renovation and Industry Professionals.docx, Backgrounder1_Building Owners.docx, Backgrounder4_Insurance and Finance.docx, Backgrounder2_Renovation and Industry Professionals.docx

Hello Energy Step Code Council members,

Thank you to everyone who was able to join our meeting last Friday Oct. 4, 2019 either in person or by phone. It was great to connect with all of you and especially to hear from new Council members Joe, Kelly and Megan.

This is the first follow-up email from our meeting - please watch for more to come.

New BSSB Staff – our CleanBC Team

Code Team
Scott Williams - Senior Energy Codes Administrator – Scott.B.Williams@gov.bc.ca
Tommy Dang – Codes Administrator – Tommy.Dang@gov.bc.ca

Policy Team
Aura McCrae – Senior Policy Advisor – Aura.McCrae@gov.bc.ca
Hugo Wong – Policy Analyst – Hugo.Wong@gov.bc.ca
Nicole Vukosavljevic, Senior Policy Advisor - Nicole.Vukosavljevic@gov.bc.ca

Wendy Acheson/BC Housing – Proposal for Mandatory Step Code Training

- PPT Attached – As requested by Wendy, PLEASE DO NOT SHARE
- Feedback on the proposal can be sent to Wendy at wacheson@bchousing.org

Existing Buildings Project Materials

Unfortunately, due to time, we deferred the Existing Buildings item on the agenda. In lieu, we are sharing the attached 5 'backgrounder' documents for your information. Again, please watch for more to come on this.

Lessons Learned Report
Robyn shared hard copies of the report at the meeting. Reminder it's also available online here: Lessons from the BC Energy Step Code (PDF, 3.5MB)

Thank you and please be in touch if you have questions.

Kind regards,
Dale

DALE ANDERSSON, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Office: 778-974-3903 | Mobile: 778-679-9653
Email: Dale.Andersson@gov.bc.ca

ENGAGEMENT BACKGROUNDER

Developing an Alterations Code for Energy Efficient, Resilient Buildings

For Discussion: Building Officials and Local Governments

In developing stronger codes for existing buildings, it is important to understand the values, opportunities, and challenges that inform renovation industry activity and building owner investments in existing buildings.

Below are initial topics we would like to discuss with you in more detail:

- Values and Principles of a Future Alterations Code for Existing Buildings
- Interpretation of the BC Building Code for Existing Buildings Alterations
- Enforcement of the BC Building Code on Existing Buildings Alterations
- Current Capacity for Enforcement
- Future Capacity Building Needs
- Preferences for Future Engagement

You will have the chance to provide input through each phase of the project.

Building and Safety Standards Branch
Our Organization and Mandate

The Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing, is responsible for the BC Building Code (BCBC) which regulates health and safety, fire and structural protection, accessibility, and energy and water efficiency in building construction.

Delivering on the CleanBC commitment for Better Buildings, the Branch aims to develop an Existing Building Code for energy efficient and resilient buildings by 2024. The Better Buildings commitment aims to make every building more efficient by improving the BC Building Code and developing stronger codes and standards for existing buildings.

Project Goal: To provide clear requirements for existing buildings that will enable GHG reductions and increase life safety and resilience for British Columbians.

Project Context: Current Opportunities and Challenges

1) *Many existing buildings use more energy than is necessary.* Existing buildings account for 11% of BC's total GHG emissions and as much as 50% in urban areas.
2) *The built environment is increasingly susceptible to seismic and climate risks.* Existing buildings of a certain age may also be the most susceptible to damage and collapse in a seismic event.
3) *The BC Building Code is primarily intended for new construction.* The BC Building Code can be unclear in how it applies to building retrofits, leaving it open to interpretation and leading to inconsistent enforcement.
4) *Retrofits can be expensive, and costs can deter people from taking action.* The renovation industry in BC is a significant contributor to the provincial economy. In 2017, BC's renovation industry accounted for 82,845 jobs, $5.0 billion in wages, and $9.8 billion in investment value.

Your input is needed to help develop policy and regulatory options that address these opportunities and challenges.

Project Timeline

Phase 1 (2019-2021) Prepare Strategy	Phase 2 (2021-2022) Develop Codes & Standards	Phase 3 (2022-2024) Voluntary Implementation
Identify targets for building energy performance, prepare policy options to guide code application to building retrofits, develop a resilience lens through which to evaluate options and identify potential social, environmental and cost-related impacts.	Draft technical codes / standards to implement strategy recommendations. Coordinate development of regulations / programs to support successful implementation.	Provide codes and standards for voluntary early adoption in 2022 in advance of creating a provincial requirement in 2024.

Step Code Training Initiative

Wendy Acheson
October 4, 2019

BC HOUSING

Background

- Residential builders must be licensed in BC under the *Homeowner Protection Act,* administered by BC Housing
- Purpose of the Act is to strengthen consumer protection, increase quality of residential construction, and support related research and education
- General contractors of part 9 buildings must participate in annual Continuing Professional Development (CPD) as a condition of licence renewal
- New licensees must also meet minimum competency requirements in seven areas, including Building Code knowledge and Construction Technology
- Training is currently being provided by a number of organizations for both informal and formal purposes

BC HOUSING

Issues

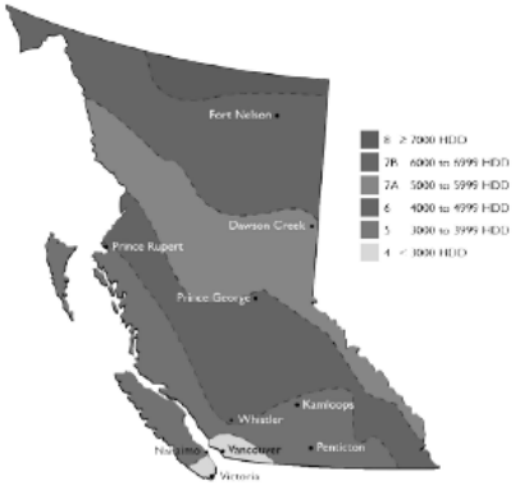


- There is a risk to homebuyers of defective homes without sufficiently qualified builders
- Understanding how to build energy efficient homes will be a key component of home builder competency, particularly in context of the Step Code
- Various municipalities and industry associations are currently offering relevant training, which can be coordinated and leveraged
- As regulator BC Housing is in an ideal position to ensure that builders are appropriately trained
- Any initiative chosen must be within the authority prescribed in the *Homeowner Protection Act*

BC HOUSING

Objectives of Step Code Training Initiative

1. Strengthen consumer protection for buyers of new homes by reducing risk of defective construction caused by poor building practices
2. Improve the energy efficiency of residential construction by ensuring that licensed builders have received appropriate technical training
3. Support research and education initiatives aimed at Building Code and Step Code compliance
4. Support the overall climate action mandates of government



BC HOUSING

Possible Strategy

1. Develop a core curriculum of education needed now and in the near future
2. Share information to encourage coordination and consistency of training efforts and accredit approved providers
3. Implement a schedule of mandatory training for general contractor licensees, as a condition of licence
4. Identify appropriate exemptions
5. Ensure curriculum is included in existing minimum qualification training for new licensees



BC HOUSING

Step 1: Curriculum development

Coordinated by BC Housing on the following proposed topics:

- Air tightness and continuity of air barrier
- Building envelope details
- Mechanical systems/air quality
- Overall building science and building design



Questions:

- Are these the right topics?
- How much coverage (i.e. hours of instruction) per topic?

BC HOUSING

Step 2: Accreditation

- Share curriculum with possible providers
- Evaluate curriculum coverage and quality of training proposed by providers
- Accredit approved providers
- BC Housing would provide training only where gaps in adequate coverage are identified
- Accredited providers would agree to terms of use of curriculum and costs



BC HOUSING

Step 3: Mandatory training

- Training in accredited courses a condition of licence renewal for general contractors
- Could be part of Continuing Professional Development (CPD), not additional hours
- Licensees would have a variety of accredited training to choose from, including online training

Questions:

- Should topics be provided in one longer course or in modules?
- If modules, should they all be available at once or prioritized over time?
- Should there be any testing of knowledge?



BC HOUSING

Step 4: Exemptions from training

- Licensees who could demonstrate that they were already competent would be exempted from the condition

- Exemptions could be included for:
  - Taking an equivalent course previously
  - Evidence of building energy efficient homes previously
  - Anything else?

- Education providers could be asked to submit material to show that their existing course is equivalent

BC HOUSING

Step 5: Qualifications courses

Ensure curriculum is included in existing minimum qualification training for new licensees

- Identify all existing qualifications courses
- Share approved curriculum with training providers
- Establish timeline for ensuring qualification courses are updated



BC HOUSING

Questions or Comments?

BC HOUSING

ENGAGEMENT BACKGROUNDER

Developing an Alterations Code for Energy Efficient, Resilient Buildings

For Discussion: Non-Government Research Organizations

In developing stronger codes for existing buildings, it is important to understand the values, opportunities, and challenges that inform renovation industry activity and building owner investments in existing buildings.

Below are initial topics we would like to discuss with you in more detail:

- Values and Principles of a Future Code for Existing Buildings
- Existing Buildings Strategies and Programs
- Code Triggers and Targets for Existing Buildings
- Performance vs. Prescriptive Requirements
- Cost Impacts
- Preferences for Future Engagement

You will have the chance to provide input through each phase of the project.

Building and Safety Standards Branch
Our Organization and Mandate

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Delivering on the CleanBC commitment for Better Buildings, the Branch aims to develop an Existing Building Code for energy efficient and resilient buildings by 2024. The Better Buildings commitment aims to make every building more efficient by improving the BC Building Code and developing stronger codes and standards for existing buildings.

Project Goal: To provide clear requirements for existing buildings that will enable GHG reductions and increase life safety and resilience for British Columbians.

Project Context: Current Opportunities and Challenges

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ENGAGEMENT BACKGROUNDER

Developing an Alterations Code for Energy Efficient, Resilient Buildings

For Discussion: Renovation Industry Professionals

In developing stronger codes for existing buildings, it is important to understand the values, opportunities, and challenges that inform renovation industry activity and building owner investments in existing buildings.

Below are initial topics we would like to discuss with you in more detail:

- Values and Principles of a Future Code for Existing Buildings
- Market Demand for Renovations
- Current Industry Supply of Professionals
- Capacity Building for the Future
- Interface with Permitting/Local Government Enforcement System
- Interpretation of the BCBC for Existing Buildings
- Preferences for Future Engagement

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ENGAGEMENT BACKGROUNDER

Developing an Alterations Code for Energy Efficient, Resilient Buildings

For Discussion: Building Owners

In developing stronger codes for existing buildings, it is important to understand the values, opportunities, and challenges that inform renovation industry activity and building owner investments in existing buildings.

Below are initial topics we would like to discuss with you in more detail:

- Values and Principles of a Future Code for Existing Buildings
- Investment Values when Altering Existing Buildings
- Investment Motivations when Altering Existing Buildings
- Past and Future Investments in Existing Buildings
- Barriers and Challenges to Investment in Existing Buildings
- Involvement in Permitting System
- Preferences for Future Engagement

You will have the chance to provide input through each phase of the project.

Building and Safety Standards Branch
Our Organization and Mandate

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Project Goal: To provide clear requirements for existing buildings that will enable GHG reductions and increase life safety and resilience for British Columbians.

Project Context: Current Opportunities and Challenges

1) *Many existing buildings use more energy than is necessary.* Existing buildings account for 11% of BC's total GHG emissions and as much as 50% in urban areas.
2) *The built environment is increasingly susceptible to seismic and climate risks.* Existing buildings of a certain age may also be the most susceptible to damage and collapse in a seismic event.
3) *The BC Building Code is primarily intended for new construction.* The BC Building Code can be unclear in how it applies to building retrofits, leaving it open to interpretation and leading to inconsistent enforcement.
4) *Retrofits can be expensive, and costs can deter people from taking action.* The renovation industry in BC is a significant contributor to the provincial economy. In 2017, BC's renovation industry accounted for 82,845 jobs, $5.0 billion in wages, and $9.8 billion in investment value.

Your input is needed to help develop policy and regulatory options that address these opportunities and challenges.

Project Timeline

Phase 1 (2019-2021) Prepare Strategy	Phase 2 (2021-2022) Develop Codes & Standards	Phase 3 (2022-2024) Voluntary Implementation
Identify targets for building energy performance, prepare policy options to guide code application to building retrofits, develop a resilience lens through which to evaluate options and identify potential social, environmental and cost-related impacts.	Draft technical codes / standards to implement strategy recommendations. Coordinate development of regulations / programs to support successful implementation.	Provide codes and standards for voluntary early adoption in 2022 in advance of creating a provincial requirement in 2024.

ENGAGEMENT BACKGROUNDER

Developing an Alterations Code for Energy Efficient, Resilient Buildings

For Discussion: Insurance and Finance Industry

In developing stronger codes for existing buildings, it is important to understand the values, opportunities, and challenges that inform renovation industry activity and building owner investments in existing buildings.

Below are initial topics we would like to discuss with you in more detail:

- Values and Principles of a Future Code for Existing Buildings
- Involvement in Altering Existing Buildings
- Use of the BC Building Code
- Insurance and Financial Incentives and Programs for Seismic Upgrades
- Preferences for Future Engagement

You will have the chance to provide input through each phase of the project.

Building and Safety Standards Branch
Our Organization and Mandate

The Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing, is responsible for the BC Building Code (BCBC) which regulates health and safety, fire and structural protection, accessibility, and energy and water efficiency in building construction.

Delivering on the CleanBC commitment for Better Buildings, the Branch aims to develop an Existing Building Code for energy efficient and resilient buildings by 2024. The Better Buildings commitment aims to make every building more efficient by improving the BC Building Code and developing stronger codes and standards for existing buildings.

Project Goal: To provide clear requirements for existing buildings that will enable GHG reductions and increase life safety and resilience for British Columbians.

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FW: Question: UDI's Preliminary Budget 2020 Submission

From: Sinclair, Emily OHCS:EX <Emily.Sinclair@gov.bc.ca>
To: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Ricketts, Dave OHCS:EX <Dave.Ricketts@gov.bc.ca>
Sent: October 11, 2019 11:29:54 AM PDT
Attachments: image001.wmz, image003.png

FYI – see below for a sneak-peak of comments UDI may make during the existing buildings stakeholder engagement.

Emily

From: Dean, Jeff OHCS:EX
Sent: September 12, 2019 11:07 AM
To: Sinclair, Emily OHCS:EX <Emily.Sinclair@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Subject: RE: Question: UDI's Preliminary Budget 2020 Submission

No this is great. Thanks!

From: Sinclair, Emily OHCS:EX
Sent: September 12, 2019 11:04 AM
To: Dean, Jeff OHCS:EX <Jeff.Dean@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Subject: RE: Question: UDI's Preliminary Budget 2020 Submission

Hi Jeff,

Here's a blurb:

CleanBC commits the Province to improving energy efficiency in the built environment. The Building Resilience and Energy Retrofit Strategy is the first step toward developing and implementing a retrofit code for existing buildings by 2024. The Strategy will:

- identify targets for building energy performance;
- prepare policy options to guide code application to building retrofits;
- develop a resilience lens through which to evaluate options; and,
- identify potential social, environmental and cost-related impacts.

Agree with Gord's addition – we will consider the proposal, making it clear that tax policy is the responsibility of the Ministry of Finance.

Let me know if you need anything else,

Emily

From: Dean, Jeff OHCS:EX
Sent: September 12, 2019 9:56 AM
To: Sinclair, Emily OHCS:EX <Emily.Sinclair@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Subject: RE: Question: UDI's Preliminary Budget 2020 Submission

Emily, can you send me a blurb about the Existing Buildings Retrofit Strategy? What is it, what's the status?

Does it matter that UDI asks for the property tax exemption for new and existing buildings?

From: Page, Doug OHCS:EX
Sent: September 12, 2019 9:28 AM

To: Dean, Jeff OHCS:EX <Jeff.Dean@gov.bc.ca>
Subject: FW: Question: UDI's Preliminary Budget 2020 Submission

Jeff, I think you can say this and just add on what Gord said: e.g., it is something that the Existing Buildings Retrofit Strategy will consider as part of its policy analysis, but decisions on tax policy rest firmly with the Minister of Finance.

From: Sinclair, Emily OHCS:EX
Sent: September 12, 2019 9:23 AM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: DeSouza, Roxanne OHCS:EX <Roxanne.DeSouza@gov.bc.ca>; Dean, Jeff OHCS:EX <Jeff.Dean@gov.bc.ca>
Subject: RE: Question: UDI's Preliminary Budget 2020 Submission

Yes please – just that it is something that the Existing Buildings Retrofit Strategy will consider as part of its policy analysis.

Thanks,

Emily

From: Page, Doug OHCS:EX
Sent: September 12, 2019 9:04 AM
To: Sinclair, Emily OHCS:EX <Emily.Sinclair@gov.bc.ca>
Cc: DeSouza, Roxanne OHCS:EX <Roxanne.DeSouza@gov.bc.ca>; Dean, Jeff OHCS:EX <Jeff.Dean@gov.bc.ca>
Subject: RE: Question: UDI's Preliminary Budget 2020 Submission

Would you want the BN Jeff is doing for Kaye's meeting with UDI to say anything to that effect? Currently, I think the plan is just to say we defer all things tax to Finance.

Doug

From: Sinclair, Emily OHCS:EX
Sent: September 12, 2019 8:26 AM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: DeSouza, Roxanne OHCS:EX <Roxanne.DeSouza@gov.bc.ca>
Subject: RE: Question: UDI's Preliminary Budget 2020 Submission

Hi Doug,

I haven't seen this one, but it is interesting input for the existing buildings project to consider. We're not quite at the point where we are looking at impacts, but will consider this when we reach that stage.

Is any action needed in terms of a response?

Thanks,

Emily

From: Page, Doug OHCS:EX
Sent: September 11, 2019 2:46 PM
To: Sinclair, Emily OHCS:EX <Emily.Sinclair@gov.bc.ca>
Subject: Question: UDI's Preliminary Budget 2020 Submission

Hi Emily,
Do you know if this UDI proposal for a Sustainable Property Tax Exemption and Incentives has been considered?
Doug

From: DeSouza, Roxanne OHCS:EX
Sent: September 11, 2019 2:27 PM

To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Ko, Juliana B OHCS:EX <Juliana.Ko@gov.bc.ca>
Subject: FW: FYI: From UDI's Preliminary Budget 2020 Submission

Interesting. Maybe worth connecting with Emily (or contacts at Finance) on this…it seems that this was also included in their 2019 submission: http://udi.bc.ca/wp-content/uploads/2018/10/UDI-2019-Pre-Budget-submission-Ministry-of-Finance.pdf.

Would be good to know if they did any policy work on this and/or would be planning to implement the future (or have already nixed for the time being)

From: Page, Doug OHCS:EX
Sent: September 11, 2019 1:30 PM
To: Ko, Juliana B OHCS:EX <Juliana.Ko@gov.bc.ca>; DeSouza, Roxanne OHCS:EX <Roxanne.DeSouza@gov.bc.ca>
Subject: FYI: From UDI's Preliminary Budget 2020 Submission

Sustainable Property Tax Exemption and Incentives
UDI believes that provincial property tax exemptions could be beneficial for new and existing rental buildings to encourage the adoption of green or energy efficiency measures, which is the Government's stated goal in the *Clean, Efficient Buildings Intentions Paper*. Unfortunately, there are currently property tax disincentives to improve the energy and water efficiency in buildings. When energy efficient building features are incorporated in new and existing projects, the valuations increase, and as a result, so do the property taxes.
It will be important for the Government to offer exemptions and other sustainable building incentives and financial mechanisms for rental projects in particular. Incentive programs like these may become critical if the Government proceeds with mandating energy efficiency (and other requirements) through both the adoption of the *Energy Step Code* in the *B.C. Building Code* for new construction and the adoption of the *Building Code for Existing Buildings* as described in the *CleanBC Plan*. As noted above, new purpose-built rental projects already face financial obstacles, and this has been exacerbated with the further restrictions on the annual Allowable Rent Increases that were made in 2018. Older buildings will face a nearly impossible balancing act with both seismic and energy efficiency upgrades expectations and Government pressure to keep rent increases down.
We acknowledge that this issue is pervasive across housing types and note, for example, that strata corporations of older buildings will find that balancing affordability with mandated upgrades will be just as difficult as it is for landlords. An exemption is needed that would offset tax increases due to energy/water efficiency features incorporated in new and existing buildings. At the same time, we need to encourage local governments to do the same for their portion of the property tax bill. 5

UDI recommends the creation of a Sustainable Property Tax Exemption, for the Provincial portion of the property tax, which would apply to both rental developments and other building types/tenures.

UDI has one caveat to this recommendation. As we noted in our response to the *Intentions Papers*, the Government should be discerning where money is invested, because for some buildings, it could be more advantageous that redevelopment occur – rather than renovations. It would not be cost efficient to heavily invest in building upgrades in areas where municipal plans are in place that encourage the densification of sites, as those upgrades and the embodied carbon would be lost when the buildings are demolished. Decisions will have to be made on a site-by-site basis. For example, it would likely be more cost effective and environmentally friendly to redevelop a sixty-year-old three-storey rental building next to a SkyTrain station than to make substantive seismic and energy efficiency upgrades to it. It would be better if the government funding was used instead, to increase the number of low-end market rental units on the site during the redevelopment process, and to assist tenants in relocation (see below).

Doug Page, (RI)
Director of Policy and Legislation

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Office: 778 974-3888
Cell: 250 380-8696
Email: doug.page@gov.bc.ca



ESSC Meeting Minutes for Oct. 4 2019, other updates

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	dschioler@boabc.org, Catherine Ernst <catherine.ernst@boabc.org>, sean.pander <sean.pander@vancouver.ca>, nconnolly <nconnolly@richmond.ca>, Maxwell.Sykes@surrey.ca, Megan Lohmann (CEA) <mlohmann@communityenergy.bc.ca>, J.Madden@ubc.ca, Jason Jung <jjung@asttbc.org>, Maura Gatensby <mgatensby@aibc.ca>, warrenp@bccassn.com, muneesh@boma.bc.ca, bdeeks@rdcfinehomes.com, Joe Hart <joe.iconhomes@shaw.ca>, Kelly Reid <kelly@hkrbuilders.com>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, mark@havan.ca, Todd.cumiskey@icba.ca, Jeff Fisher <jfisher@udi.org>, Christian Cianfrone <christian@zebx.org>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wark, Robyn <Robyn.Wark@bchydro.com>, Bains, Bea <bea.bains@fortisbc.com>, christine.gillis@canada.ca, Wilma Leung <wileung@bchousing.org>, Berkhout, Tom EMPR:EX <Tom.Berkhout@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, toby.lau@bchydro.com, nconnolly@newwestcity.ca, nheap <nheap@richmond.ca>, Vanessa Joehl <vanessa@chbabc.org>, Mary McWilliam <mmcwilliam3@bcit.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Maya Chorobik <mchorobik@communityenergy.bc.ca>, Lisa.Mak@bchydro.com, Enright, Patrick <patrick.enright@vancouver.ca>, SHorsburgh@rdn.bc.ca, Wells, Ralph <ralph.wells@ubc.ca>, Hamer, Gary <gary.hamer@bchydro.com>, Christopher McLellan (NRCan) <christopher.mclellan@canada.ca>, Christopher Frye <christopher.frye@canada.ca>, Hold - 230929 - Starkl-Moser, Miriam MUNI:EX <Miriam.Starklmoser@gov.bc.ca>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc:	May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Sandham, Kylie HOUS:EX <Kylie.Sandham@gov.bc.ca>
Sent:	October 29, 2019 4:49:55 PM PDT
Attachments:	ESCC-Notes-2019-10-04-v02_FINAL.docx

Hello everyone,

Thanks to everyone who joined the Oct. 4 meeting, and for your patience. The minutes from the Oct. 4 meeting are attached and ready for to review. Please let me know if there are inaccuracies and I will correct them.

On a related note, the 2019 public review of proposed changes to the 2015 National Building, Fire and Plumbing codes and the 2017 National Energy Code is now accepting comments. It runs until Dec. 23, 2019. More information is here.

Thanks very much.
Hugo

Hugo Wong
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Notes

Date: Friday October 4, 2019 | Time: 9:00 a.m. to 4:00 p.m. Pacific
Venue: BC Hydro Office, 333 Dunsmuir Street, Vancouver or by teleconference
Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Participants

1. Bea Bains, FortisBC
2. Maya Chorobik, Chair, Small LG Peer Network
3. Christian Cianfrone, ZEBx
4. Norm Connolly, Richmond/PIBC, and co-chair, Technical Subcommittee
5. Patrick Enright, City of Vancouver
6. Jeff Fisher, UDI
7. Joe Hart, Icon Homes/CHBA BC
8. Toby Lau, BC Hydro and co-chair, Technical Subcommittee
9. Wilma Leung, BC Housing
10. Megan Lohmann, CEA and UBCM rep
11. John Madden, UBC
12. Lisa Mak, BC Hydro
13. Harshan Radhakrishnan, EGBC
14. Kelly Reid, HKR Builders/CHBA BC
15. Mark Sakai, HAVAN
16. Muneesh Sharma, BOMA
17. Maxwell Sykes, City of Surrey/UBCM Rep and Chair, Large LG Peer Network
18. Warren Perks, BCCA
19. Dale Andersson, BSSB and co-chair, CBC Subcommittee
20. Guests: Wendy Acheson, BC Housing; Pauline Rupp, CHBA BC; Gary Hamer, BC Hydro; Bertine Stelzer, BC Hydro
21. By Teleconference: Tom Berkhout, MEMPR; Mark Bernhardt, Bernhardt Contracting and CHBA BC (guest); Catherine Ernst, BOABC; Chris Fyre, NRCan Housing Division; Nicholas Heap, City of Richmond and co-chair, CaEASC; Vanessa Joehl, CHBA BC and co-chair, CaEASC; Jason Jung, ASTTBC; Adrian Mohareb, Climate Action Secretariat, Andrew Pride, SCEE
22. By Teleconference – BSSB Staff: Aura McCrae; Emily Sinclair; Nicole Vukosavljevic; Scott Williams; Hugo Wong

Regrets: Todd Cumiskey, ICBA; Maura Gatensby, AIBC.

NOTES

1. Welcome and Introductions

Zachary May welcomed Council members and guests. New Council members include Kelly Reid, HKR Builders & Joe Hart, Icon Homes, representing CHBA BC; and Megan Lohmann, CEA, representing UBCM with Max Sykes. Wendy Acheson, BC Housing, Pauline Rupp, CHBA BC and Mark Bernhardt, Bernhardt Contracting attended as guests. Zac thanked all Council members for their efforts, noting 2022 represents the next horizon for Council's work. Zac invited new Council members to share their perspectives on Step Code implementation in their regions.

Megan Lohmann brings the perspective of the Kootenay region to Council. Step Code knowledge in the Kootenays is high and builder airtightness is strong. Three communities have adopted the Step Code and all also require labelling. Current challenges: Incorporating more innovative construction methods such as wall assemblies (they have developed a training module demonstrating various assemblies); home design in energy efficiency and the value of early collaboration with an Energy Advisor; addressing the current Step 3 issue; training for Alberta builders in region. Two EAs are based in the region – may need more as two other communities adopt the Step Code in the new year.

Joe Hart: Joe is based in Quesnel. There are two EAs in Prince George but it will be hard to figure out how to work with EAs over such as large area as the north: it is not practical or sustainable to have an EA in every town. The proposed Sliding Scale TEDI (to be discussed further under proposed Part 9 changes) appears to be working better: the first Net

Zero home in the north only reached Step 4, but with the sliding TEDI reached Step 5. There is little Council or builder interest in the Step Code in the north, so making Step 3 the first mandatory step could be a challenge: is there a potential to made Step 1 a requirement before 2022? Small communities typically do not have the means to offer funding for incentives. In the Cariboo, his company is the only one doing blower door testing at present, and he built six Step 3 homes last year. Despite lower interest, most builders are likely already building to Step 3. Northern differences: architects and engineers are rarely used for Part 9 buildings; construction budgets are significantly lower. While there are challenges in the north, northern builders have expertise they can also share with the south (e.g., quality of construction and achieving airtightness).

Kelly Reid: Kelly is based in Kamloops where they have similar challenges. Eighteen months ago there were no EAs, but through a partnership with BC Housing, they were able to test 20 homes – all with very good airtightness results - and now have 1 individual trained/certified as an EA. Kamloops has adopted an inventive program, and there is also training for builders and building officials. Challenges: Issues with archetypes and site location on north/south sides of the river - the same home built on the north side reached Step 3 but on the south side only achieved Step 1; shortage of EAs; modest construction budgets compared to other regions; little interest in all-electric solutions at present. Homes typically have air conditioning.

Council members discussed related issues including: GHGs as a metric; thinking longer term and eventual electrification; the value of reducing plug loads as critical to success; practical options for today that will support changes in future; no current mandate in CleanBC or the Pan-Canadian Framework to reduce GHGs in the Code; exploring other options. BC Hydro has been involved in helping construct a Net Zero home near Kamloops (?) that is all electric; there will be metrics on the home when completed that could be reported back to Council next spring.

ACTION: CBC Subcommittee co-chairs to contact Joe to discuss the possible case study examples from northern B.C.

ACTION: CBC Subcommittee co-chairs/Peer Network Co-chairs to explore options for building capacity in smaller, rural/northern communities such as: the SC Peer Networks; using existing UBCM or LGMA structures such as the UBCM Climate Caucus or the Climate Leadership Institute or regional groups; engaging an EA to introduce to builders and do airtightness testing examples in the north; showcasing different assemblies in the north as Megan/CEA has done in the Kootenay region, etc.

ACTION: CBC Subcommittee co-chairs further explore EA capacity across B.C., particularly in the north.

ACTION: BSSB to contact Gary Hamer re: Net Zero home example for presentation at future ESCC meeting.

2. Provincial Update

Proposal for Mandatory Step Code Training for Licensed Residential Builders

Wendy Acheson or BC Housing presented details of a proposal under consideration for mandatory Step Code training for licensed residential builders. The objective of such a requirement would echo the purposes in the legislation: strengthen consumer protection, improve the energy efficiency of buildings etc. Council discussion focussed on: the value of mixed-methods approaches to training – e.g., experiential vs classroom; appropriate exemptions (e.g., if a licensee can demonstrate existing knowledge); capturing airtightness values somehow; being able to rely on builders who are 'doing a great job;' the importance of process (e.g., engaging an EA as early as possible) and learning about integrated design; different levels of training – e.g., Step Code 1, Step Code 2; training for individuals vs companies; new licensee requirements vs license renewals; timing (aiming to make changes quickly – e.g., 2020); ensuring sufficient training capacity if this becomes mandatory; training for apprentices; training for all trades not just carpenters; setting training requirements over two license periods instead of just one (so licensees will also be able to take other valuable training); demonstrating competency rather than just participation at a training event.

ACTION: Dale to share Wendy's PPT with Council members with the proviso it be kept confidential for now. DONE

ACTION: Council members to send other feedback about the proposal for Mandatory Step Code Training for Licensed Residential Builders to Wendy at wacheson@gov.bc.ca.

ACTION: CBC Subcommittee co-chairs to invite Wendy to speak at a Subcommittee meeting about the proposal for mandatory Step Code training for Licensed Residential Builders.

Provincial Resources

Zac announced new BSSB staff who will be supporting our CleanBC projects for the Step Code and existing buildings:

- Code team: Tommy Dang and Scott Williams – with Adrian Mohareb continuing to work on the Step Code through his new job with the Climate Action Secretariat
- Policy team: Aura McCrae (BERT support), Hugo Wong (ESCC, strategic plan), and Nicole Vukosavljevic (existing buildings) plus Dale who will focus on CBC, EA issues, remote/rural communities

The new staff resources provide an opportune time to reflect on the current Terms of Reference of the Council Subcommittees. If there's a perceived value in revising or adjusting them, that can be done so that the Subcommittees address our code needs. There is no additional funding but BSSB can collaborate with partner—NRCan, BC Housing, BC Hydro etc.—to help source needed funds.

ACTION: Dale to share contact details for new BSSB staff with Council. DONE

ACTION: Dale/BSSB staff to connect with Max/Maya to determine if/how BSSB could provide support to the LG Peer Networks.

3. National Update

Andrew Pride, Chair of the Standing Committee on Energy Efficiency, provide an update on the development of the National Energy Code and what to anticipate in 2020. A public review process will start October 22, 2019 to gather feedback on the current proposals for Part 3 and Part 9 buildings.

- Proposal for Part 3 buildings: four simple energy tiers, no EUIs, tier 4 = 40% better than reference code.
- Proposal for Part 9:
    - 5 tiers – tier 1 = prescriptive; tier 2 10% better; tier 3 – 20%; tier 4 – 40% and tier 5 = 70%+ - levels which mimic current voluntary standards such as R2000. There is no TEDI.
    - No TEDI but will still require an envelope calculation to ensure better than the prescriptive built house
    - Mandatory testing of all tiers
    - Automatic 10% energy credit to any small house – about 1100 sq ft home or smaller – should enable them to qualify for tier 2

There is no requirement for GHG reductions as this is very difficult at a national level. Zac noted that over the long term, B.C. is committed to harmonizing with the national codes (due to the cost of code development), and there will be fewer B.C. variations over time, and for this reason, the Part 9 TEDI proposal uses language being proposed at the national level. Council discussed the value of improving the software HOT 2000 (H2K) to that it is more aligned with the building code.

ACTION – BSSB to provide Council with info about the national public review when it opens Oct. 22, 2019 so that Council members may respond.

4. GHG and Costing Studies

The final reports of the GHGi and costing studies completed earlier this year were provided to Council. The reports were contracted by BSSB with funding received from NRCan. The studies will be posted to the Step Code website to facilitate sharing.

GHG Study led by Integral Group: Zac notes there is no mandate in the BC Building Code to reduce GHGs, and a resolution to that effect was defeated last week at UBCM's annual convention. Council members discussed ways GHGs could be addressed by local governments given these constraints. Discussion included the following points:

- Local governments pursuing 'default' options if a given Step is not reached (e.g., require Step 3 but Step 2 permitted if connect to a low carbon energy system/district energy, or reduce fees if constructing to a low carbon energy system)
- The value to builders of offering such relaxations
- Setting intensity limits such as the City of Vancouver is doing
- Local government sharing of best/promising practices
- BC Utilities Commission regulation requirements
- Changing climate data over time/in future and possibility of new clean energy options (apart from electricity)

ACTION: Robyn/LG Peer Network Co-chairs – to summarize and share information with Council about local government approaches to GHG reductions. BSSB to assist as needed.

ACTION: Dale to post the GHG and costing studies online and let Council know when they are available.

ACTION: Dale to provide Council with the link to the Lessons Learned report completed in June. DONE

Bob Deeks and Robyn Wark will be sharing the Lessons Learned report at the Getting to Zero Forum in Oakland, CA Oct 9 – 12, 2019. See https://gettingtozeroforum.org/speakers/.

5. Local Government Peer Networks

Item deferred due to time.

6. Proposed Changes Part 9 Buildings

Zac reviewed two proposed changes to address issues - particularly in climate zones 5 and 6 - with the current Part 9 TEDI metrics. BSSB worked with Remi Charron/BC Housing this summer and with the assistance of a TEDI Working Group, identified two problems and recommended solutions:

- **Issue 1: Inequality of TEDI targets at the edge of climate zones. Proposed solution:** Use HDD-based TEDI (adjusting the targets to meet 'sloped' rather than stepped increments) to facilitate targets being met in areas on the colder fringes of the climate zones
- **Issue 2: Challenges of meeting TEDI target for single family dwellings with unique design features (e.g., cathedral ceilings). Proposed Solution:** Align the approach closer with that currently being proposed for the National Building Code – allow for an alternative option to TEDI - achieve a % improvement in TEDI over the reference house

Issue 1: Sliding TEDI Solution - Council members discussed:

- How a sliding scale would work (the Code table would remain the same but there would be an option to adjust based on 100 heating degree day increments)
- Change fatigue and the challenges of communicating another change and explaining the sliding scale (in contrast to last year, industry asked for changes this year which demonstrates the Council is listening and responding)
- AHJ authority to determine climate within their jurisdictions
- Issue doesn't seem to appear in CZ 4
- Are 100 HDD increments too fine – finer than the climate itself?
- The 2017 and 2018 metrics reports reflected locations at the mid range of the CZs

- A sliding scale is not a relaxation but merely making it fair
- How to improve available weather/data files?
- In-stream projects would not be affected by this change, but local governments may make different arrangements
- Homebuilders will be very open to this change and indeed will see it as a 'huge improvement'

Toby Lau reported the Technical Subcommittee agrees with this proposal.

Pauline Rupp of CHBA BC reported on findings of a CHBA BC Task Group looking at this issue. They ran 84 homes through the proposed approach. In the mid to higher end of the CZ, they found a relaxation of about 3 points; 30% found favourable changes though they were not actually significant. CHBA BC would still like an alternative option – the proposed approach works well in theory but there are challenges (e.g., the sliding scale is based on HDD but the AHJ gets to choose this and there are limited data points in software such as ERS which is a H2K issue rather than an issue with the sliding scale).

DECISION: ESCC members endorsed the proposed TEDI metric change and recommended it be supported by appropriate communications.

ACTION: BSSB to work with Subcommittees and NRCan to discuss possibility of enhancing weather files within ERS.

ACTION: BSSB to explore the idea of publishing a bulletin about available weather data in ERS and challenges using it when modelling homes.

ACTION: BC Hydro/BSSB to develop appropriate communications language for the November newsletter about Part 9 TEDI Changes (i.e., ESCC responsive to concerns – try to obtain quotes from CHBA and others demonstrating effective govt-industry partnership).

Issue 2: % Better - The Working Group found that TEDI doesn't necessarily work for some building archetypes. A % better option would enable a builder to demonstrate % better improvements in building envelope over a reference home. The proposed language is the same as that being proposed for the national code which assists harmonization efforts. This would be a voluntary option.

Pauline Rupp reported that this is a building envelope method only (mechanicals not included) and CHBA members view having a choice – TEDI or % better - favourably. Working to align with the direction of the national code makes sense and makes one less change down the road. When their Task Group ran calculations, they didn't see consistent/predictable results and would like to explore that further.

Council discussed:

- Changes due to solar heat gains
- Efficient designs and the importance of this, noting that every building that uses a % better approach isn't necessarily due to poor design
- ERS aligning with the Code over time – this would help that alignment
- The value of having technical support available to EAs and builders – Service Organizations receive more inquiries than they can handle
- Sharing answers to Step Code questions/inquiries publicly – e.g., posting to the website
- The value of working collaboratively with NRCan to prioritize ERS needs
- Directing technical questions to code.question@gov.bc.ca

DECISION: ESCC members endorsed the proposed % better change if issues identified by CHBA BC can be resolved very soon, and the change is supported by appropriate communications.

ACTION: BSSB to consult with EAs to see where there is confusion in either modelling and/or Code language, and engage with NRCan if help needed with H2K issues.

ACTION: BSSB and communications team to develop plan for communicating Part 9 changes, especially with Building Officials and builders – potential communications opportunity at BOABC's fall conference (connect with Catherine Ernst).

ACTION: BSSB to undertake appropriate regulatory work to incorporate the proposed Part 9 changes into the BC Building Code as quickly as possible.

7. Compliance and Energy Advisor Subcommittee Report

Subcommittee Co-chairs Vanessa Joehl and Nicholas Heap provided a written report attached with meeting agenda. Highlights of work since the June meeting:

- Updated Part 9 Energy Compliance Report – now with instructions for modelling/testing ground-oriented attached residential buildings
- Part 9 Mid-Construction Verification Form – now available online and much work and review
- Searchable EA/energy modeller database now online

The Co-chairs reminded the Council of their request from the June meeting that the Subcommittee be allotted enough budget so it can prepare and deliver on a workplan of needed items for the coming year (the development of a budget/workplan may be iterative). There is concern with 'volunteer fatigue' that the current ad-hoc resourcing model is not able to address.

ACTION: BSSB to assign new staff to Step Code work, and in collaboration with partners, help identify how to address the resourcing/financing issues raised by the Subcommittee.

8. EA White Paper and Recommendations

C&EA Subcommittee Co-chairs Vanessa and Nicholas reminded Council the C&EA Subcommittee was likely the first time EAs, building officials, service organizations and industry have come together to work to solve shared challenges – just one of which is the role of EAs/energy modellers in the building regulatory system. A Working Group of the C&EA Subcommittee helped guide the preparation of an EA White Paper report and recommendations. The White Paper was prepared by City Green with funding from NRCan and examined the current and potential future role of Energy Advisors/energy modellers. Four overarching recommendations from the report focus on:

- Professional Regulation of the Industry
- Code Compliance Services Training
- Quality Assurance
- Stakeholder Support Mechanisms

The recommendations are inter-related and equally important. Subcommittee Co-chairs urged the Council to take responsibility for ensuring the recommendations are fully implemented. They proposed two Working Groups be formed: the first to review the recommendations in full, and a second to develop a plan for how to implement the recommendations. Each set of recommendations will need a sponsor and multi-tiered supports.

Council discussed the following related points:

- Possibly regulatory homes - Professional Governance Act, BC Housing's licensing group? NRCan?
- This issue may not sit solely or primarily within BSSB in government (e.g., may involve other ministries such as Advance Education)

- EGBC/AIBC have professional practice guidelines - ASTT could potentially fill that gap – the majority of EAs are not architects/engineers
- Interior Designers Institute of BC – similar pressures of role in current regulatory system
- If regulation is pursued, not making it overly complex or cumbersome or an obstacle to building

DECISION: ESCC members generally agreed with the request made by the C&EA Co-chairs that implementation of the EA White Paper be a high priority.

ACTION: BSSB to help determine next steps to address EA Report Recommendations. BSSG to start a working group and speak with other ministries and NRCan (as this will be a national issue with a tiered code) when doing so.

ACTION: Dale to connect with Max and Maya/LG Peer Networks about options/tools to ease local government communications / sharing of solutions etc. (e.g., SharePoint).

9. Capacity Building and Communications Subcommittee Report

Written report from Dale Andersson and Christian Cianfrone.

Christian wanted expanded key performance indicators, to evaluate progress with more rigour and with a clear Scope of Work to create potential funding options. He also wants someone to manage the role and go from there.

There has been some interest in a Part 3 Working Group which will start up.

10. Proposed Changes Part 3 Buildings

Zachary May outlined three proposals for changes to the Step Code metrics for Part 3 buildings:

- Proposal #1 - Adjusted metrics for Part 3 - CZ5+
- Proposal #2 – Metrics for public sector buildings for hospitals/care facilities – due to concern expressed about the proposed metrics, this proposal was removed from the discussion pending further analysis by BSSB and the Technical Subcommittee
- Proposal #3 – Metrics for other public sector buildings

Council discussed issues as follows:

Proposal 1:

- What feedback BSSB received in the public review process – mostly concern with metrics for hospitals being too ambitious, and the need to differentiate other public sector buildings such as schools or colleges
- IBPSA raised no concerns about this proposal
- Technical Subcommittee support of this proposal
- FortisBC's interest in offering incentives for Part 3 buildings and the value of incentives to encourage builders – there is value in understanding any obstacles to the provision of incentives

DECISION: COUNCIL supported the proposed Part 3 changes for Climate Zones 5 and above.

ACTION: BSSB to share public review comments on Part 3 buildings proposed metrics changes.

ACTION: BSSB to incorporate proposed Part 3 changes into BCBC regulation as quickly as possible supported by relevant communications.

Proposal 2:

- What feedback BSSB received in the public review process – mostly concern with metrics for hospitals being too

Proposal #2: Other Public Sector

Council discussed the following:

- The diversity of public buildings are challenging, as hospitals and classrooms should have different requirements from university residences/mixed use. Some labs/hospitals must adhere to different standards from Ministry of Health/WorkSafeBC reqs on air changes, etc. Different requirements are necessary for each.
    - Zac said college/university definition does not apply to all buildings built on campuses, but rather school-type buildings regardless of whether they are on campus or not (e.g. laboratories would be judged on EUI and thermal demand).
    - On hospitals, Zac said there is a proposal to build to Step 1 and determine specifics of next Steps by policy (Min. of Health requires NPV, carbon impacts, etc.). That responds to IBPSA concerns. Guidelines could be made by January. Technical SC is more split on whether to keep targets and provide guidance, or strike them and work further.
- John said efficiency should not come at the expense of occupant comfort/good learning environment. Old policies did not specify mechanical cooling in classrooms, but students/faculty complained about poor air quality and high temperatures.
- Christian said absolute targets are advantageous because they force everyone to discuss and consider things you might not otherwise. Targets also hold people accountable to use best practices. John wants to see targets, but as proposed, not realistic to achieve within constraints of WorkSafeBC.
- Different targets proposed include a % better approach, a tiered approach, and finer distinctions between targets of a similar type (e.g. elementary vs. high schools). There were concerns about another new approach.
- Robyn said without policy/requirements, CEMs say bottom dollar always wins. Industry and public sector should be held to same high standard. If takes a little longer, that is OK.
- Harshan has read all feedback from Technical Sub-Committee – no issue w EUIs just TEDIs. E.g., elementary schools – issues that related. Northern Zone schools had hard time reaching highest Step TEDIs. A step forward would be to have EUI established. If putting TEDI – say TEDI will apply if no local policies apply.
- Wilma said the merit of % better was a possibility. To adhere to objectives of CleanBC, GHGs targets would be welcomed.
- Zac said GHG's will be part of public sector buildings policy. Adrian agreed, and is seeking guidance at this stage. Patrick said school buildings can be very different. Absolute targets can be very challenging, so he supports % better approach which is aligned with the national approach.

ACTION: Zac will take these comments and suggestions back to BSSB to find alternatives and develop more options for public sector buildings. BSSB will add ventilation rates to research project and follow-up with FortisBC on incentives/barriers. Public review comments to be forwarded to Step Code Council; Ministry of Advanced Education, Skills and Training and Ministry of Energy, Mines and Petroleum Resources. Follow up on four recommendations by December and create a Public Sector Buildings Working Group. Will develop communications resources for local governments.

John has data they can share on different typologies, etc.

Topic of existing buildings was deferred to the next meeting due to time constraints.

Meeting adjourned at 4 p.m.

Request: Upcoming Engagement Session with Building and Safety Standards Branch (Municipal Affairs and Housing)

From: McCrae, Aura OHCS:EX
To: jmeads@qualico.com
Sent: December 4, 2019 11:32:13 AM PST
Attachments: image002.jpg

Hi Jonathan,

Jeff Fisher of UDI provided your name to us in response to the email below. I'm looking to book a 1 hour meeting with you to talk with our contractor who will be leading this session. Can you please advise on your availability this week (or next)? For this week, tomorrow or Friday afternoon looks pretty open from our end.

Thanks in advance,

Aura McCrae
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
T: 778 698-7635 | M: 250 880-4566 | Email: aura.mccrae@gov.bc.ca

Offering acknowledgement in respect of the Lekwungen Speaking People, traditional keepers of this land on which I live, work and play.



From: McCrae, Aura OHCS:EX
Sent: November 18, 2019 12:28 PM
To: jfisher@udi.org
Cc: May, Zachary OHCS:EX
Subject: FYI/Request: Upcoming Engagement Session with Building and Safety Standards Branch (Municipal Affairs and Housing)

Greetings,
I am writing to you as you have been identified as a contact for your organization.
As you may or may not know, Building and Safety Standards Branch (BSSB) with the BC government is working on an initiative called Building Energy Requirements Tool (BERT for short).
This tool is intended to gather data to help inform policies and programs throughout the building lifecycle.
Specifically, BERT will:

- Help manage information
- Support industry compliance with BC Building Code requirements
- Support local government enforcement of code requirements
- Improve transparency

With the initial application aimed at supporting industry and local government's transition to new energy performance requirements, there is potential to assess opportunities in tool development and other data needs.
To do this, we would be conducting engagement/consultation sessions in the next few weeks to seek your input. The purpose of these sessions is to document data needs in building/built environment to inform tool development from a user interface (data inputs and outputs) and on how we may manage the data we collect.
In addition to yourself, please provide 2 to 3 additional contacts from your organization as soon as possible.
*Note: we have also reached out to International Building Performance Simulation Association of British Columbia, Association of Professional Engineers and Geoscientists of British Columbia, Architectural Institute of British Columbia to seek representation from their organizations.

Myself and/or other members of the project team will be in contact with you with further details on this planned engagement/consultation session.
Please advise if you are no longer the appropriate contact. I look forward to hearing from you.
Sincerely,

Aura McCrae
Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
T: 778 698-7635 | M: 250 880-4566 | Email: aura.mccrae@gov.bc.ca

Hello everyone,

Meeting agenda attached.

As before, please find dial-in information and a Skype link below. I have added an additional 30 minutes for overflow in case we go long, but we’ll try to keep it to 1.5 hours.

We are still finalizing the agenda, so if you think we should amend or change it, there’s still time to let us know.

Best,
Hugo

Hugo Wong
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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Join Skype Meeting
Trouble Joining? Try Skype Web App
Join by phone
s.15

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From: Wong, Hugo OHCS:EX
Sent: November 21, 2019 3:24 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'bdeeks@rdcfinehomes.com'; 'bea.bains@fortisbc.com'; 'catherine.ernst@boabc.org'; 'christian@zebx.org'; 'christine.gillis@canada.ca'; 'christopher.frye@canada.ca'; 'christopher.mclellan@canada.ca'; Dang, Tommy OHCS:EX <Tommy.Dang@gov.bc.ca>; 'gary.hamer@bchydro.com'; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; 'Guido.Wimmers@unbc.ca'; 'hradhakrishnan@egbc.ca'; 'J.Madden@ubc.ca'; 'jfisher@udi.org'; 'jjung@asttbc.org'; 'joe.iconhomes@shaw.ca'; 'kelly@hkrbuilders.com'; 'Lisa.Mak@bchydro.com'; 'mark@havan.ca'; 'Maxwell.Sykes@surrey.ca'; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>; 'mchorobik@communityenergy.bc.ca'; 'MGatensby@aibc.ca'; 'mlohmann@communityenergy.bc.ca'; 'mmcwilliam3@bcit.ca'; 'msohi@boabc.org'; 'muneesh@boma.bc.ca'; 'nconnolly@newwestcity.ca'; 'NConnolly@richmond.ca'; 'nheap@richmond.ca'; 'patrick.enright@vancouver.ca'; 'ralph.wells@ubc.ca'; 'robyn.wark@bchydro.com'; Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>; 'sean.pander@vancouver.ca'; 'SHorsburgh@rdn.bc.ca'; Starkl-Moser, Miriam MAH:EX

<Miriam.Starklmoser@gov.bc.ca>; 'toby.lau@bchydro.com'; 'Todd.cumiskey@icba.ca'; 'vanessa@chbabc.org'; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; 'warrenp@bccassn.com'; 'wileung@bchousing.org'; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Dang, Tommy OHCS:EX <Tommy.Dang@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>; Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: Save the Date: December ESCC Teleconference for Mon. Dec. 9, 2-3:30 p.m.

Dear Energy Step Code Council members and guests,

My name is Hugo, and I work with Dale at BSSB. I’ll be providing admin support for the Energy Step Code Council and some sub-committees.

With the release of Revision 2 of the 2018 BC Building Code, we’d like to propose a 1.5-hour teleconference on Monday Dec. 9, 2-3:30 p.m. We’re still finalizing an agenda, but our draft contains:

* ESCC Subcommittee Composition: Report Out
* Succession Planning for Subcommittees
* Strat Plan Update?
* Discuss Roadmap to 2022 code – what should we do by 2021?
* BSSB CleanBC Team Update - update on our work/plans etc.?
* EA White Paper Response
* Other?

Please let us know if you can make it, and send any questions or other agenda items to us. We’ll send dial-in information and a more fulsome agenda closer to the date.

Best,
Hugo

Hugo Wong
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Agenda

Date and Time of Meeting: December 9, 2019 | Time: 2:00 – 4:00 p.m. Pacific Time
Teleconference Meeting – See also meeting invite for call-in details
s.15

Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

1. Welcome and Introductions – Zachary May
    - New member: Manjit Sohi representing BOABC
2. BCBC 2018 Revision 2: BC Energy Step Code Changes – Zachary May, Toby Lau and Norm Connolly
    - See https://energystepcode.ca/news/ for details of Part 3 and Part 9 Buildings
    - Decision re: Step 1 for Public Sector Buildings
    - Public Sector Buildings Working Group Update – Scott Williams, BSSB
    - Roadmap to BCBC 2022
3. ESCC Subcommittee Composition: Follow-up from October 4, 2019 Meeting – Zachary May and others
    - Survey of Subcommittee Members (Planned)
    - Succession Planning for Subcommittees
4. Local Government Implementation Update (Graphic to follow shortly) – Zachary May and others
5. BC Energy Step Code Year-End Accomplishments (Graphic to follow shortly) – Zachary May and others
6. Other Items – All
7. Next Meeting: Usual in-person meeting proposed for February 2020 – Zachary May
8. Meeting Adjournment

For Information

Energy Efficiency Canada has just released a scorecard comparing efforts in energy efficiency across Canada. B.C. is on top, due in part to our work on the BC Energy Step Code and the supporting work from Utilities and BC Housing! https://www.scorecard.efficiencycanada.org/.

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Table ES1. Summary of Provincial Scores

Rank	Province	Energy Efficiency Programs (35 pts.)	Enabling Policies (22 pts.)	Buildings (18 pts.)	Transportation (17 pts.)	Industry (8 pts.)	Total (100 pts.)
1	British Columbia	9	**14**	**14**	13	**6**	**56**
2	Québec	11	12	5	**14**	6	48
3	Ontario	15	12	9	7	5	47
4	Nova Scotia	**18**	11	6	5	6	45
5	Manitoba	13	6	6	2	5	32
6	Alberta	9	8	5	3	6	30
7	Prince Edward Island[6]	13	6	3	3	1	26
8	New Brunswick	6	7	1	7	4	24
9	Saskatchewan	2	6	4	1	5	18
10	Newfoundland and Labrador	4	6	2	2	1	15

ESCC presentation, December year end update

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bdeeks@rdcfinehomes.com <'bdeeks@rdcfinehomes.com'>, bea.bains@fortisbc.com <'bea.bains@fortisbc.com'>, catherine.ernst@boabc.org <'catherine.ernst@boabc.org'>, christian@zebx.org <'christian@zebx.org'>, christine.gillis@canada.ca <'christine.gillis@canada.ca'>, christopher.frye@canada.ca <'christopher.frye@canada.ca'>, christopher.mclellan@canada.ca <'christopher.mclellan@canada.ca'>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, gary.hamer@bchydro.com <'gary.hamer@bchydro.com'>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, Guido.Wimmers@unbc.ca <'Guido.Wimmers@unbc.ca'>, hradhakrishnan@egbc.ca <'hradhakrishnan@egbc.ca'>, J.Madden@ubc.ca <'J.Madden@ubc.ca'>, jfisher@udi.org <'jfisher@udi.org'>, jjung@asttbc.org <'jjung@asttbc.org'>, joe.iconhomes@shaw.ca <'joe.iconhomes@shaw.ca'>, kelly@hkrbuilders.com <'kelly@hkrbuilders.com'>, Lisa.Mak@bchydro.com <'Lisa.Mak@bchydro.com'>, mark@havan.ca <'mark@havan.ca'>, Maxwell.Sykes@surrey.ca <'Maxwell.Sykes@surrey.ca'>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, mchorobik@communityenergy.bc.ca <'mchorobik@communityenergy.bc.ca'>, MGatensby@aibc.ca <'MGatensby@aibc.ca'>, mlohmann@communityenergy.bc.ca <'mlohmann@communityenergy.bc.ca'>, mmcwilliam3@bcit.ca <'mmcwilliam3@bcit.ca'>, msohi@boabc.org <'msohi@boabc.org'>, muneesh@boma.bc.ca <'muneesh@boma.bc.ca'>, nconnolly@newwestcity.ca <'nconnolly@newwestcity.ca'>, NConnolly@richmond.ca <'NConnolly@richmond.ca'>, nheap@richmond.ca <'nheap@richmond.ca'>, patrick.enright@vancouver.ca <'patrick.enright@vancouver.ca'>, ralph.wells@ubc.ca <'ralph.wells@ubc.ca'>, robyn.wark@bchydro.com <'robyn.wark@bchydro.com'>, Sandham, Kylie HOUS:EX <Kylie.Sandham@gov.bc.ca>, sean.pander@vancouver.ca <'sean.pander@vancouver.ca'>, SHorsburgh@rdn.bc.ca <'SHorsburgh@rdn.bc.ca'>, Hold - 230929 - Starkl-Moser, Miriam MUNI:EX <Miriam.Starklmoser@gov.bc.ca>, toby.lau@bchydro.com <'toby.lau@bchydro.com'>, Todd.cumiskey@icba.ca <'Todd.cumiskey@icba.ca'>, vanessa@chbabc.org <'vanessa@chbabc.org'>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, warrenp@bccassn.com <'warrenp@bccassn.com'>, wileung@bchousing.org <'wileung@bchousing.org'>, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Wells, Ralph <ralph.wells@ubc.ca>, Madden, John (C+CP) <j.madden@ubc.ca>, Gillis, Christine (NRCAN/RNCAN) <christine.gillis@canada.ca>, Wilma Leung <wileung@bchousing.org>, Jason Jung <jjung@asttbc.org>, Enright, Patrick <patrick.enright@vancouver.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, nconnolly <nconnolly@richmond.ca>, Catherine Ernst <catherine.ernst@boabc.org>, Warren Perks <warrenp@bccassn.com>, Lau, Toby <Toby.Lau@bchydro.com>, Manjit Sohi <msohi@boabc.org>, s.22 , Christopher McLellan (NRCan) <christopher.mclellan@canada.ca>, Megan Lohmann (CEA) <mlohmann@communityenergy.bc.ca>, Todd Cumiskey <todd.cumiskey@icba.ca>, Muneesh Sharma <muneesh@boma.bc.ca>, Mary McWilliam <mmcwilliam3@bcit.ca>, Christopher Frye <christopher.frye@canada.ca>, Bains, Bea <bea.bains@fortisbc.com>, Hamer, Gary <gary.hamer@bchydro.com>, Maya Chorobik <mchorobik@communityenergy.bc.ca>, nheap <nheap@richmond.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Jeff Fisher <jfisher@udi.org>, Vanessa Joehl <vanessa@chbabc.org>

Sent: December 9, 2019 2:16:30 PM PST

Attachments: ESCC - 2019-12-12.pdf

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY STEPCODE

BUILDING BEYOND THE STANDARD

Zachary D. May, MBA
Director, Strategic Policy
Buildings and Safety Standards Branch
Ministry of Municipal Affairs and Housing

December 12, 2019
Energy Step Code Council – Year End Update

Outline

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

- **Recent Changes – effective December 12, 2019**
- Additional work and research underway
- Getting to 2022

Changes – Dec. 12, 2019

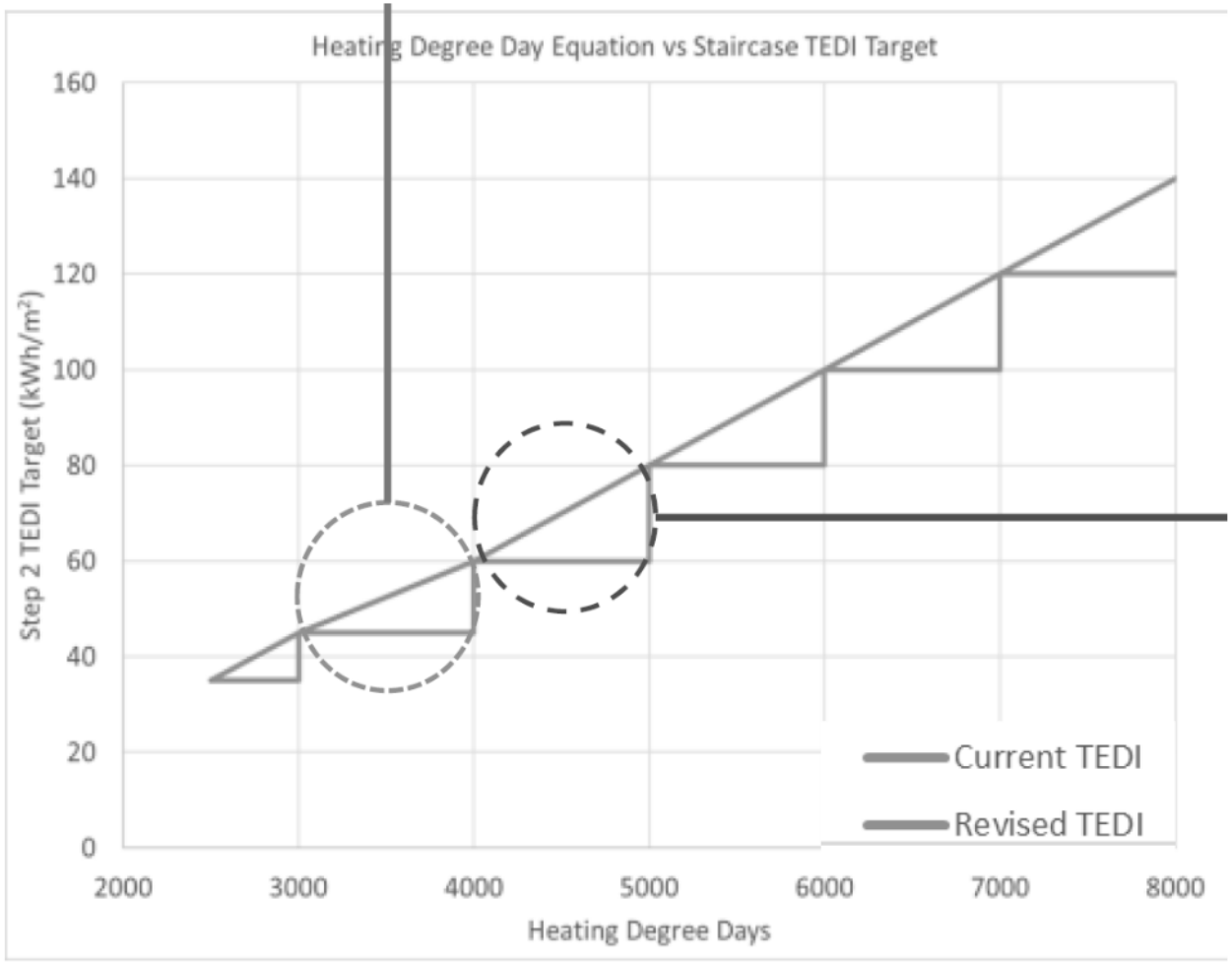
Part 9:

- Part 9 TEDI (Envelope) adjustment scale
- Alternative to TEDI using ERS reference building

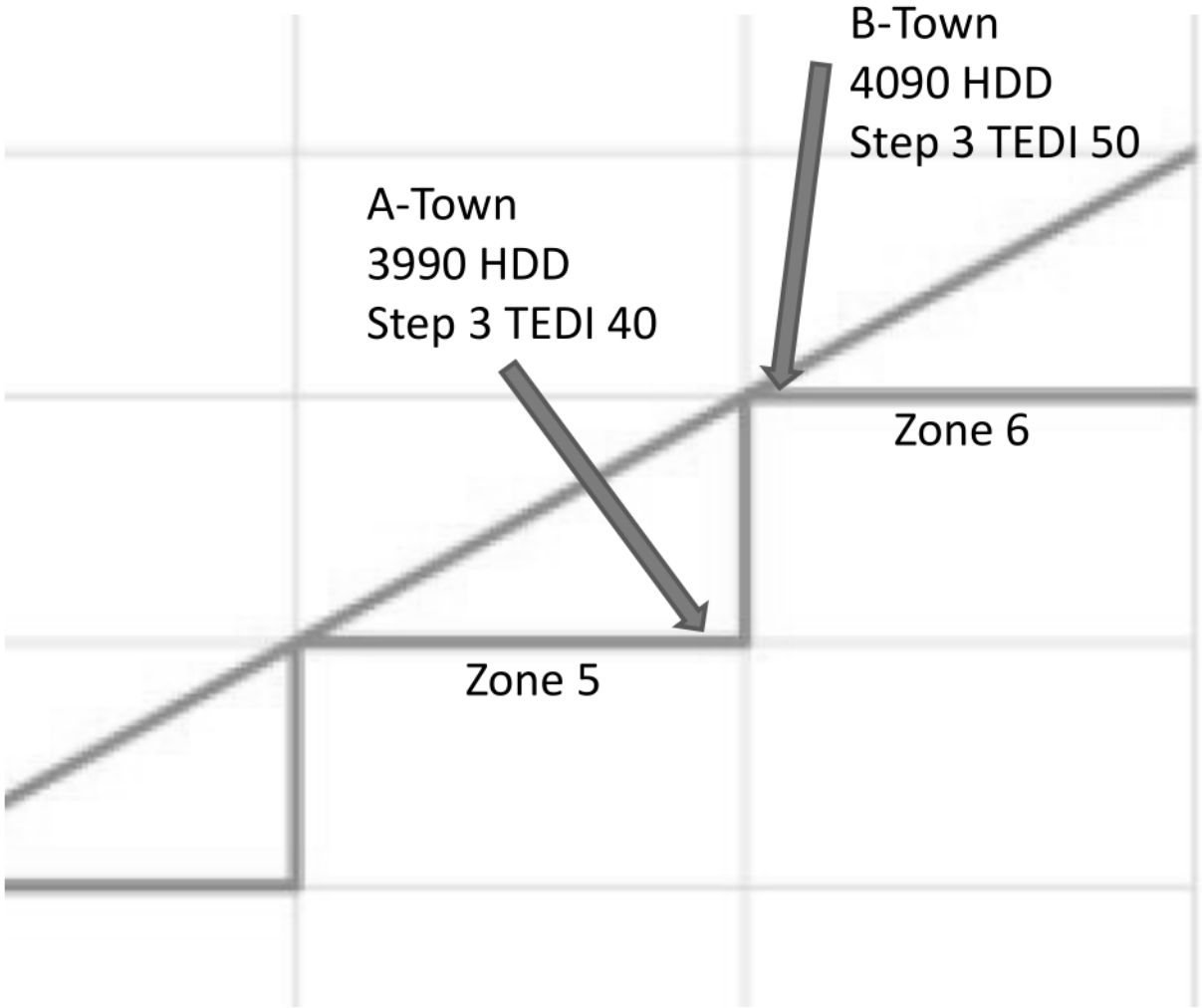
Part 3:

- Adjusted targets outside Climate Zone 4
- Enable Energy Step Code for Public Sector Buildings

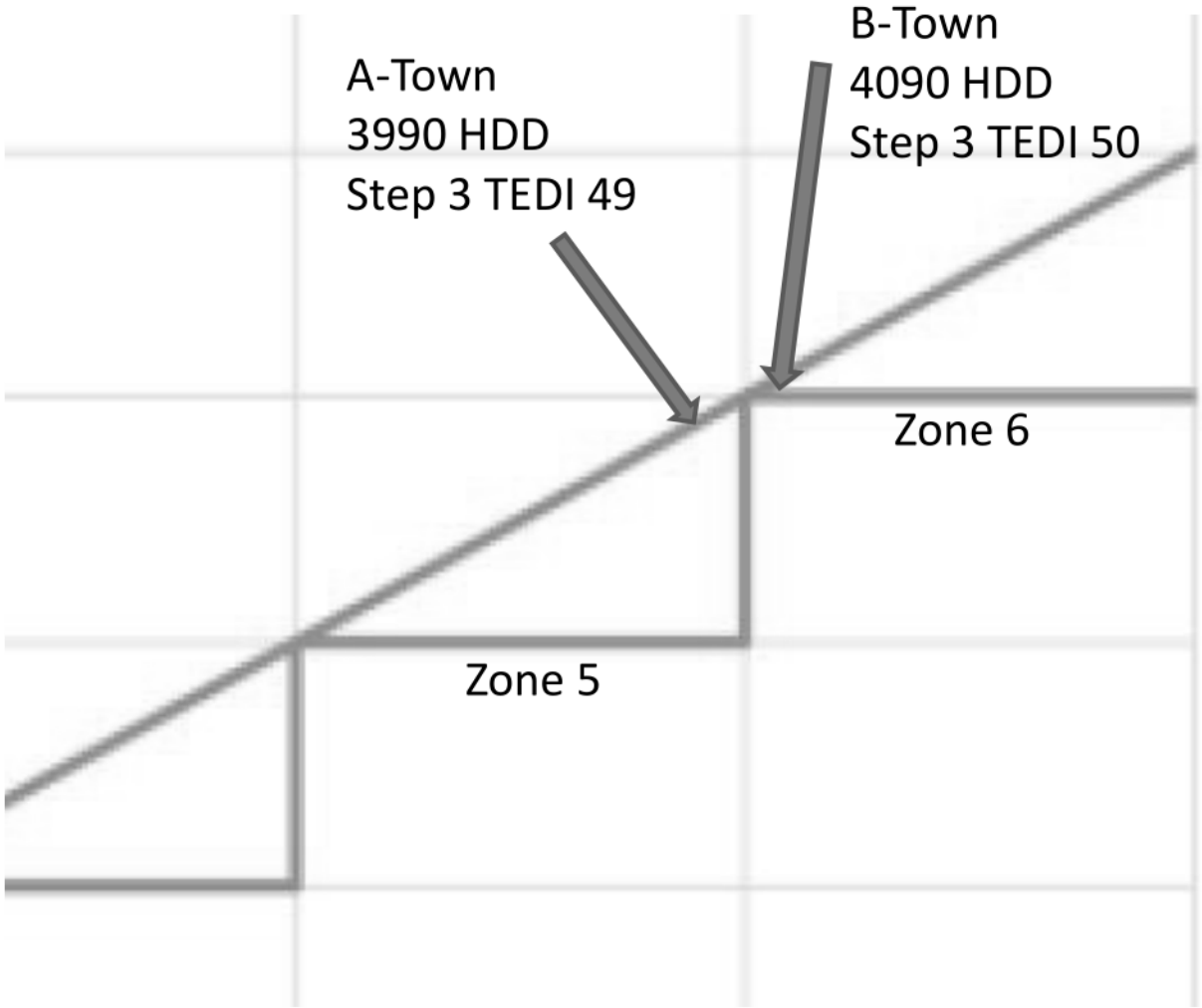
Part 9 Changes



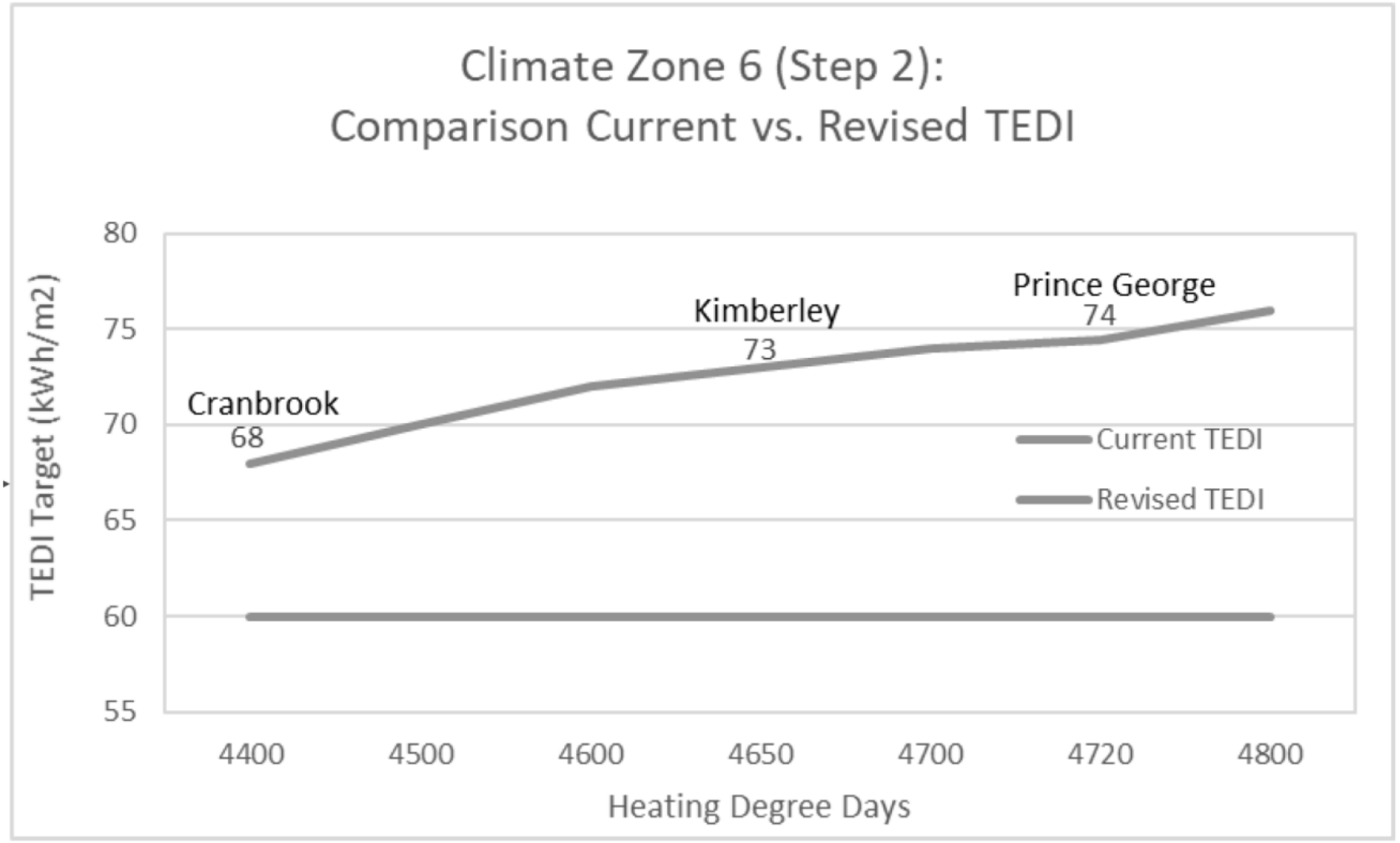
Part 9 Changes



Part 9 Changes



Part 9 Changes



Changes – Dec. 12, 2019

Part 9:

- Alternative to TEDI using ERS reference building - "*envelope performance improvement over the EnerGuide Reference House*"

- New term defined within 9.36.6.
- Based on proposed 2020 National Building Code
- Only available with ERS compliance (not 9.36.5.)
- Neutralizes impact of equipment, focused on passive reduction of heating demand

Changes – Dec. 12, 2019

ERS Compliance Options

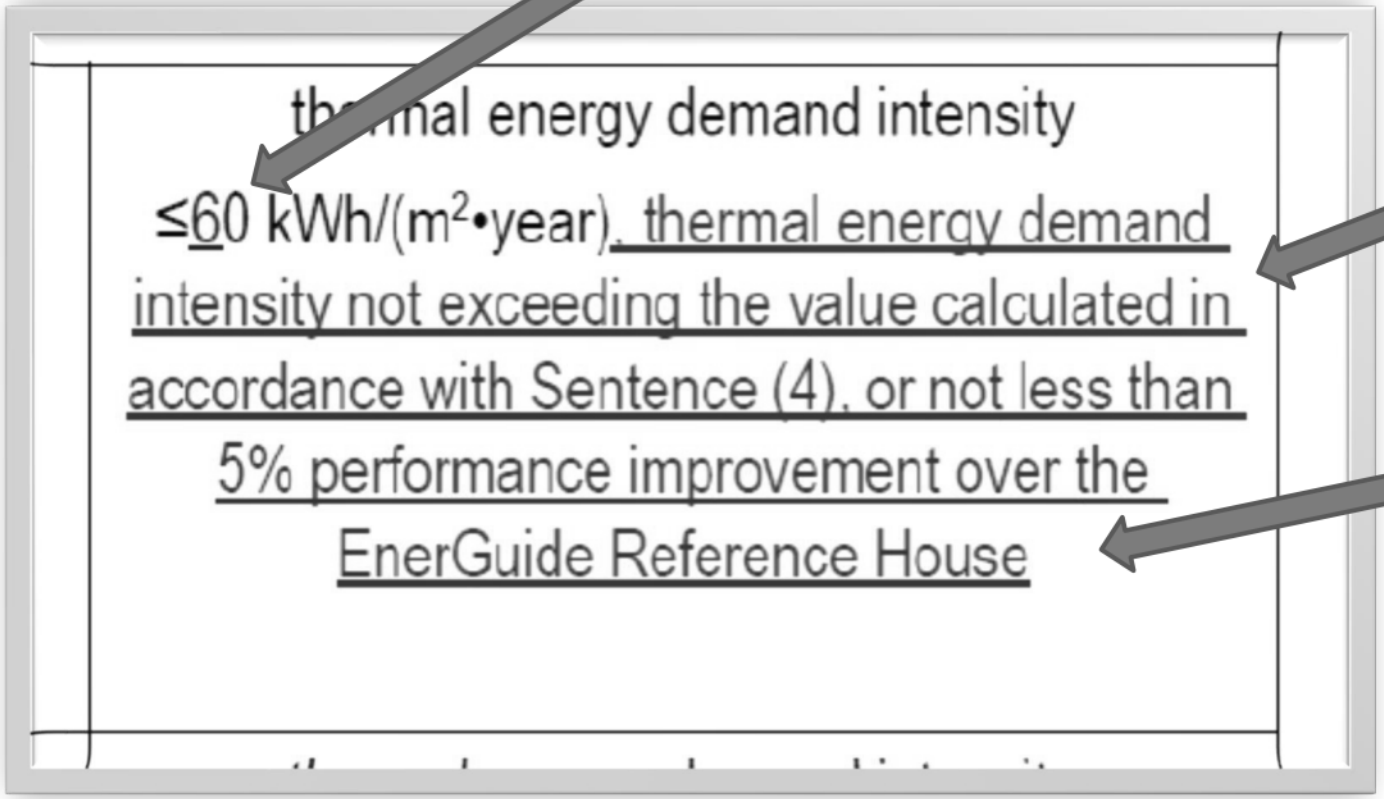
Step	ACH	% over ERS reference	% envelope improvement over ERS reference house
1	N/A	≤0	N/A
2	≤3.0	≤10%	≤5%
3	≤2.5	≤20%	≤10%
4	≤1.5	≤40%	≤20%
5	≤1.0	N/A	≤50%

Changes – Dec. 12, 2019

Step	Airtightness (Air Changes per Hour at 50 Pa Pressure Differential)	Performance Requirement of *Building* Equipment and Systems	Performance Requirement of *Building* Envelope
1	N/A	EnerGuide Rating % lower than EnerGuide Reference House: not less than 0% lower energy consumption or conform to Subsection 9.36.5.	
2	≤ 3.0	EnerGuide Rating % lower than EnerGuide Reference House: not less than 10% lower energy consumption or the applicable mechanical energy use intensity requirements in Table 9.36.6.3.-G	thermal energy demand intensity ≤60 kWh/(m²•year), thermal energy demand intensity not exceeding the value calculated in accordance with Sentence (4), or not less than 5% performance improvement over the EnerGuide Reference House
3	≤ 2.5	EnerGuide Rating % lower than	thermal energy demand intensity

Changes – Dec. 12, 2019

Baseline TEDI for climate zone



Scaled-adjusted TEDI

Envelope performance improvement over the ERS Reference House

Changes – Dec. 12, 2019

Part 3:

- Adjusted targets outside Climate Zone 4
- Enable Energy Step Code for Public Sector Buildings

Changes – Dec. 12, 2019

Table 10.2.3.3.-H
Energy Performance Requirements for Other Residential Occupancies
Forming part of Sentences 10.2.3.3.(1) and (2)

Degree-Days Below 18°C	Step	Equipment and Systems – Maximum Total Energy Use Intensity, kWh/(m²•year)	*Building* Envelope – Maximum Thermal Energy Demand Intensity, kWh/(m²•year)
Less than 3000	1	Conform to Part 8 of the NECB	
	2	130	45
	3	120	30
	4	100	15
3000 to 3999	1	Conform to Part 8 of the NECB	
	2	130	45
	3	120	35
	4	110	22
4000 to 4999	1	Conform to Part 8 of the NECB	
	2	135	50
	3	120	40
	4	110	22
5000 to 5999	1	Conform to Part 8 of the NECB	
	2	135	55
	3	120	40
	4	110	22

Changes – Dec. 12, 2019

Table 10.2.3.3.-H
Energy Performance Requirements for Other Residential Occupancies
Forming part of Sentences 10.2.3.3.(1) and (2)

Degree-Days Below 18°C	Step	Equipment and Systems – Maximum Total Energy Use Intensity, kWh/(m²•year)	*Building* Envelope – Maximum Thermal Energy Demand Intensity, kWh/(m²•year)
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	2	130	45
	3	120	35
	4	110	22
4000 to 4999	1	Conform to Part 8 of the NECB	
	2	135	50
	3	120	40
	4	110	22
5000 to 5999	1	Conform to Part 8 of the NECB	
	2	135	55
	3	120	40
	4	110	22

- Adjusted targets outside climate zone 4 based on available data
- Will make targets more achievable in colder climates

Changes – Dec. 12, 2019

10.2.3. Energy Step Code

10.2.3.1. Application

1) This Subsection applies to *buildings* containing any of the following *major occupancies*:

a) *assembly*, as described in Tables 10.2.3.3.-A, 10.2.3.3.-B, 10.2.3.3.-C and 10.2.3.3.-D,

b) *treatment*, as described in Table 10.2.3.3.-E,

c) *care*, as described in Table 10.2.3.3.-F,

d) *residential*,

e) *business and personal service*, or

f) *mercantile*.

(See Sentence 1.1.3.1.(1) and Table C-2 in Appendix C.)

Changes – Dec. 12, 2019

10.2.3. Energy Step Code

10.2.3.1. Application

1) This Subsection applies to *buildings* containing any of the following *major occupancies*:

a) *assembly*, as described in Tables 10.2.3.3.-A, 10.2.3.3.-B, 10.2.3.3.-C and 10.2.3.3.-D,

b) *treatment*, as described in Table 10.2.3.3.-E,

c) *care*, as described in Table 10.2.3.3.-E,

d) *residential*,

e) *business and personal service*, or

f) *mercantile*.

(See Sentence 1.1.3.1.(1) and Table C-2 in Appendix C.)

- Enables Energy Step Code Step 1 for public sector buildings
- No specific targets at this time

Changes – Dec. 12, 2019

Part 9:

- Part 9 TEDI (Envelope) adjustment scale
- Alternative to TEDI using ERS reference building

Part 3:

- Adjusted targets outside Climate Zone 4
- Enable Energy Step Code for Public Sector Buildings

Outline

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

- Recent Changes – effective December 12, 2019
- **Additional work and research underway**
- Getting to 2022

Additional work and research



Complete:

- Summary memo of the changes – Complete!
  www.energystepcode.ca

Underway and in development:

- Online code publishing
- Collaboration with NRCan for ERS compliance
- Part 9 compliance forms and calculator update
- Updates to builder guides – BC Housing
- Research on public sector buildings

Outline



- Recent Changes – effective December 12, 2019
- Additional work and research underway
- **Getting to 2022**

CleanBC – Better Buildings



British Columbia's commitment for future Building Codes

New Buildings
2022 – 20% improvement
2027 – 40% improvement
2032 – Net Zero Energy Ready

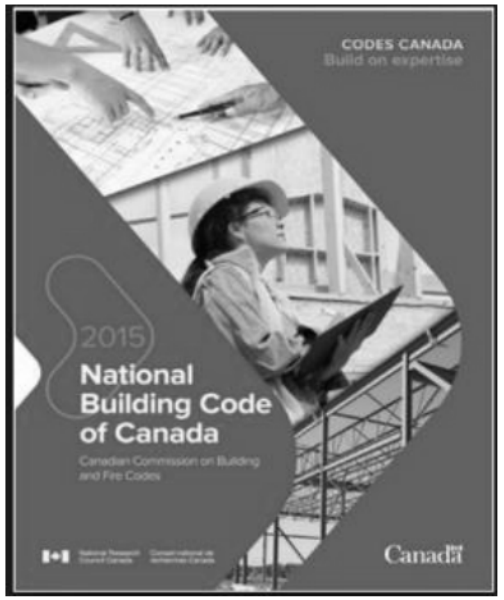
Existing Buildings
Code for existing buildings in 2024

Getting to 2022

20% improvement in 2022:

- Build on the success of the Energy Step Code
- Increase harmonization with National Building Code / National Energy Code for Buildings

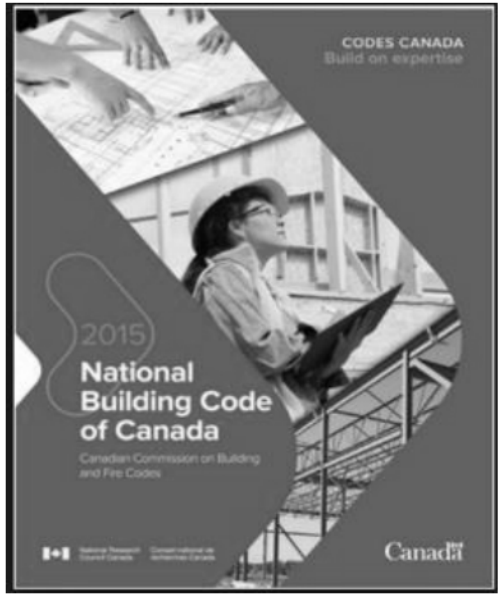
ENERGY STEPCODE
BUILDING BEYOND THE STANDARD



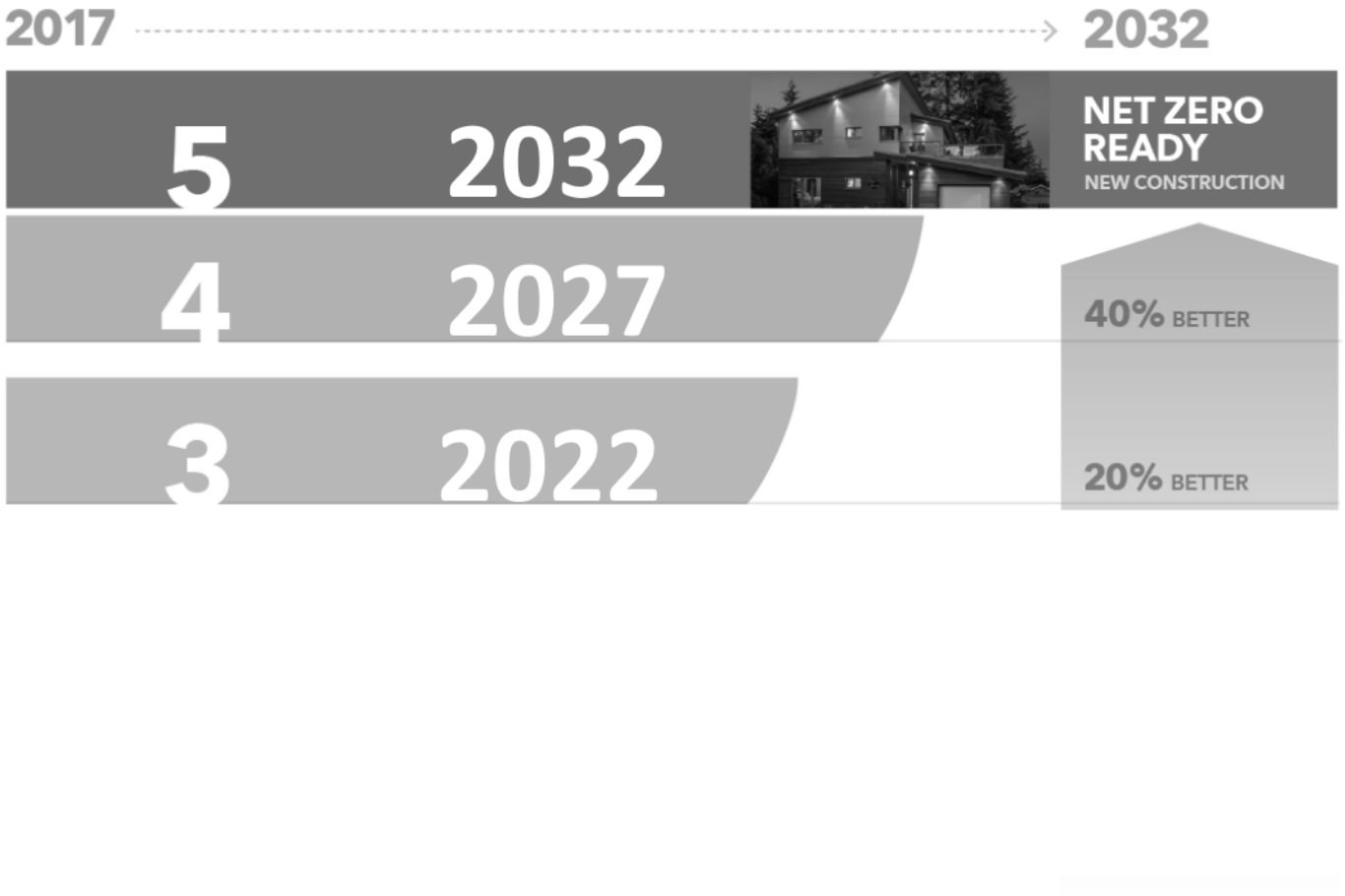
Getting to 2022

2020 NBC/NECB possible outcomes:

- NECB may achieve 20% improvement over 2015 NECB
- No proposed changes to baseline 9.36. prescriptive (static since 2012)
- Tiered code proposals



Getting to 2022



Part 9 (proposed plan):

- Step 3 achieves 20%
- Lower steps will need to be removed or adjusted
- Communities can still reference higher Steps
- Prescriptive backstop for non-residential
- Capacity challenges for rural and remote communities

Getting to 2022



Part 3 (proposed plan):

- Less clear which step is "20% improvement"
- Will require analysis and consultation to establish new minimum Step
- Baseline will be the 2020 National Energy Code for Buildings

CleanBC – Better Buildings



British Columbia's commitment for future Building Codes

New Buildings
2022 – 20% improvement
2027 – 40% improvement
2032 – Net Zero Energy Ready

Existing Buildings
Code for existing buildings in 2024

ESCC Feb. meeting date, Dec. meeting minutes, etc.

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bdeeks@rdcfinehomes.com <'bdeeks@rdcfinehomes.com'>, bea.bains@fortisbc.com <'bea.bains@fortisbc.com'>, catherine.ernst@boabc.org <'catherine.ernst@boabc.org'>, christian@zebx.org <'christian@zebx.org'>, christine.gillis@canada.ca <'christine.gillis@canada.ca'>, christopher.frye@canada.ca <'christopher.frye@canada.ca'>, christopher.mclellan@canada.ca <'christopher.mclellan@canada.ca'>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, gary.hamer@bchydro.com <'gary.hamer@bchydro.com'>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, Guido.Wimmers@unbc.ca <'Guido.Wimmers@unbc.ca'>, hradhakrishnan@egbc.ca <'hradhakrishnan@egbc.ca'>, J.Madden@ubc.ca <'J.Madden@ubc.ca'>, jfisher@udi.org <'jfisher@udi.org'>, jjung@asttbc.org <'jjung@asttbc.org'>, joe.iconhomes@shaw.ca <'joe.iconhomes@shaw.ca'>, kelly@hkrbuilders.com <'kelly@hkrbuilders.com'>, Lisa.Mak@bchydro.com <'Lisa.Mak@bchydro.com'>, mark@havan.ca <'mark@havan.ca'>, Maxwell.Sykes@surrey.ca <'Maxwell.Sykes@surrey.ca'>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, mchorobik@communityenergy.bc.ca <'mchorobik@communityenergy.bc.ca'>, MGatensby@aibc.ca <'MGatensby@aibc.ca'>, mlohmann@communityenergy.bc.ca <'mlohmann@communityenergy.bc.ca'>, mmcwilliam3@bcit.ca <'mmcwilliam3@bcit.ca'>, msohi@boabc.org <'msohi@boabc.org'>, muneesh@boma.bc.ca <'muneesh@boma.bc.ca'>, nconnolly@newwestcity.ca <'nconnolly@newwestcity.ca'>, NConnolly@richmond.ca <'NConnolly@richmond.ca'>, nheap@richmond.ca <'nheap@richmond.ca'>, patrick.enright@vancouver.ca <'patrick.enright@vancouver.ca'>, ralph.wells@ubc.ca <'ralph.wells@ubc.ca'>, robyn.wark@bchydro.com <'robyn.wark@bchydro.com'>, Sandham, Kylie HOUS:EX <Kylie.Sandham@gov.bc.ca>, sean.pander@vancouver.ca <'sean.pander@vancouver.ca'>, SHorsburgh@rdn.bc.ca <'SHorsburgh@rdn.bc.ca'>, Hold - 230929 - Starkl-Moser, Miriam MUNI:EX <Miriam.Starklmoser@gov.bc.ca>, toby.lau@bchydro.com <'toby.lau@bchydro.com'>, Todd.cumiskey@icba.ca <'Todd.cumiskey@icba.ca'>, vanessa@chbabc.org <'vanessa@chbabc.org'>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, warrenp@bccassn.com <'warrenp@bccassn.com'>, wileung@bchousing.org <'wileung@bchousing.org'>, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>

Sent: January 8, 2020 5:40:22 PM PST

Attachments: 2019 Year in Review.pdf, ESCC-Notes-2019-12-09-vFIN.docx

Hello Energy Step Code Council members,

I hope you have had a restful holiday. We have some updates to share following our December teleconference.

After looking over the Doodle poll, we have chosen **Feb. 28, 2019** as the date for the next Energy Step Code Council meeting. We expect it to be an all-day meeting in Vancouver again. We tried to choose the date that the most members could attend, although I realize it doesn't work for everyone. Such is the challenge with a large group!

I have attached the minutes from the December teleconference, as well as a summary graphic of our achievements as a group over the last year. Please let me know if there are errors or omissions.

More details on the timing and logistics of the meeting will come in the next few weeks.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

2019 Year in Review

48,029
visits to energystepcode.ca

1,490
newsletter subscriptions
519 from 2018

Tools for Local Governments
Part 9 Compliance Report Update
Mid-Construction Verification Form

31
local governments **reference** the BC Energy Step Code

57
local governments **consulting** on the BC Energy Step Code

NRCan accepted the recommendations for multiple EAs working on an ERS file

Key Studies and Publications

1. Local Government Readiness Survey – 2019
2. Energy Advisor Scope of Practice
3. Lessons Learned Report
4. GHGi Study
5. Costing Study
6. BC Housing Design Guide and Supplement
7. Local Government Best Practices Guide Version 2
8. Building Official Handbook

Link to publications

The 2019 Local Government Survey indicates **88%** of respondents have a moderate, good or excellent knowledge of the BC Energy Step Code

BOABC's Energy Foundations Program

Specifically designed for building officials whose communities have either adopted or have plans to adopt the BC Energy Step Code. The Program includes a new Building Official handbook and online course

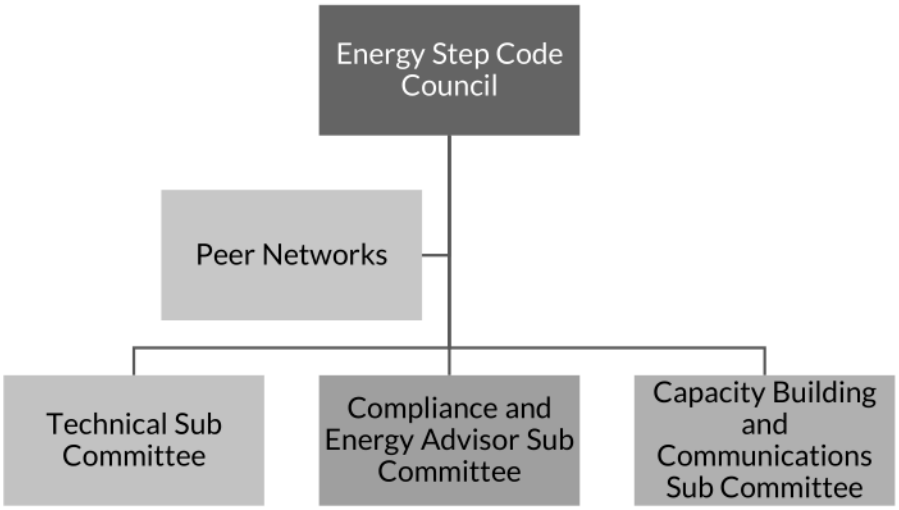
3
Key Incentive Programs
Better Homes
Better Buildings
Better Buildings Challenge

DECEMBER 12, 2019

BC Building Code 2018 Revision 2:

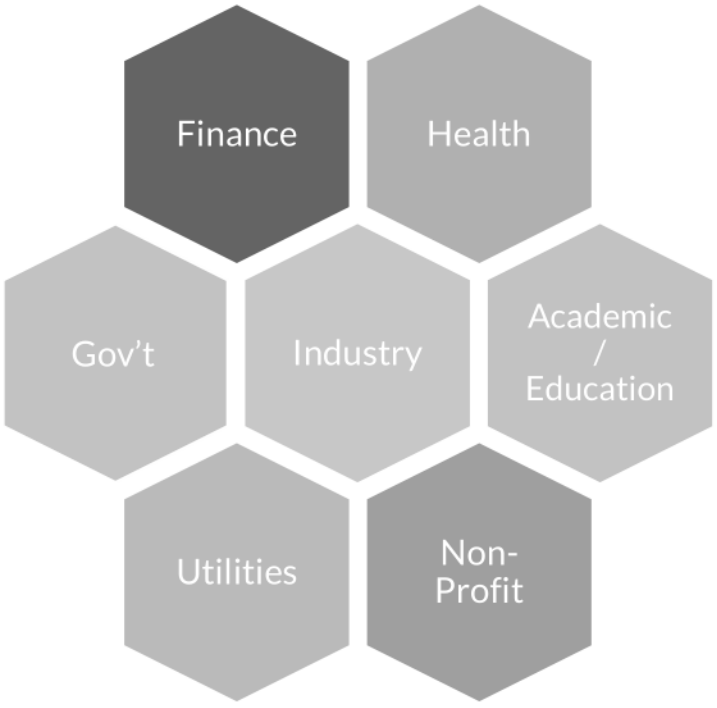
- Refinements to requirements for Part 9 buildings
- Refinements to requirements for Part 3 buildings outside of Climate Zone 4
- New Step 1 requirements for schools, hospitals, care centres, and more

Council and Subcommittees



30 local governments involved in the Peer Networks

74 organizations, across 7 sectors, involved in the Energy Step Code Council and Sub Committees



- 3West Building Energy Consultants
- Applied Science, Technologists & Technicians of BC
- Architectural Institute of BC
- BC Construction Association
- BC Housing
- Enforma
- BC Hydro
- BC Non-Profit Housing Association
- Bernhardt Contracting
- Bowen Island Municipality
- British Columbia Institute of Technology
- Building Balance
- Building Officials' Association of BC
- Building Owners and Managers Association of BC
- Canadian Association of Consulting Energy Advisors
- Canada Green Building Council
- Canadian Home Builders' Association
- Canada Mortgage and Housing Corporation
- Capital Home Energy
- City Green Solutions
- City of Kamloops
- City of Kelowna
- City of Langley
- City of Maple Ridge
- City of New Westminster
- City of Port Moody
- City of Prince George
- City of Richmond
- City of Surrey
- City of Vancouver
- City of Victoria
- Community Energy Association
- District of Saanich
- District of Squamish
- E3 Eco Group
- Enerlytics
- Engineers and Geoscientists BC
- Focal Engineering
- FortisBC
- Fraser Health
- Glave Communications
- Homebuilders Association Vancouver
- HomeTech Energy Solutions
- Independent Contractors and Businesses Association
- Jensen Hughes
- Kingsmere Construction Ltd.
- Kootenay Energy Advisor
- Ministry of Advanced Education, Skills and Training
- Ministry of Energy, Mines and Petroleum Resources
- Ministry of Municipal Affairs and Housing
- Mutual Aid Insurance Brokers Company
- NAIMA Canada
- National Research Council
- Natural Resources Canada
- Passive House Canada
- Pelican Consulting
- Planning Institute of BC
- RDH Building Science
- Real Estate Foundation of BC
- Real Estate Institute of BC
- Regional District of Central Kootenay
- Richard Kadulski Architect
- Streetside Developments
- Total Home Solutions
- Townline
- Union of BC Municipalities
- University of British Columbia
- University of British Columbia, Okanagan
- University of Northern British Columbia
- Urban Development Institute
- Vancity
- Vancouver Economic Commission
- Whirlpool Corporation Canada
- ZEBx

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Notes

Date: Mon. Dec. 9, 2019 | Time: 2:00 p.m. to 3:15 p.m. Pacific
Venue: By teleconference
Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Participants

1. Bea Bains, FortisBC
2. Christian Cianfrone, ZEBx
3. Maya Chorobik, LG Peer Network
4. Norm Connolly, Richmond/PIBC, and co-chair, Technical Subcommittee
5. Catherine Ernst and Manjit Sohi, BOABC
6. Chris Frye, NRCan Housing Division
7. Nat Gosman, EMPR
8. Joe Hart, Icon Homes/CHBA BC
9. Nicholas Heap, City of Richmond and co-chair CaEASC
10. Gary Hamer, BC Hydro
11. Vanessa Joehl, CHBA BC and co-chair, CaEASC
12. Jason Jung, ASTTBC;
13. Toby Lau, BC Hydro and co-chair, Technical Subcommittee
14. Wilma Leung, BC Housing
15. Joe Hart, Icon Homes and CHBA-BC
16. John Madden, UBC
17. Warren Perks, BCCA
18. Harshan Radhakrishnan, EGBC
19. Maxwell Skyes, City of Surrey/UBCM Rep and Chair, Large LG Peer Network
20. BSSB Staff: Scott Williams, Hugo Wong, Dale Andersson

Regrets: Bob Deeks, CHBA BC

NOTES

1. Welcome and Introductions

Zachary May welcomed Council members and guests, and walked through changes that have occurred since the last ESCC meeting on Oct. 4. No decisions today on the roadmap to 2022, but 20% better by 2022 is the policy commitment and appears realistic. Wanted to frame the upcoming February 2020 ESCC call around meeting some CleanBC commitments as a group.

BCBC 2018 Revision 2: BC Energy Step Code Changes – Zachary May, Toby Lau and Norm Connolly

1. **Part 9 Residential Buildings:** As discussed at the October meeting, there will now be two (BC Energy Step Code) additional options to address building envelope performance requirements (sometimes referred to as 'targets' or 'metrics'): revised TEDI requirements or a percent-better approach. Thermal Energy Demand Intensity (TEDI) requirements will remain the same, however Revision 2 will allow builders in colder parts of a climate zone to adjust their TEDI based on the Degree Days Below 18°C (HDD) of their project location, rather than use a single value for the entire climate zone. Alternately, builders using the EnerGuide approach will have the option of demonstrating a percentage improvement of the annual space heating demand over the reference building. This is based on a similar approach being considered for the model National Building Code.

2. **Part 3 Buildings Outside Climate Zone 4:** The BC Energy Step Code has adjusted requirements for Total Energy Use Intensity (TEUI) and Thermal Energy Demand Intensity (TEDI) that better reflect colder climate conditions.

3. **Part 3 Buildings, (Some Group A and Group B Occupancies):** Preliminary BC Energy Step Code requirements for hospitals, care centres, schools, recreation centres, libraries and colleges have been introduced, which establish a Step 1 requirement (energy modelling conforming to Part 8 of the National Energy Code for Buildings (NECB) and air leakage testing will be required) for these building types. At this time, specific energy intensity requirements are not included for these buildings.

Change 1 is intended to address concerns from energy modellers in colder climate zones and is similar to the 2020 NBC approach.

Change 2 (Part 3 buildings outside CZ4) were based on the 2018 metrics research report, and are meant to make the targets more reachable for buildings outside CZ4.

Change 3 is to introduce Step 1 for assembly and some care occupancies (sometimes referred to as "public sector buildings"). There are no specific TEDI or TEUI targets for these yet, as there was agreement at the October ESCC meeting that more work is required to develop acceptable requirements. It was clarified that Step 1 is not mandatory for these buildings, and adoption as a mandatory requirement is at the discretion of the municipality.

Discussion that there are no prescriptive minimums now, but prescriptive backstops could be an option in the future. Local governments have shown leadership to the private sector by building high performance public sector buildings, with increasing provincial leadership.

See https://energystepcode.ca/news/ for details of Part 3 and Part 9 Buildings.

ACTION: Slides about the BCBC 2018 Revision 2 Changes to be distributed to ESCC members, additional materials on the way.

BSSB is working with Wilma Leung and BC Housing to update all guides and training info to align with new options for Part 3 and 9 under Step Code. Updated Part 9 Compliance Reports/Calculator are also in the works. Depending on which compliance option you choose for your Part 9 building, the current calculator may work just fine. BSSB acknowledges FortisBC and BC Housing for funding the Part 9 Reports update.

Public Sector Buildings Working Group Update – Scott Williams, BSSB

As discussed at the October meeting, further work is needed to develop appropriate requirements for 'public sector' buildings. BSSB has posted an RFP to engage a consultant to assist with this work, with the RFP closing Jan. 10, 2020. The work will include a facilitated discussion on the Lower Mainland in the new year. Council members will be invited.

Roadmap to BCBC 2022

Zac reminded ESCC that CleanBC commits to a 20% improvement in new buildings by 2022, and to establish a code for existing buildings by 2024. Government seeks to build on the success of the Energy Step Code while keeping in mind the Provincial commitment to harmonization with the national codes. Lower Steps may need adjustment or removal, and Step Code will continue to expand to more building types and occupancies. Council input would be required there. There is also a need to address the capacity challenges in rural and remote communities. The Ministry is aiming to finalize the details of the 2022 code by early 2021.

2. **ESCC Subcommittee Composition: Follow-up from October 4, 2019 Meeting – Zachary May and others**
   - Survey of Subcommittee Members
   - Succession Planning for Subcommittees (not discussed)

In consultation with the Subcommittee Co-chairs, BSSB will send a survey to Subcommittee members to gather feedback on how the Subcommittees can most efficiently and effectively do their collective work. There have been some requests to tweak the scope of the Subcommittees in 2020 – for example, by having a dedicated subcommittee each for Part 3 and Part 9 buildings. BSSB will report back to Council at the next in-person meeting.

3. Local Government Implementation Update – Zachary May and others

BSSB numbers show 57 local governments have submitted an initial notification of consultation form. About 31-33 municipalities actually reference the Step Code in some way. A graphic will be shared by the end of the calendar year showing progress.

4. BC Energy Step Code Year-End Accomplishments – Zachary May and others

The Efficiency Canada report card showing B.C. as a leader in North America was a reminder of how much work we've done in the last five years. We have a clear destination, and clear barriers to overcome. B.C. understands net-zero ready better than most. This is also the second year in a row that CHBA members recommended changes that the ESCC responded to by way of a code change – reflecting responsiveness to the concerns of those in the industry.

Chris Frye: NRCan and Efficiency Canada asked Step Code reps to visit Nova Scotia to discuss with industry, local governments and the province to implement a Step Code-like regulation in the next 10-12 years. Others are also asking for details on the B.C. situation.

Zac also reminded Council of the Lessons Learned report prepared by James Glave and Robyn Wark as an excellent summary and analysis of the accomplishments and innovation of the Energy Step Code Council.

An in-person meeting is being planned for mid- to late February. A Doodle poll will be sent to help identify an appropriate date.

Meeting adjourned at 3:16 p.m.

ACTION: BSSB to distribute PowerPoint presentation and additional bulletins on the Revision 2 BCBC changes.

ACTION: Toby to determine if he can share national reports

251825: Invitation to Participate in Roundtable to Discuss Housing

From: Minister, MAH MAH:EX <MAH.Minister@gov.bc.ca>
To: presidentandceo@udi.org
Sent: January 27, 2020 1:39:19 PM PST
Attachments: 258123 Point Plan Affordable Housing 2018.pdf, 251823 30 Point Plan Progress Report.pdf, 251825 McMullin Signed Final.pdf

Good afternoon,

Please find attached a letter from the Honourable Selina Robinson, Minister of Municipal Affairs and Housing.

Thank you.



HOMES FOR B.C.

A 30-POINT PLAN FOR HOUSING AFFORDABILITY IN BRITISH COLUMBIA

BRITISH COLUMBIA

HOMES FOR B.C.: A 30-POINT PLAN FOR
HOUSING AFFORDABILITY IN BRITISH COLUMBIA
FEBRUARY, 2018

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FOREWORD BY THE HONOURABLE SELINA ROBINSON MINISTER OF MUNICIPAL AFFAIRS AND HOUSING

Safe, affordable housing is critical to affordability and our overall quality of life, yet it has become the single-biggest challenge affecting British Columbians today.



Prices for renting and buying have surged past local incomes, leaving people paying a greater portion of their wages towards their home. This is hurting people, businesses and communities.

Since becoming housing minister I have met with hundreds of leaders from every level of government, Indigenous Peoples, and the public, non-profit and private sectors. All were excited to be part of the solution to British Columbia's housing affordability crisis.

The lack of affordable homes is hurting people and holding our province back.

Home prices didn't spike overnight, and our housing problems can't be fixed with a single budget.

It will take years of sustained action to bring housing affordability home.

We are acting immediately to stabilize demand by introducing a new speculation tax, increasing and expanding the foreign buyers tax and closing legal loopholes abused by speculators.

And we're working hard to build the right supply. We're making the biggest investment in housing in our province's history. Thousands of affordable homes are in development today, with tens of thousands more to come.

Together, in partnership with all levels of government, Indigenous Peoples, non-profits, co-ops, and the private sector we will streamline the creation of the homes people need across British Columbia.

We will continue to make housing more secure with sensible changes to our housing laws that make life more fair for renters and landlords, and by helping seniors and low-income families in need keep up with skyrocketing rents.

Taken together, these actions represent the first step on the path to reaching our goal of a province where everyone has the secure, safe, and affordable home they need.

Selina Robinson, Minister of Municipal Affairs and Housing

GOVERNMENT'S 30-POINT PLAN FOR A FAIRER HOUSING MARKET

GOVERNMENT'S 30-POINT PLAN FOR A FAIRER HOUSING MARKET

STABILIZING THE MARKET:

1. Taxing speculators who are driving up housing costs
2. Increasing the foreign buyers tax rate to 20%
3. Expanding the foreign buyers tax to areas outside of Metro Vancouver
4. Increasing the property transfer tax on the value of homes over $3 million
5. Increasing the school tax rate on the value of homes over $3 million
6. Allowing online accommodation providers to apply PST and MRDT on short-term rentals
7. Reviewing the Homeowner Grant to provide fairness for renters

CRACKING DOWN ON TAX FRAUD AND CLOSING LOOPHOLES:

8. Moving to stop tax evasion in pre-sale condo reassignments
9. Taking action to end hidden ownership, including a new beneficial ownership registry
10. Strengthening provincial auditing and enforcement powers
11. Moving to close property tax loopholes on the ALR
12. Expanding information collection and information sharing with the federal government to prevent tax evasion
13. Seeking permanent provincial-federal action to combat money laundering, tax evasion, and avoidance



BUILDING THE HOMES PEOPLE NEED:

14. Making a $6 billion-plus investment in affordable housing.

15. Building rental units for the missing middle – more than 14,000 units for individuals, working families and seniors

16. Housing for women and children affected by violence

17. Working with universities, institutes and colleges to build new student housing

18. Fixing existing projects with an eye to ensuring affordability for British Columbians

19. Partnering with Indigenous communities to invest $548 million over 10 years in social housing



20. Building 2,500 new supportive homes for people struggling with homelessness

SECURITY FOR RENTERS:

21. Expanding and increasing benefits to seniors living independently

22. Expanding and increasing the Rental Assistance Program to help working parents.

23. Strengthening protections for renters and manufactured home owners.

24. Extending the life, quality and affordability of existing affordable housing

SUPPORTING PARTNERS TO BUILD AND PRESERVE AFFORDABLE HOUSING

25. HousingHub: Building Partnerships. Building Homes.

26. Empowering local governments

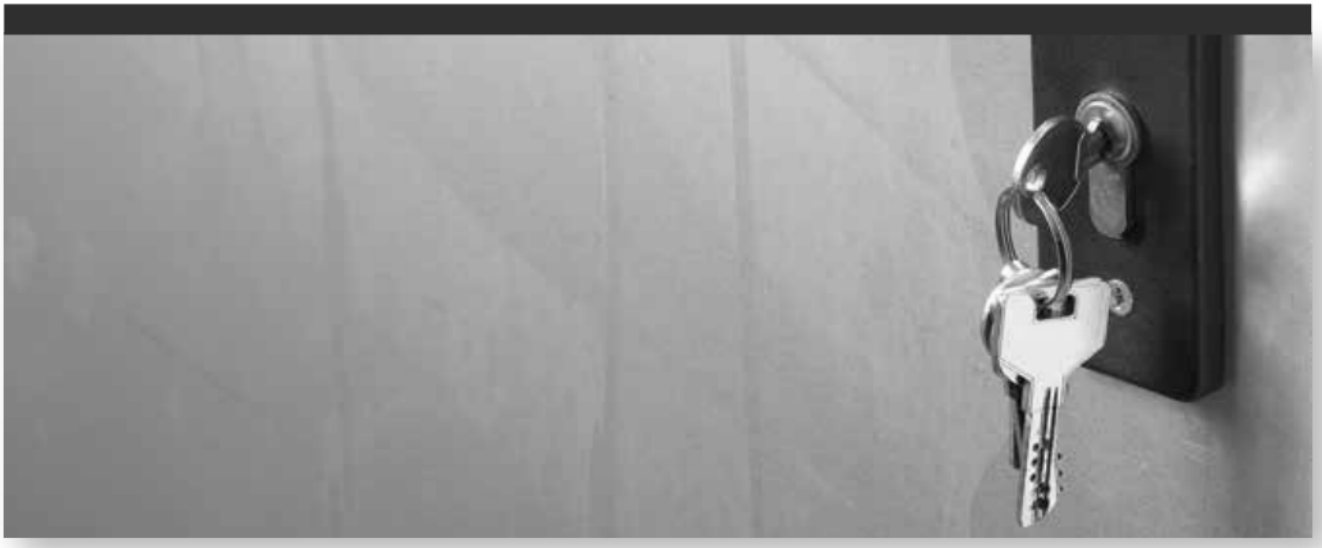
27. Expanding the use of MRDT revenues for affordable housing

28. Encouraging more rentals via property tax exemptions

29. Empowering homeowners in stratas to deal with short-term rentals

30. Expanding transit and building communities

STABILIZING THE MARKET



STABILIZING THE MARKET

Stabilizing B.C.'s out-of-control real estate market is essential to addressing the housing crisis.

That's why our strategy includes a number of measures aimed at curbing demand, reducing tax evasion, closing real estate market loopholes and cracking down on speculators who don't contribute to our province and our communities.

1. TAXING SPECULATORS WHO ARE DRIVING UP HOUSING COSTS

People, including many non-resident investors, are speculating in B.C.'s housing market, using our housing stock as an investment vehicle that drives up prices and removes rental stock.

We are taking immediate action to crack down on speculators who distort our market.

Beginning fall 2018, the Province will introduce a new speculation tax on residential property. This tax will target foreign and domestic speculators who own residential property in B.C., but don't pay taxes here, including those who leave their units sitting vacant. This will include satellite families.

We are applying this new speculation tax broadly to ensure we don't simply push speculators into neighbouring markets. The new tax will apply to Metro Vancouver, Fraser Valley, Capital and Nanaimo Regional Districts, and in the municipalities of Kelowna and West Kelowna.

Up-front exemptions will be available for most principal residences, qualifying long-term rental properties and special cases. The Province will also introduce a non-refundable income tax credit which will allow those who pay income tax in B.C. to offset the property tax.

This bold new tax will help return the real estate market to one that serves local residents, rather than speculators.

2.INCREASING THE FOREIGN BUYERS TAX

Affordability for B.C. residents comes first.
The speculation in our housing market cannot be allowed to overrule the needs of British Columbians. The 15% foreign buyers tax alone has been insufficient to stabilize the housing market; foreign demand is still putting pressure on our housing stock.

That's why we are increasing the foreign buyers tax (additional property transfer tax) rate from 15% to 20%. Increasing the tax will help deter those speculating in B.C.'s housing market, and penalize those who do. Property owners who enjoy our services should pay their fair share of taxes. Foreign buyers should contribute to our society in return for the high quality of life they enjoy when they move to B.C.

3. EXPANDING THE FOREIGN BUYERS TAX TO MORE AREAS

Our government is also extending the reach and impact of the foreign buyers tax to the Capital Regional District, the Fraser Valley, the Central Okanagan and the Nanaimo Regional District. Extending it to other communities ensures that speculation isn't pushed into neighbouring markets.

The increase and expansion of this tax will help stabilize housing prices and raise revenues to help fund housing affordability measures in our province.

4. INCREASING THE PROPERTY TRANSFER TAX ON THE VALUE OF HOMES OVER $3 MILLION

Speculation has led to distortions in our housing market, raising prices and turning homes into commodities. These rising housing prices have benefited many people. Those who have benefited the most from the rising real estate market should contribute their fair share.

That's why our government is raising taxes on the province's most expensive homes. The first step is to increase the property transfer tax to 5% from 3% on the fair market value that is over $3 million on residential properties.

5. INCREASING THE SCHOOL TAX RATE ON HOMES OVER $3 MILLION

Starting in 2019, the Province will be increasing the school tax on homes assessed over $3 million – here, too, the increased tax will apply only to the value in excess of $3 million.



This is what a progressive tax system looks like. These last two measures will not only ask the wealthiest to contribute a little bit more, but they will help to stabilize housing prices. Our tax system should work for all British Columbians, not just those at the top. Our goal is fairness for the people that live, work and pay taxes here. The revenues from these taxes will help address housing affordability in our communities.



6. ALLOWING ONLINE ACCOMMODATION PROVIDERS TO APPLY PST AND MRDT ON SHORT-TERM RENTALS

Home-sharing has grown alongside our traditional accommodation industry. But through global offices and online transactions, these companies have taken root outside of our traditional tax system. It is time to make sure they are properly integrated in our tax system.

Our government is taking bold action to make sure new business models in the sharing economy are operating fairly.

The Province is working to make sure that legitimate home-sharing is appropriately taxed. That's why the Province and Airbnb agreed to move forward with legislative changes to allow Airbnb to collect the 8% provincial sales tax (PST) and the up to 3% municipal and regional district tax (MRDT) on all its accommodation provided in B.C. through its platform on behalf of its hosts. This is the first arrangement of its kind in B.C.

Our goal is to ensure tax fairness. This sets online accommodation providers on an even footing with other short-term rental providers across B.C. The Province will be looking to move forward with similar arrangements with other accommodation platforms in the near future.

This action supports municipalities. Local governments have the authority to regulate short-term rentals. These include setting occupancy limits, requiring business licenses, setting zoning requirements and setting bylaws around noise and nuisances. Applying the PST and MRDT to accommodation purchased on online platforms is one way the province can make sure businesses are operating fairly in our communities.

Applying these taxes to Airbnb supports housing affordability. These additional revenues will help the Province and local governments ease housing affordability. Local governments will also have access to the additional MRDT revenues.

The sharing economy is part of our economy. This is our first step to ensure these businesses are part of our tax system and ensure fairness.

7. REVIEWING THE HOMEOWNER GRANT TO PROVIDE FAIRNESS FOR RENTERS

Currently, through the Homeowner Grant, the Province offers support for most homeowners. But there is no similar support for renters.

The Province will review the Homeowner Grant program to ensure both renters and homeowners benefit in a similar way.

CRACKING DOWN ON TAX FRAUD AND CLOSING LOOPHOLES



CRACKING DOWN ON TAX FRAUD AND CLOSING LOOPHOLES

Fraud and corruption in real estate are distorting housing prices in B.C. For too long people have been skirting the tax system when investing in real estate, such as claiming more than one home as a principal residence or applying for the Homeowner Grant without living in B.C.

The Province is taking immediate action to reduce tax fraud and close loopholes. Strengthening tax administrators' audit and enforcement powers will help to close information gaps and ensure tax compliance.

8. MOVING TO STOP TAX EVASION IN PRE-SALE CONDO REASSIGNMENTS

For too long, people have been using loopholes to obscure the true nature of ownership in B.C.'s housing market. One loophole is in contract assignments in the condo pre-sale market. Through the selling and re-selling of contract assignments a condo unit can be sold multiple times before the unit is even lived in, with each of those buyers usually inflating the price and not necessarily paying the appropriate tax.

This is unfair to British Columbians trying to buy into the condo market. The people flipping these pre-sale condos should pay their fair share of taxes.

That's why we are building a database on pre-sale condominium assignments. We will require developers to collect and report comprehensive information about the assignment of pre-sale condo purchases. The information will be reported to a designated provincial office. This information will be shared with federal and provincial tax authorities so they can make sure taxes are paid.

Collecting this information will also allow government to develop new taxation models in the future.

9. TAKING ACTION TO END HIDDEN OWNERSHIP

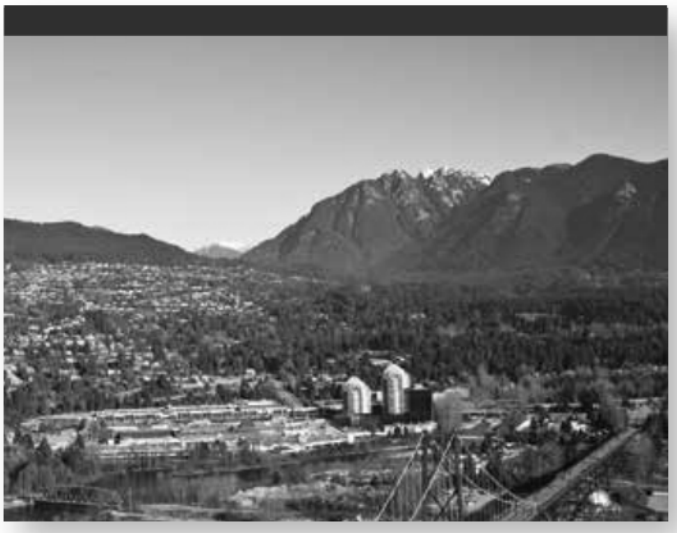
Currently in B.C., true ownership of real estate can be hidden. This means numbered companies, offshore and domestic trusts, and stand-in owners obscure the source of funds in the real estate market. For example, lack of transparency in the land registry means it is not clear who owns nearly half of Vancouver's most expensive properties. This is wrong.

The Province is taking action to close these loopholes and give us a clearer picture of real estate ownership in B.C. It will also help us to crack down on speculators, tax frauds and those engaged in money laundering.

We are taking action in a number of ways to build complete information about beneficial ownership of land and corporations in B.C.

First, the Province will require additional information about beneficial ownership on the Property Transfer Tax form.

Second, we are establishing a registry that will contain information about beneficial ownership of land in B.C., administered by the Land Title Survey Authority. This information will be publicly available and will be shared with federal and provincial tax and law enforcement authorities to assist them in their investigations.



Third, the Province also intends to introduce legislative amendments to require corporations in B.C. hold accurate and up to date information on beneficial owners in their own records offices that will be available to law enforcement, tax and other authorities.

Having a registry means we'll know who owns what. This will help ensure that federal and provincial regulatory, tax and law enforcement agencies have the information they need. By requiring corporations to hold detailed records we'll also be able to track how real estate changes hands.

Together, these actions will help the Province close loopholes in B.C.'s real estate market, and give us a clearer picture of who owns residential property in B.C. The information we collect about beneficial ownership will also allow for the development of new taxation models in the future.

10. STRENGTHENING PROVINCIAL AUDITING AND ENFORCEMENT POWERS

The Province will amend the Property Transfer Tax Act to:

- increase the limitation period for assessments to six years
- enable the collection of additional buyer information
- introduce administrative penalties for non-compliance
- extend the application of the general anti-avoidance rule
- enable tax administrators to compel access to information relevant to transfers such as information held in a Multiple Listing Service (MLS) database

These amendments will help government verify the information people provide on their property transfer tax form.

The government will also amend the Income Tax Act and the Land Tax Deferment Act to allow improved information sharing to help better identify when people are abusing the property tax deferment program or double-claiming principal residences. These amendments will help improve tax compliance and enforcement.

11. MOVING TO CLOSE PROPERTY TAX LOOPHOLES ON THE ALR

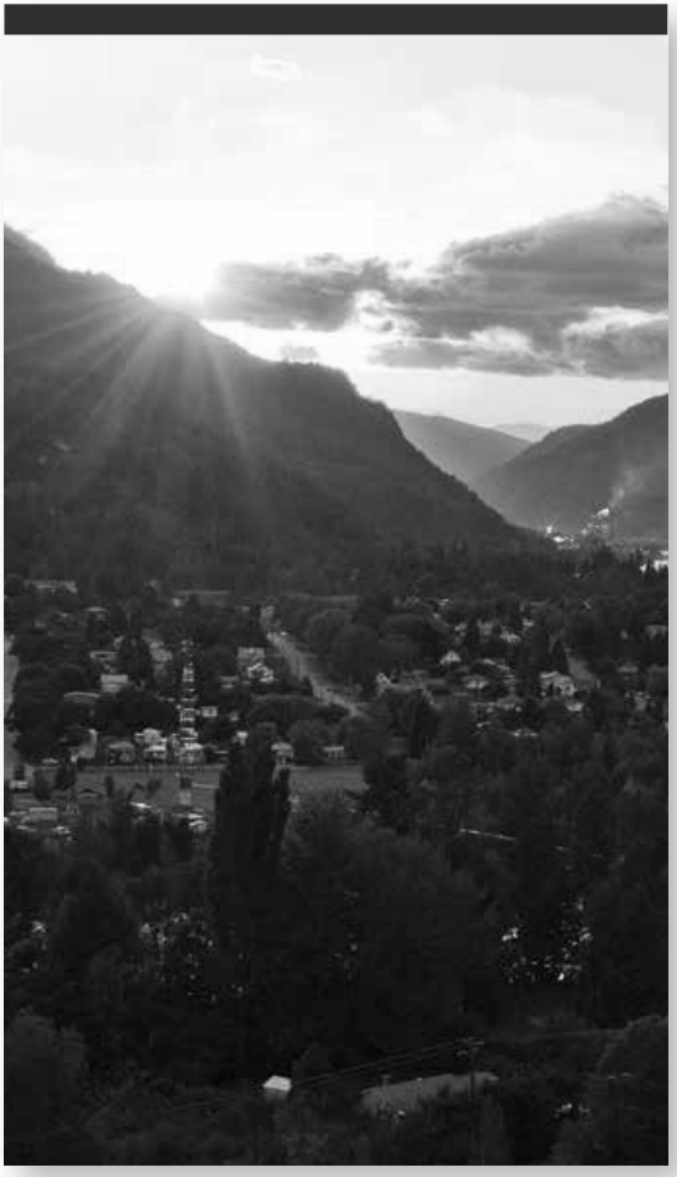
Land in the Agricultural Land Reserve (ALR) should be used for farming, not for investors or mega-mansions. The Province will move to change the property tax treatment of residential property in the ALR as part of a broader review to ensure ALR land is being used for farming.

12. WORKING WITH THE FEDERAL GOVERNMENT TO PREVENT TAX EVASION

Starting in 2019 the Province will collect Social Insurance Numbers as part of the Homeowner Grant application process. This will allow information collected through the Homeowner Grant program to be easily cross referenced with income tax information to catch people inappropriately claiming the grant. This also adds rigour to B.C.'s Homeowner Grant administration to help fight tax evasion, reduce fraud, and ensure people are paying the right amount of tax.

13. PERMANENT PROVINCIAL/ FEDERAL ACTION TO COMBAT MONEY LAUNDERING, TAX EVASION AND AVOIDANCE

The Province has also asked the federal government to formalize a multi-agency working group on tax evasion, money-laundering and housing. Having a dedicated working group would help ensure high priority compliance and enforcement issues in B.C.'s real estate sector are actively addressed. It will also ensure that the B.C. government has the information it needs



to continue to collect and provide data sets required by federal enforcement agencies.

Together these actions will help reduce tax fraud and combat money laundering in B.C.'s real estate market. These are the first steps in making sure the Province and its partners have the information we need to better enforce real estate taxation. British Columbians deserve more effective tax fraud enforcement in our real estate sector.

BUILDING THE HOMES PEOPLE NEED



BUILDING THE HOMES PEOPLE NEED

The right supply of homes is key to addressing housing affordability in British Columbia. After years of prices spiraling out of control and declining availability of the kinds of homes people need, it is clear the market alone is not able to deliver safe, affordable, functional homes for British Columbians.

We are making the biggest investment in housing affordability in B.C. history. This will help build homes for people, create local jobs and open up economic development in communities.

We're investing more than $6.6 billion over 10 years in homes and housing supports that people need, in every corner of the province – urban, suburban and rural.

14. MAKING A $6.6 BILLION OVER 10 YEARS INVESTMENT IN AFFORDABLE HOUSING

Through partnerships, government will deliver 114,000 affordable homes over the next 10 years via an historic investment of $6.6 billion over 10 years in the province's future. This housing will fill current gaps in the market, including homes for growing families, homes for seniors, housing options for women and children fleeing violence, and homes for students.

We are working with all levels of government, Indigenous Peoples, non-profits, and the private sector to streamline the creation of new affordable homes in every region of the province. It can't be done overnight but with sustained action, proactive partnering and smart streamlining; government can provide critical leadership on the supply-side.

15. BUILDING MORE THAN 14,000 RENTAL UNITS FOR THE MISSING MIDDLE

Many middle income people and families in B.C. are struggling to find housing.

Skilled workers – the teachers, service-industry workers, nurses, and carpenters our communities need – are finding it difficult to find and afford quality housing. This hurts people, it hurts businesses and it hurts our economy.

B.C. Chamber of Commerce members overwhelmingly agree that housing costs are a major issue for businesses across the province, with 9 out of 10 business owners agreeing home prices are discouraging workers from living in our communities.



ABOVE: ROSALIE'S VILLAGE PROVIDES AFFORDABLE HOUSING AND DAYCARE FOR SINGLE MOTHERS FLEEING VIOLENCE.

Recognizing historically low vacancy rates and historically high home prices, the Province is investing $378 million over three years and more than $1.8 billion over the next 10 years in rental housing to improve housing choices for middle income British Columbians, including seniors and families.

This builds on the investment of $208 million to help build 1,700 new affordable rental homes that government funded in the Budget 2017 Update.

16. HOUSING FOR WOMEN AND CHILDREN AFFECTED BY VIOLENCE

Women and children fleeing violence and abuse need a safe, secure place to live and support so they can heal.

Budget 2018 makes the first significant investment in housing options for women and children fleeing violence and abuse in the last two decades.

The Province is committing $141 million over three years and $734 million over the next 10 years to build and provide housing supports for women and children at this difficult time in their lives.

17. WORKING WITH UNIVERSITIES, INSTITUTES AND COLLEGES TO BUILD HOUSING FOR POST-SECONDARY STUDENTS

Government is partnering with post-secondary institutions to deliver at least 5,000 new spaces in student housing. These new on-campus homes will help more students find an affordable place to live while they pursue their studies.

And as they move closer to their studies, they will free up rental housing in tight rental markets, making it easier for everyone to find homes.

This is a part of a new $450 million student housing program that will allow public post-secondary institutions to borrow directly from the Province in order to help finance new student housing.

18. FIXING EXISTING PROJECTS WITH AN EYE TO AFFORDABILITY

Improving access to safe, affordable housing isn't just about planning and building new stock; it's also about taking care of what we already have. Our plan talks more about this in the next section on rental security.

But it also applies to development projects that are already underway but experiencing cost pressures that threaten their long-term affordability.

Our government has reviewed these projects and found that insufficient provincial investments into new homes in prior budgets mean that many of the buildings started by the previous government will not be affordable for the British Columbians they were supposed to help. As a result, our government is committing more than $75 million over the next two years to address the cost pressures with an eye to making sure these 4,900 homes remain affordable.

19. PARTNERING TO BUILD SOCIAL HOUSING FOR INDIGENOUS PEOPLE

Indigenous British Columbians, more than 70 percent of whom live off-reserve, are disproportionately represented among the homeless population and are under-housed in B.C. Our investments in Indigenous and social housing will seek to address that gap.

Over the next 10 years, the Province is investing $550 million into the construction of 1,750 units of social housing for Indigenous people in British Columbia. This housing will be developed in partnership with the Aboriginal Housing Management Association, Indigenous housing societies, and First Nations.

In order to ensure the right housing is being created and to advance reconciliation efforts, we will look to engage Indigenous peoples to develop the housing design and delivery system.

20. BUILDING 2,500 NEW SUPPORTIVE HOMES FOR PEOPLE STRUGGLING WITH HOMELESSNESS

We recognize the growing and urgent problem of homelessness in B.C. communities.

In just the last six months, the Province has joined communities across B.C. – including Vancouver, Surrey, Terrace, Prince Rupert, Kelowna, and Kamloops – to begin building more than 1,300 new modular homes for people in need, with hundreds more to come.

These partnerships were made possible by the $291 million in capital funding and operating funding of $216 million over three years to provide ongoing services and supports for those most in need.

Given the urgent need to address homelessness in B.C. communities, Budget 2018 builds on this successful program with funding for an additional 2,500 new homes with 24/7 support for people who are homeless or at risk of homelessness.



TS'I'TS'UWATUL' LELUM (DUNCAN) PROVIDES AFFORDABLE HOUSING SPECIFICALLY DESIGNED FOR INDIGENOUS ELDERS AND PERSONS WITH DISABILITIES.



DRIVER HOUSE (DAWSON CREEK) OFFERS LOW- TO MODERATE-INCOME RENTALS FOR INDIGENOUS FAMILIES AND SENIORS.

IMPROVING SECURITY FOR RENTERS

IMPROVING SECURITY FOR RENTERS

Too many British Columbians are worried about how they will afford housing in the future and even whether they can stay in the housing they already have.

Renters are facing increasingly limited housing options as rents continue to rise and vacancy rates remain persistently low, particularly in urban centres.

Owners of manufactured homes are also feeling uncertainty as the land their homes sit on rises in value and is targeted for redevelopment.

People need to feel secure in their housing. That's why we are taking action to support seniors and low-income British Columbians who are in danger of losing their rental housing by increasing rental supports, strengthening rental laws, upgrading existing affordable housing and enhancing protections for owners of manufactured homes.

21. EXPANDING AND INCREASING BENEFITS TO SENIORS LIVING INDEPENDENTLY and 22. EXPANDING AND INCREASING THE RENTAL ASSISTANCE PROGRAM TO HELP WORKING PARENTS

Rental assistance programs give low-income households the choice of where they want to live and help with housing costs. The Shelter Aid for Elderly Renters (SAFER) program and Rental Assistance Program (RAP) make housing more affordable for low-income seniors and working families who rent their homes in the private market.

Over the last number of years these programs have not kept up with increasing rent costs, leaving many seniors and families struggling to get by.

Budget 2018 invests $116 million over three years to increase the average benefit under RAP and SAFER programs, and will expand the eligibility criteria for RAP – families with gross household annual incomes of up to $40,000 will now be eligible, up from the previous ceiling of $35,000. As a result of these enhancements, more than 35,000 households become eligible for





ABOVE AND BELOW: DAHLI PLACE (VICTORIA) PROVIDES AFFORDABLE RENTAL HOUSING.

increased monthly benefits, including 3,200 newly eligible seniors and families.

Effective September 2018, on average, seniors will receive an extra $930 per year, and the increase for families will be about $800 more per year.

23. STRENGTHENING PROTECTION FOR RENTERS AND MANUFACTURED HOME OWNERS

Property owners provide housing for more than a quarter of B.C. residents.

Unfortunately, some landlords have taken advantage of the tight rental market and their actions have had serious impacts on people. Loopholes in rental laws that allow landlords to wrongfully evict tenants and unfairly jack up rents have left many British Columbians feeling renting is not a secure and predictable housing option.

People who pay their rent and abide by their tenancy agreement should be able to count on their housing. Landlords also deserve certainty. They need to know that if they have a tenant who breaks their rental agreement that it will be dealt with quickly.

That's why we are updating our housing laws to provide more fairness for everyone.

We have already ended the abuse of fixed-term leases and eliminated the geographic rent increase clause, both of which were being used to unfairly jack up rents.

And we increased funding to the Residential Tenancy Branch to reduce wait times, improve service and deal with disputes more quickly, while also strengthening the Residential Tenancy Act and the penalties for those who repeatedly break the law.



Too many people are left struggling to find new housing they can afford when they are evicted to allow for large-scale renovations or when older, affordable buildings are demolished to make way for new development.

While landlords need to be able to make necessary repairs and upgrades to existing rental stock, current protections are not sufficient to ensure those displaced can find new homes, or pay associated moving costs. Government will make changes to the laws that apply in cases of renovations or demolitions to ensure that renters left without housing have adequate support, and to provide a stronger response to cases where landlords misuse these provisions.

Some owners of manufactured homes have been forced to abandon their investments with little compensation for having to move or find a new home.

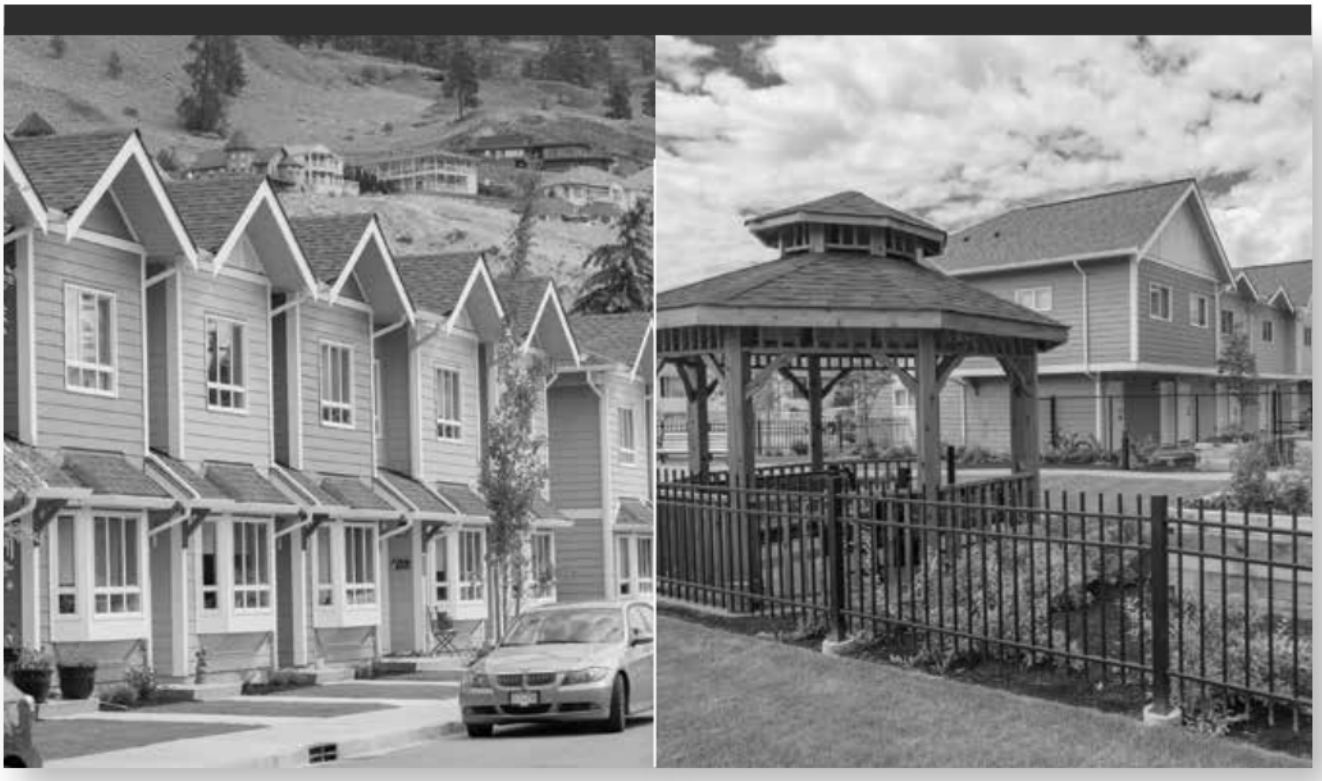
This has left people, many of them in retirement, without a safe, affordable place to live, and without the help they need to find housing elsewhere.

Recognizing the impact on these families, the Province will strengthen the laws protecting owners of manufactured homes when changes to land use displace them.

24. EXTENDING THE LIFE, QUALITY AND AFFORDABILITY OF EXISTING AFFORDABLE HOUSING

To ensure existing social housing continues to be safe and secure, we are investing $1.1 billion over 10 years into seismic and fire-safety upgrades and essential building repairs and maintenance, making homes safer and more comfortable for residents. This is the largest investment in refits and renovations of social housing in B.C. in more than 20 years.

These investments will also lower carbon emissions, and cut energy costs for non-profit providers and residents alike.



LEFT AND RIGHT: PLEASANTVALE (KELOWNA) PROVIDES AFFORDABLE HOUSING UNITS FOR SENIORS AND TOWNHOMES FOR FAMILIES.

BUILDING PARTNERSHIPS FOR AFFORDABILITY



HYAD PLACE (NORTH VANCOUVER) PROVIDES RESIDENTIAL APARTMENTS FOR ADULTS WITH DEVELOPMENTAL DISABILITIES.

BUILDING PARTNERSHIPS FOR AFFORDABILITY

The Province cannot build its way out of the housing crisis on its own. That's why we're bringing together partners from all levels of government, Indigenous organizations, non-profits and the private sector to build the right supply together.

We will build on these emerging housing partnerships by expanding government's work with Indigenous governments and organizations, with non-profits, and with the private sector, with the goal of building capacity and becoming a catalyst for new affordable housing development.

It will take a sustained, coordinated effort to meet the most pressing housing needs facing people and communities. Thankfully, the federal government, the Union of B.C. Municipalities, many individual local governments, and innovators in the private and non-profit sectors have already put forward their own strategies for addressing housing, signalling a desire to work together to make life better for British Columbians. For the first time, all levels of government understand and are prepared to act on the urgent need for housing. BC will work with these and other partners to ease housing affordability and give people more housing options.

25. HOUSINGHUB: BUILDING PARTNERSHIPS. BUILDING HOMES

The province is creating HousingHub – funded by winding down the BC Home Owner Mortgage and Equity Partnership program – to build partnerships and affordable homes where British Columbians need them most.

The Hub will partner with the non-profit sector, faith groups, for-profit builders, all levels of government and others to find and develop or re-develop available land and buildings, creating affordable homes for people who live and work in our communities.

The Hub will act as a project coordinator for owners who are not experienced developers but want to create affordable housing with a reasonable rate of return, to benefit their communities.

HousingHub will also work with new investment sources, such as pension fund and social impact investors to find the best financing solutions for local projects and local people.

26. EMPOWERING LOCAL GOVERNMENTS

The Province recognizes that local governments are on the front lines of the housing crisis, and are well positioned to help advance the development of new homes.

Communities need solutions that work for them. For example, in some communities, the tourism industry is struggling to find workers because workers can't find affordable housing. Housing affordability has become an economic issue. The Province is taking action to put the power and resources to address housing challenges in their hands.

It begins by fully defining the problem. The provincial government is committing $5 million over three years to help fund housing need assessments for local governments, the first step to building housing for people.

We'll work closely with municipal partners to eliminate barriers to affordable housing and develop new tools, such as rental zoning, that will empower local governments to support and accelerate the construction of homes people need.

27. EXPANDING THE USE OF MRDT REVENUES FOR AFFORDABLE HOUSING

The Province is expanding the allowable use of municipal and regional district tax (MRDT) revenues to include housing affordability initiatives. Prior to this policy change, MRDT revenues could only be spent on tourism marketing, programs and projects. This will help those communities struggling with housing tourism workers more options. This will give local governments across B.C. additional flexibility to fund housing initiatives.



28. ENCOURAGING MORE RENTALS VIA PROPERTY TAX EXEMPTIONS

Communities throughout B.C. are faced with tight rental markets. They need support to bring new rental supply online. Our government is taking bold action to give municipalities the support they need to bring new rental supply online.

To help local governments, the Province will mirror the increase to the available property tax exemptions provided under municipal revitalization agreements for qualifying purpose-built rental housing. These agreements encourage the construction and preservation of rental housing by waiving municipal property taxes. The Province is increasing the incentive provided to those operating purpose-built rentals by extending the exemption to include provincial property taxes. This will help encourage developers to build more rental housing.

The Province is also reaching out to the federal government to explore additional ways governments can overcome cost barriers to develop new purpose-built rental construction.

We understand the needs of communities and we're doing our part to support municipalities in their efforts to increase housing supply.

29. EMPOWERING HOMEOWNERS IN STRATAS TO DEAL WITH SHORT-TERM RENTALS

The increasing use of condos for short-term rentals has been difficult for many living in strata developments. Noise, mess and security issues are just a few of the reasons why some strata corporations restrict short-term rentals in their buildings.

If homeowners in a strata building want to limit short-term rentals, the bylaws need to provide enough of a deterrent. People who live full-time in strata buildings deserve the peace, quiet and security they pay for.



Low fines and penalties don't stop some short-term rental operators from breaking strata bylaws. Many absorb fines as part of the price of doing business.

That's why we're empowering strata corporations to charge increased fines and penalties against rule-breakers who disrupt people's sense of peace and housing security.

30. EXPANDING TRANSIT AND BUILDING COMMUNITIES

The Province is a full partner in the Metro Vancouver Mayors' Council vision for improved transit and transportation across the region. As part of this, we will work with TransLink and local governments in Metro Vancouver to increase density and improve the availability of affordable housing around transit stations. Smart investments in transit will allow residents to live, work and play in complete communities, and reduce transportation costs for families.

CONCLUSION



WHERE WE GO FROM HERE

The housing crisis has been building for many years. No single policy or approach is capable of reversing the decline of housing affordability in British Columbia. By addressing demand, supply and security at the same time, we will bring down the curve of housing costs and improve options for people looking for a home.

While the housing problems our province faces are immense, there is tremendous will from all levels of government, First Nations, non-profits and the private sector to make changes and make a difference in housing affordability for people in our province.

We will continue to work with our partners to streamline the creation of affordable homes and build on innovative solutions to tackle the challenges in our housing market.

VISIT OUR WEBSITE AT:
WWW.GOV.BC.CA

BRITISH COLUMBIA

BRITISH COLUMBIA

Progress on Homes for BC



Every person in B.C. deserves a secure place to call home. But for too long, an out-of-control housing market has left too many British Columbians unable to afford a place to call home and businesses without the workers they need. This is hurting people and the economy.

Our government is taking bold steps to tackle the housing crisis and deliver the affordable homes British Columbians need. In Budget 2018 we launched Homes for BC, government's 30-point housing plan and the largest investment in housing affordability in B.C.'s history – $7 billion over 10 years. Through this plan, we are building the homes people need and improving security for renters. We're moderating housing prices by increasing supply, curbing speculative demand, and tackling fraud and money laundering in the real estate market.

Moderating the market

It's no secret by now that for years our housing market was left to spiral out of control. Money launderers and speculators were given free reign to drive up the price of housing at the expense of the rest of us.

In Greater Vancouver, we saw the benchmark price for single-family homes increase by over 75% in just 5 years. That's not sustainable.

That's why we introduced the **speculation and vacancy tax** to target speculators who own homes in B.C. but do not pay tax here. These speculators are driving up housing costs and using the real estate market like a stock market. This tax is helping to turn empty units into homes for people and families. It's successfully capturing speculators: over 80% paying are foreign owners, satellite families and Canadians living outside of B.C, while more than 99% of British Columbians won't pay this tax.

Our government also increased the foreign buyers tax to 20% and expanded it to urban areas beyond Vancouver to ensure foreign buyers are fairly contributing to provincial services and programs in return for the high quality of life they enjoy when they move to B.C.

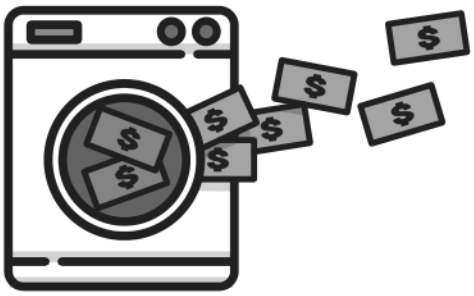
Revenue collected from both the foreign buyers and speculation taxes will be reinvested in building housing in local communities so more people can find an affordable place to live.

We believe in a tax system where everyone pays their fair share. That's why we introduced **progressivity to the existing school tax** so that the top 2% most expensive homes pay a bit more.

The measures implemented by government are beginning to bear results, with strong indications that moderation and stability are returning to B.C.'s housing market.

Cracking down on tax fraud and closing loopholes

It's unacceptable that the proceeds of crime are distorting the housing market while British Columbians are struggling to find secure, affordable housing. That's why we're moving ahead with a public inquiry into money laundering and cracking down on the estimated **$5 billion in "dirty money" laundered through B.C. real estate that's hiked the price of buying a home by at least 5%.**



But we aren't waiting to act. As part of our plan, we passed world leading legislation to end hidden ownership of land in B.C. This public registry - the first of its kind in Canada - will help crack down on tax evasion and make sure people and companies are paying their fair share.

For years, it was widely acknowledged that the practice of pre-sale condo flipping in Greater Vancouver was a factor in driving up real estate prices and avoiding taxes. That's why we acted to close real estate loopholes in the condo market, by establishing Canada's first ever condo pre-sale registry to track pre-sale flipping and assignments.

By cracking down on money laundering, stopping tax fraud, and closing loopholes, we are doing our part to make our real estate market fair for everyone.

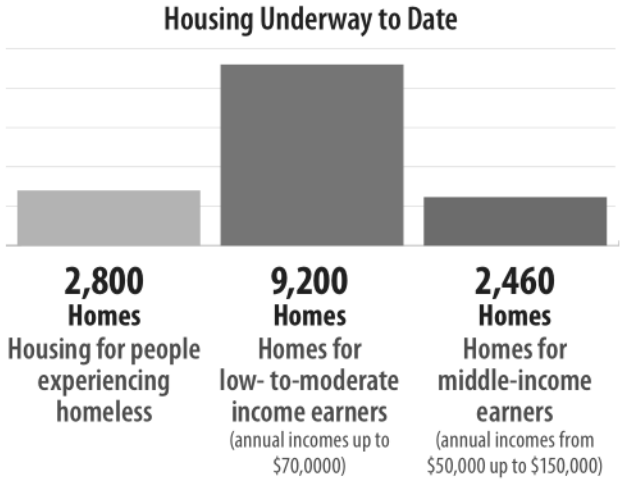
Building the homes people need

Our government is committed to working in partnership to deliver 114,000 affordable homes over 10 years. This includes directly funding new affordable housing and working with committed partners to deliver the homes people need. In less than two years, we are well on our way, with **more than 20,000 new homes open or underway** in nearly 80 communities.

Funding Program	Total underway (includes completed, under construction & in approvals)
Community Housing Fund	5,204
Indigenous Housing Fund	1,157
Women's Transition Housing Fund	343
Supportive Housing Fund	602
Rapid Response to Homelessness	2,064
Affordable Rental Housing Program	1,598
Deepening Affordability Fund	2,156
HousingHub	960
Regional Housing First Program (CRD)	762
Student Housing	5,630
Total	**20,476**



We are building homes for people with a range of incomes: people experiencing homelessness, people with low to moderate incomes, and middle-income earners.



We are also supporting local governments in their efforts to bring affordable housing to their communities, with new tools like rental zoning, and new funding programs to help municipalities assess their long-term housing needs. New building code changes are also allowing the safe construction of taller wood buildings, supporting our mass timber industry and delivering the homes that British Columbians need, faster.

With new government funding and partnerships with municipalities and housing groups, we are working towards building 114, 000 homes for people living in British Columbia.

Security for renters and landlords

Renters have been struggling with inflated rents and rental laws that failed to protect them for years.

To help ease pressure on renters, our government has cut the annual allowable rent increase by 2%, limiting it to inflation.

To offer families and seniors some relief from rising costs, we have expanded eligibility and increased the benefits available under the Rental Assistance Program and Shelter Aid For Elderly Renters by an average of 17% and 42% respectively.

By closing the fixed-term lease loophole we have put an end to unfair rent hikes when leases end and are being renewed. We have also strengthened protection for renters during renovations and demolitions to prevent unfair renovictions.

New investments also mean that renters and landlords are seeing reduced wait times and getting better service from the Residential Tenancy Branch. A new Compliance and Enforcement Unit will ensure everyone follows the rules or face real consequences when they break them.



People deserve the opportunity to thrive and get ahead. That starts with having an affordable place to call home. After years of out of control rents and skyrocketing housing prices, we've made great progress in our 10-year housing strategy, but this is only the beginning. There is more to do and we're committed to continuing our work to build a better future for everyone in B.C.

BRITISH COLUMBIA

January 27, 2020

Ref: 251825

Anne McMullin
President and Chief Executive Officer
Government and Public Affairs
Urban Development Institute

Dear Anne McMullin:

I am writing to invite you to join me for a roundtable session with others in the housing sector to discuss the Province's Homes for B.C.: A 30-Point Plan for Housing Affordability in British Columbia.

Working in partnership, we have over 22,000 units of affordable housing complete or underway across the province in just two years. As we move forward in delivering 114,000 homes over 10 years, we would like to hear your views on the successes and opportunities for continuing to deliver affordable housing in our province.

The meeting will take place on March 9, 2020, from 9:30 a.m. to 11:30 a.m., at the Vancouver Cabinet Offices of the Government of British Columbia (Suite 740, 999 Canada Place).

If you are unable to attend personally, we hope you will consider sending another representative to attend. Please send your response by March 2, 2020, by email to: Housing.Policy@gov.bc.ca, to confirm whether you will be attending the meeting.

If you have any questions, do not hesitate to contact my Ministerial Assistant, Molly Henry, by email at: Molly.Henry@gov.bc.ca.

Sincerely,

Selina Robinson
Minister

Enclosures: 1) A 30-Point Plan for Housing Affordability for British Columbia
2) Progress on Homes for BC

Ministry of Municipal Affairs and Housing

Office of the Minister

Mailing Address:
PO Box 9056 Stn Prov Govt
Victoria BC V8W 9E2
Phone: 250 387-2283
Fax: 250 387-4312

Location:
Room 310
Parliament Buildings
Victoria BC V8V 1X4

http://www.gov.bc.ca/mah

Emergency Program Act Modernization

From:	Cassandra McColman <cmccolman@udi.org>
To:	Minister, PSSG PSSG:EX <PSSG.Minister@gov.bc.ca>
Cc:	Emergency Program Act EMBC:EX <EmergencyProgramAct@gov.bc.ca>, Lori.Halls@gov.bc.ca, Anne McMullin <AMcMullin@udi.org>, Jeff Fisher <jfisher@udi.org>, Marissa Chan-Kent <mchan-kent@udi.org>
Sent:	January 31, 2020 2:44:12 PM PST
Attachments:	UDI Letter - Emergency Program Act Modernization_Jan.2020.pdf, image003.jpg, image001.jpg, image002.jpg

Dear Minister,

On behalf of Anne McMullin, President and CEO of the Urban Development Institute (UDI), we respectfully submit our comments in response to the Emergency Management Legislation Discussion Paper.

If you have further questions regarding this submission, please don't hesitate to contact us.

Regards,

Cassandra McColman | Policy and Research Coordinator
Urban Development Institute
cmccolman@udi.org Direct: 604.661.3032
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January 31, 2020

Hon. Mike Farnworth
Minister of Public Safety and Solicitor General
Room 128 Parliament Buildings
Victoria, BC V8V 1X4

Dear Minister:

Re: Emergency Program Act Modernization

The Urban Development Institute (UDI) is pleased to respond to your Ministry's important review of the *Emergency Program Act* (*EPA*). UDI is the association of the development industry and its related professions - developers, property managers, financial lenders, lawyers, engineers, planners, architects, appraisers, real estate professionals, local governments and government agencies. Emergency management, especially in an age in which are facing the impacts of climate changes is a critical issue for our members. They need to understand where and how to purchase sites for their projects, and what will be expected of them as early as possible in terms of new requirements to address potential future flooding, forest fires and extreme heat.

Our Building Code Committee has had the opportunity to review the Ministry's Modernizing *BC's Emergency Management Legislation Discussion Paper*. Overall, we are generally supportive of the approach being taken by the Government to adopt the United Nation's *Sendai Framework*, which increases the focus on risk identification and mitigation as well as utilizing an "*All of Society*" approach. We are pleased that the importance of private businesses (and other stakeholders) as partners in emergency management is recognized in the *Discussion Paper*.

It is difficult to provide specific comments at this stage or gauge the impact that the *EPA* Review may have on our members because at this early stage, it is not clear what will be required of builders. As this process moves forward, UDI would be pleased to meet with the Province, local governments and other stakeholders to discuss the expectations for builders and their projects.

UDI has several general recommendations and comments regarding the *Discussion Paper*.

We support the proposal that future legislation "*Require Local Authorities … to give greater consideration of current and future risk for new development approvals in hazardous areas; and Require sustainable long-term mitigation measures when building and development is approved in hazardous areas*." However, we have two critical recommendations:

- It would be best if the Province were to provide direction and best practices to manage development in hazard areas. The Province has access to resources to properly research the most appropriate approaches and policies on issues such as Flood Construction Levels (FCL), flood management approaches, or wall assemblies in wild fire areas. We hope that this research will lead to increased coordination of FCLs, particularly as they relate to sea-level rise and coastal and river flooding across the Metro Vancouver region.

- It is important that our members be consulted by the Province and local governments as well as given early notice of potential changes in land uses, the definition/designation of new hazard areas and additional requirements. It is very difficult to adjust projects where land has been purchased and financial arrangements have been made.

UDI is pleased that the Province is taking on the role "… *to centrally house and provide* transparent data *on hazard, risk and vulnerability assessments, or mitigation planning documents which are conducted or prepared by other bodies (provincial ministries, Crown corporations and agencies; Local Authorities; and critical infrastructure operators)*." This will assist with data collection and this would put the Province in a better position to ensure that there is coordination between ministries, agencies and local authorities. UDI sits on the BC Real Estate Association Floodplain Maps Working Group, and there is a concern that key data, information and flood mapping is not available to most local jurisdictions in the British Columbia. This expanded role for the Province, may help address this concern.

We also support the proposal to "*Enable Local Authorities, in consultation with the Minister responsible for the Community Charter, Vancouver Charter and Local Government Act and the Minister responsible for emergency management, to make emergency amendments to an Official Community Plan, Regional Growth Strategy, zoning, or bylaws*." This will speed the recovery of communities after an emergency. An additional approach that governments may wish to consider is fast tracking approvals when a damaged building is being replaced with the same structure that was there before if:

- It is updated, so it complies with the current *B.C. Building Code* or *Vancouver Building Bylaw*; and
- Is not in a hazard area.

Another way to speed up the recovery efforts of communities is have the Province coordinate with design and construction professionals who may be prepared to volunteer or do *pro-bono* work. We note that a new association of over 100 architecture firms called *Architects Assist* recently formed in Australia. The firms under this association are prepared to offer *pro-bono* design services to the victims of the massive wild fires impacting that country.

The Government may wish to expand the proposed definition of "*emergency*". The proposed language is an "… *imminent event or circumstance that: (a) Is caused by accident, fire, explosion, technical failure or a force of nature …*". This would preclude an act of terrorism or pandemic – unless this is intended to be included in future regulations. We note that on pages 23 and 25, both are identified as emergency management issues that needs to be considered.

UDI appreciates the opportunity to comment on the *Emergency Program Act Modernization*, and we are generally supportive of the direction the Province is taking. However, it will be important for our members to be consulted as this initiative moves forward and more specific measures are contemplated.

Yours sincerely,



Anne McMullin
President and CEO, Urban Development Institute

C.C. EmergencyProgramAct@gov.bc.ca

FW: [External] RE: ESCC conference

From: Mak, Lisa <Lisa.Mak@bchydro.com>

To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Guido.Wimmers@unbc.ca <'Guido.Wimmers@unbc.ca'>, christian@zebx.org <'christian@zebx.org'>, mmcwilliam3@bcit.ca <'mmcwilliam3@bcit.ca'>, mark@havan.ca <'mark@havan.ca'>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, jjung@asttbc.org <'jjung@asttbc.org'>, bea.bains@fortisbc.com <'bea.bains@fortisbc.com'>, Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>, robyn.wark@bchydro.com <'robyn.wark@bchydro.com'>, catherine.ernst@boabc.org <'catherine.ernst@boabc.org'>, NConnolly@richmond.ca <'NConnolly@richmond.ca'>, hradhakrishnan@egbc.ca <'hradhakrishnan@egbc.ca'>, jfisher@udi.org <'jfisher@udi.org'>, ralph.wells@ubc.ca <'ralph.wells@ubc.ca'>, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, bdeeks@rdcfinehomes.com <'bdeeks@rdcfinehomes.com'>, Maxwell.Sykes@surrey.ca <'Maxwell.Sykes@surrey.ca'>, MGatensby@aibc.ca <'MGatensby@aibc.ca'>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, J.Madden@ubc.ca <'J.Madden@ubc.ca'>, warrenp@bccassn.com <'warrenp@bccassn.com'>, nheap@richmond.ca <'nheap@richmond.ca'>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, mchorobik@communityenergy.bc.ca <'mchorobik@communityenergy.bc.ca'>, wileung@bchousing.org <'wileung@bchousing.org'>, christopher.mclellan@canada.ca <'christopher.mclellan@canada.ca'>, nconnolly@newwestcity.ca <'nconnolly@newwestcity.ca'>, sean.pander@vancouver.ca <'sean.pander@vancouver.ca'>, patrick.enright@vancouver.ca <'patrick.enright@vancouver.ca'>, toby.lau@bchydro.com <'toby.lau@bchydro.com'>, msohi@boabc.org <'msohi@boabc.org'>, gary.hamer@bchydro.com <'gary.hamer@bchydro.com'>, joe.iconhomes@shaw.ca <'joe.iconhomes@shaw.ca'>, Lisa.Mak@bchydro.com <'Lisa.Mak@bchydro.com'>, Sandham, Kylie HOUS:EX <Kylie.Sandham@gov.bc.ca>, kelly@hkrbuilders.com <'kelly@hkrbuilders.com'>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, christopher.frye@canada.ca <'christopher.frye@canada.ca'>, muneesh@boma.bc.ca <'muneesh@boma.bc.ca'>, christine.gillis@canada.ca <'christine.gillis@canada.ca'>, SHorsburgh@rdn.bc.ca <'SHorsburgh@rdn.bc.ca'>, vanessa@chbabc.org <'vanessa@chbabc.org'>, mlohmann@communityenergy.bc.ca <'mlohmann@communityenergy.bc.ca'>

Sent: February 28, 2020 9:23:27 AM PST

Attachments: ESCC Presentation for Feb 28 (BC_Housing).pptx

Hi everyone,

Please see attached Wilma's slides for this morning.

Cheers,
Lisa

From: Wilma Leung [mailto:wileung@bchousing.org]
Sent: 2020, February 28 12:11 AM
To: Wong, Hugo OHCS:EX
Cc: Mak, Lisa; Andersson, Dale OHCS:EX
Subject: [External] RE: ESCC conference

Caution: This is an **external** email. Do not open attachments or click on links from unknown senders.

Hi Hugo,

Attached are the slides that I'll be using.

Thanks,
Wilma

Slow Response Alert: I'm in catching up mode, and may be late in reading or responding to emails. Will prioritize attention to emails with [**Urgent**] or [**Respond by __**] in subject line.

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: February 27, 2020 15:43
To: 'Guido.Wimmers@unbc.ca'; 'christian@zebx.org'; 'mmcwilliam3@bcit.ca'; 'mark@havan.ca'; Vukosavljevic, Nicole OHCS:EX; 'jjung@asttbc.org'; 'bea.bains@fortisbc.com'; Wacker, Holly MAH:EX; 'robyn.wark@bchydro.com'; 'catherine.ernst@boabc.org'; 'NConnolly@richmond.ca'; 'hradhakrishnan@egbc.ca'; 'jfisher@udi.org'; 'ralph.wells@ubc.ca'; Williams, Scott B OHCS:EX; Dang, Tommy OHCS:EX; 'bdeeks@rdcfinehomes.com'; 'Maxwell.Sykes@surrey.ca'; 'MGatensby@aibc.ca'; May, Zachary OHCS:EX; 'J.Madden@ubc.ca'; 'warrenp@bccassn.com'; 'nheap@richmond.ca'; Andersson, Dale OHCS:EX; 'mchorobik@communityenergy.bc.ca'; 'wileung@bchousing.org'; 'christopher.mclellan@canada.ca'; 'nconnolly@newwestcity.ca'; 'sean.pander@vancouver.ca'; 'patrick.enright@vancouver.ca'; 'toby.lau@bchydro.com'; 'msohi@boabc.org'; 'gary.hamer@bchydro.com'; 'joe.iconhomes@shaw.ca'; 'Lisa.Mak@bchydro.com'; Sandham, Kylie OHCS:EX; 'kelly@hkrbuilders.com'; Gosman, Nat EMPR:EX; 'christopher.frye@canada.ca'; 'muneesh@boma.bc.ca'; 'christine.gillis@canada.ca'; 'SHorsburgh@rdn.bc.ca'; 'vanessa@chbabc.org'; 'mlohmann@communityenergy.bc.ca'
Cc: Wells, Ralph; Higgins, Chris (Sustainability); Maura Gatensby; Warren Perks; Harshan Radhakrishnan; Heap,Nicholas; Jason Jung, AScT; Madden, John (C+CP); Bains, Bea; Sykes, Maxwell; Vanessa Joehl; Wilma Leung; Frye, Christopher (NRCAN/RNCAN); Enright, Patrick; Hamer, Gary; Connolly,Norm; Jeff Fisher; Catherine Ernst; Bailey, Margaret (NRCAN/RNCAN); s.22 ; Bob Deeks; Joe Hart; Lau, Toby; Gillis, Christine (NRCAN/RNCAN); Muneesh Sharma; Mark Sakai; Maya Chorobik
Subject: ESCC conference
When: February 28, 2020 09:00-15:15 (UTC-08:00) Pacific Time (US & Canada).
Where: BC Hydro Office – 333 Dunsmuir St., Vancouver, B.C. or teleconference

Hello, Energy Step Code Council members:

I have updated this meeting invitation to include the agenda and background materials. Please let me know if you're unable to view these materials and I'll send them in a separate email. The agenda includes the WebEx link and password for those attending via teleconference.

New (2/27/2020): *Teleconference attendees may participate in the breakout groups by dialing the following numbers:*

Conference Line:
Lower Mainland: s.15
Outside Lower Mainland: s.15

Participant Access codes:

1. ***LG Peer Network –*** s.15 *(this is the one people are dialing into for the meeting as a whole)*
2. ***Part 3 Subcommittee*** – s.15
3. ***Part 9 Subcommittee*** –
4. ***CBC*** – s.15

Once the breakout sessions conclude, dial into the original conference line (the same as the LG Peer Network) to re-join.

If you haven't yet indicated your dietary needs or whether you will come in-person or via teleconference, it's not too late to let me know.

As usual, visitors to the BC Hydro building at 333 Dunsmuir St. will be asked to exchange a piece of ID for a visitor's pass. Your ID will be returned to you when you return your visitor's pass.

Your on-site contact will be Dale Andersson and Lisa Mak. I will be attending via teleconference.

Thank you very much.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards

Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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BC Energy Step Code – Survey Results

- BC Housing's Builder Survey
- Market Response Survey
- LEEP Attendee Survey

BC HOUSING

BC Housing's Builder Survey

BC HOUSING

BC Housing's Residential Builder Survey

48% of B.C. builders reported attending a BC Energy Step Code training session



Source: Licensed Residential Builder Survey, 2018

Notes:

1. For the 2018 survey, email invitations were sent to 5,758 builders in good standing without expired, suspended or cancelled licenses. Builders completed a total of 1,206 online surveys which represented a response rate of 20.9%.
2. To ensure the final sample accurately reflected the total population and composition of builders in B.C., mathematical weights were applied based on region (i.e. the area of B.C. where they primarily build) and the number of homes built, or started, in the past year.
3. The Licensed Residential Builder Survey is a province-wide quantitative survey covering the typical builder7 profile (industry experience, type of builder), their construction activities, and their

BC HOUSING

BC Housing's Residential Builder Survey

38% of B.C. builders reported working with an **Energy Advisors** in 2018



Source: Licensed Residential Builder Survey, 2018

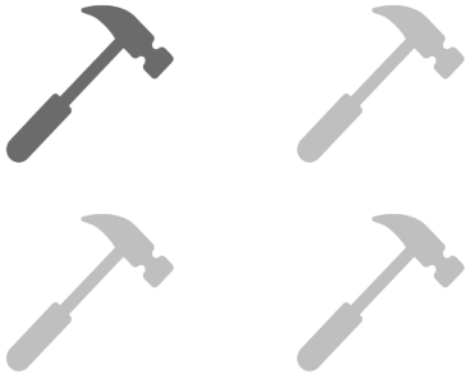
Notes:

1. For the 2018 survey, email invitations were sent to 5,758 builders in good standing without expired, suspended or cancelled licenses. Builders completed a total of 1,206 online surveys which represented a response rate of 20.9%.
2. To ensure the final sample accurately reflected the total population and composition of builders in B.C., mathematical weights were applied based on region (i.e. the area of B.C. where they primarily build) and the number of homes built, or started, in the past year.
3. The Licensed Residential Builder Survey is a province-wide quantitative survey covering the typical builder7 profile (industry experience, type of builder), their construction activities, and their

BC HOUSING

BC Housing's Residential Builder Survey

In 2018, **25%** of B.C. builders reported that they have built housing that **meets the BC Energy Step Code** in the past year



BC HOUSING

Source: Licensed Residential Builder Survey, 2018

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3. The Licensed Residential Builder Survey is a province-wide quantitative survey covering the typical builder7 profile (industry experience, type of builder), their construction activities, and their

Market Response Survey
Preliminary Results

BC HOUSING

Market Response Survey

Communities from across B.C. represented, grouped into 4 regions:

- **Lower Mainland/Southern Coast** - Metro Vancouver, Whistler, Squamish, Mission
- **Vancouver Island** - CRD, Duncan, Chemainus, Lake Cowichan, Nanaimo/Lantzville, Parksville, Comox, Campbell River, Port Alberni
- **Southern Interior** - Kelowna, Kamloops, Penticton, Lake Country, Vernon, Peachland, Summerland, Oliver, Cranbrook, Elk Valley
- **Northern BC** - Prince George, Quesnel, Smithers, Kitimat, Burns Lake, Houston

BC HOUSING

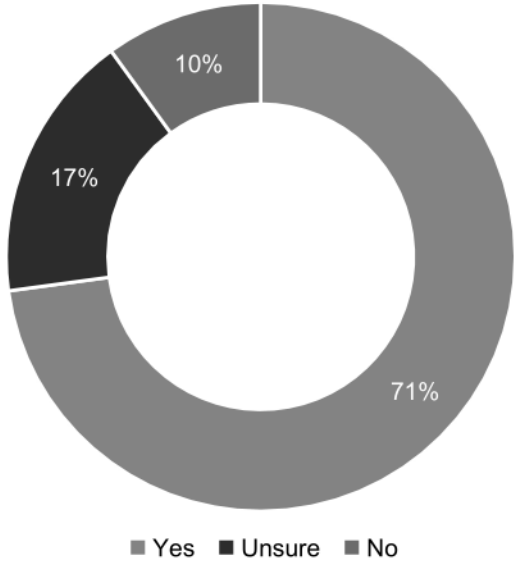
Source: BC Energy Step Code Market Response Study (PRELIMINARY)

Notes:

1. Results based on 7 phone based interviews and 65 online surveys of builders across BC in 2019. Builder participants were primarily contacted through local Homebuilder Associat

Market Response Survey

Approximately **70%** of surveyed builders reported that they felt prepared for the BC Energy Step Code

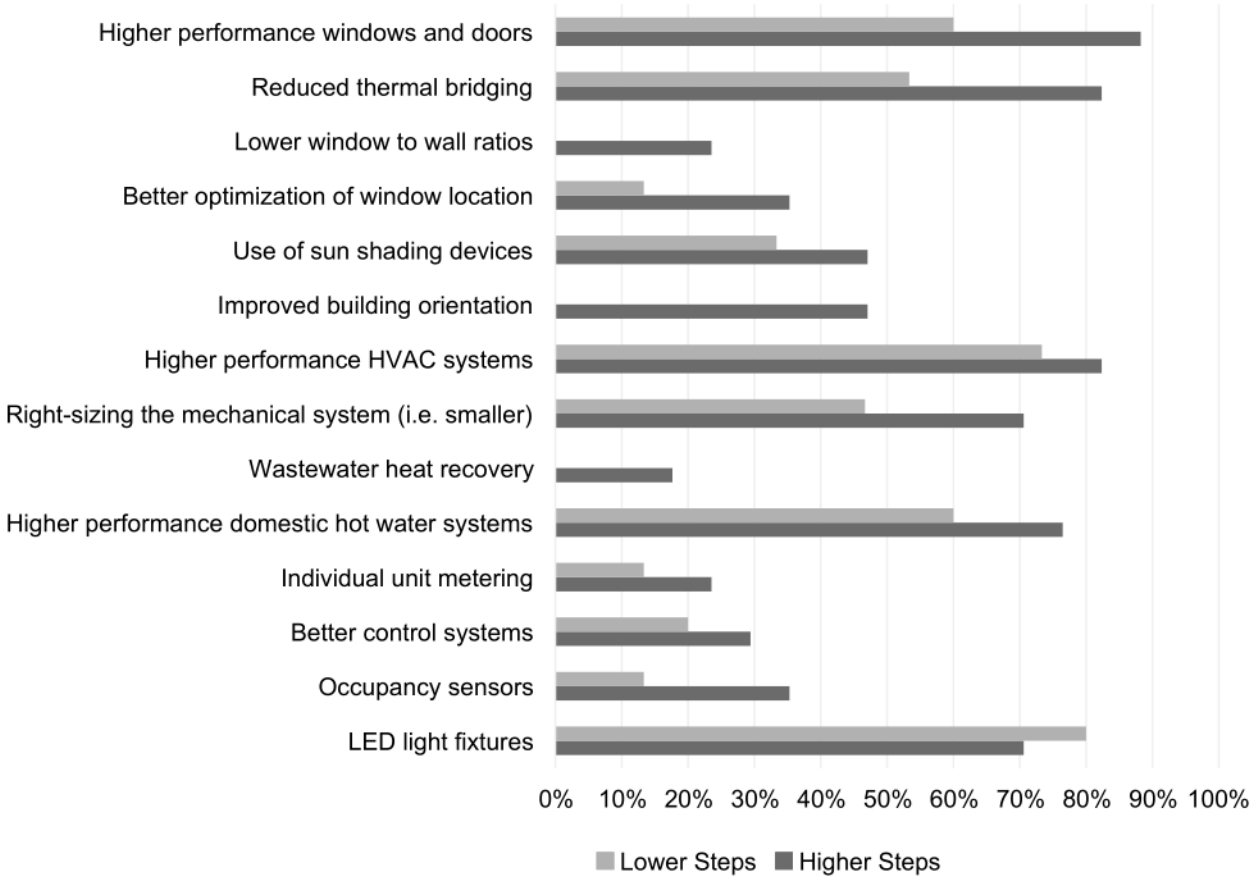


BC HOUSING

Source: BC Energy Step Code Market Response Study (PRELIMINARY)
Notes:
1. Results based on 7 phone based interviews and 65 online surveys of builders across BC in 2019. Builder participants were primarily contacted through local Homebuilder Associat

Market Response Survey

44% of responding builders reported building to the BC Energy Step Code in the past year and provided information on what energy saving measures they used



BC HOUSING

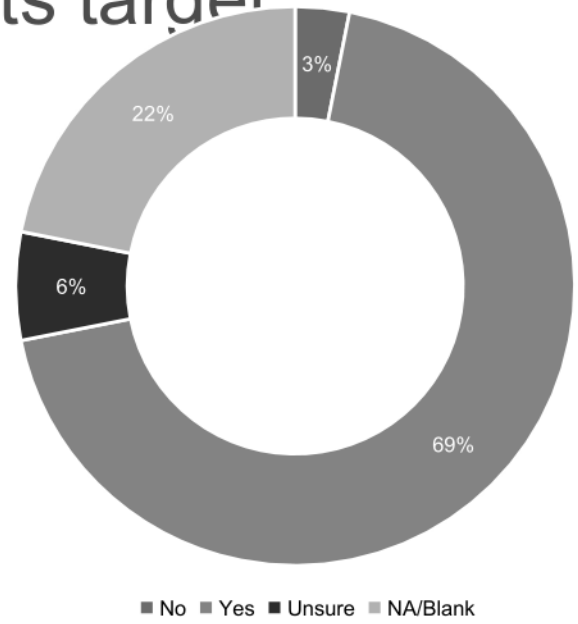
Source: BC Energy Step Code Market Response Study (PRELIMINARY)

Notes:

1. Results based on 7 phone based interviews and 65 online surveys of builders across BC in 2019. Builder participants were primarily contacted through local Homebuilder Associat

Market Response Survey

Approximately **70%** of both Lower (68%) and Higher (71%) Step builders reported that their most recent project in the past year met its target



BC HOUSING

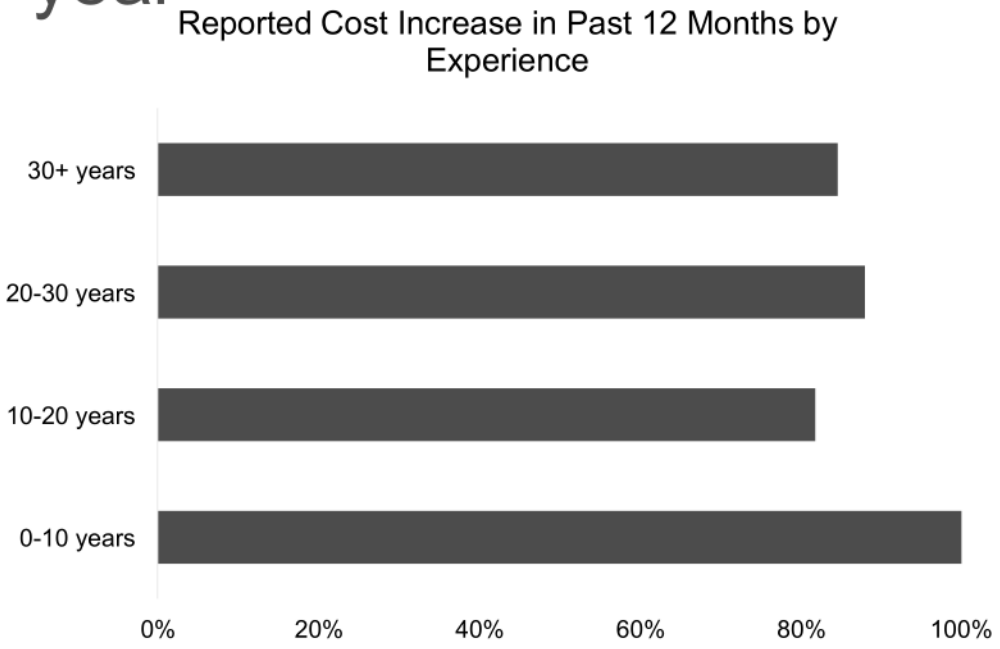
Source: BC Energy Step Code Market Response Study (PRELIMINARY)

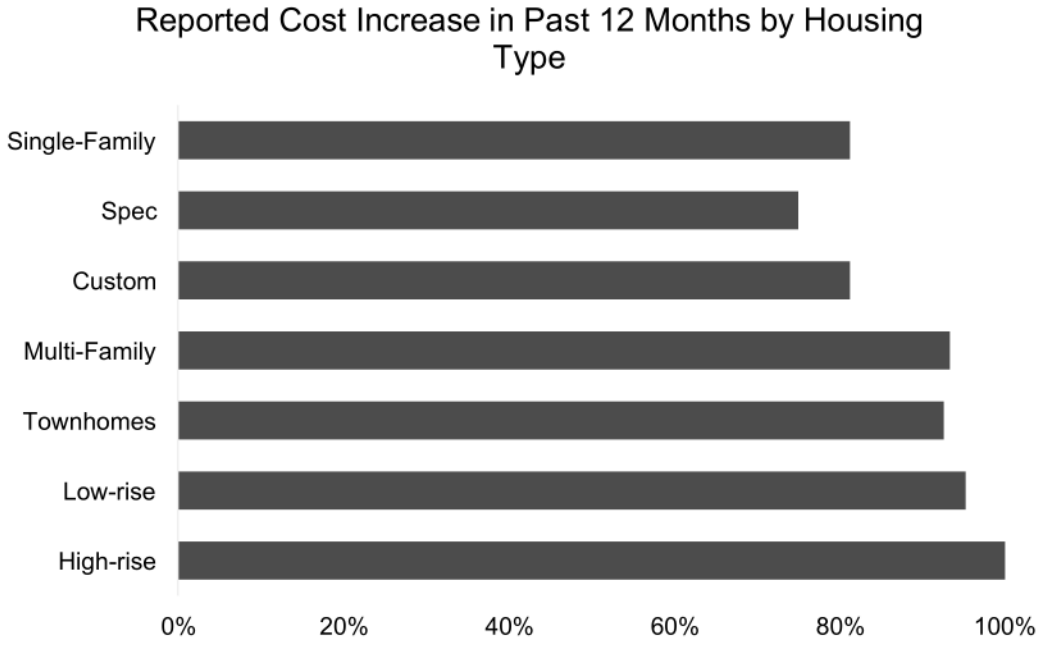
Notes:

1. Results based on 7 phone based interviews and 65 online surveys of builders across BC in 2019. Builder participants were primarily contacted through local Homebuilder Associat

Market Response Survey

88% reported their construction costs increased in the past year





BC HOUSING

Source: BC Energy Step Code Market Response Study (PRELIMINARY)

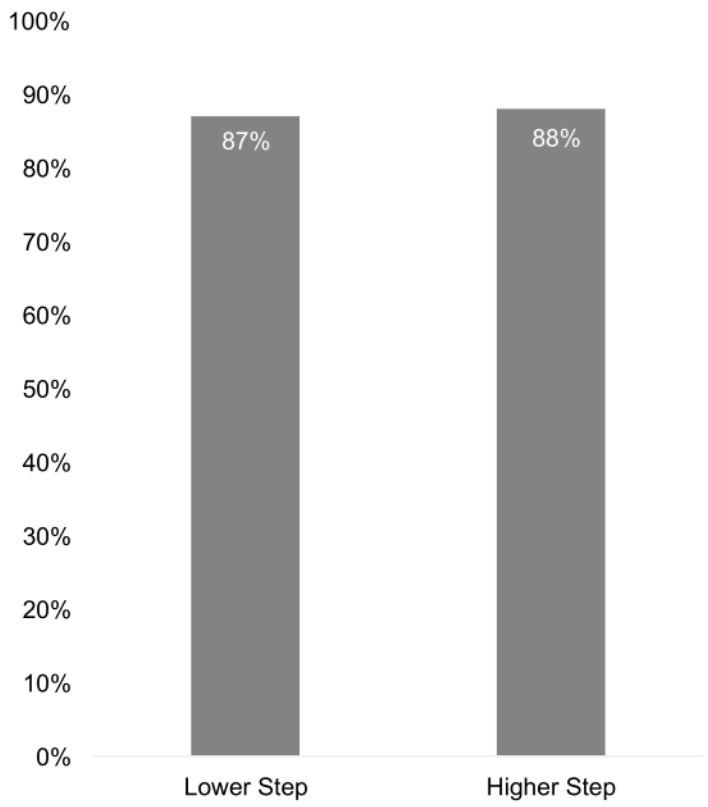
Notes:

1. Results based on 7 phone based interviews and 65 online surveys of builders across BC in 2019. Builder participants were primarily contacted through local Homebuilder Associat

Market Response Survey

The percentage of builders reporting cost increases was very close between **Lower Step builders (87%)** and **Higher Step builders (88%)**

Most builders referred to **material costs, trade/skilled labour, code changes (including seismic), taxes/fees and regulation**.



BC HOUSING

Source: BC Energy Step Code Market Response Study (PRELIMINARY)
Notes:
1. Results based on 7 phone based interviews and 65 online surveys of builders across BC in 2019. Builder participants were primarily contacted through local Homebuilder Associat

Market Response Survey

Three out of 72 responses identified the BC Energy Step Code specifically as a primary cost driver, with one noting that the change in the calculations for colder climates was a particular challenge

Five others mentioned energy efficiency/better energy conservative measures, better envelope details, air tightness, increased HVAC controls, improved mechanical efficiencies, and insulation requirements as one of their top three cost drivers

BC HOUSING

Source: BC Energy Step Code Market Response Study (PRELIMINARY)

Notes:

1. Results based on 7 phone based interviews and 65 online surveys of builders across BC in 2019. Builder participants were primarily contacted through local Homebuilder Associat

LEEP Attendee Survey

BC HOUSING

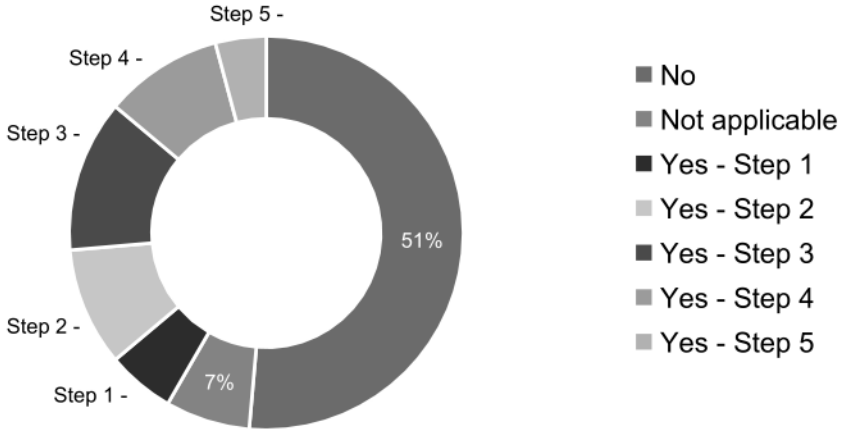
LEEP Attendee Survey

42% reported building to the BC Energy Step Code previously (14% Higher and 28% Lower)

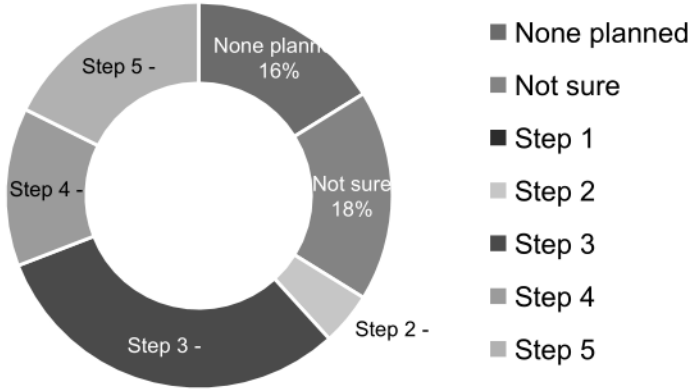
63% planned to build to the BCESC (31% Higher and 35% Lower) in 2020

42% reported feeling more confident in their ability to meet the Step as their reason

Previously built a home to BCESC



What is the highest Step you plan to build to in 2020 under the BCESC



BC HOUSING

Source: LEEP Attendee Survey, 2020

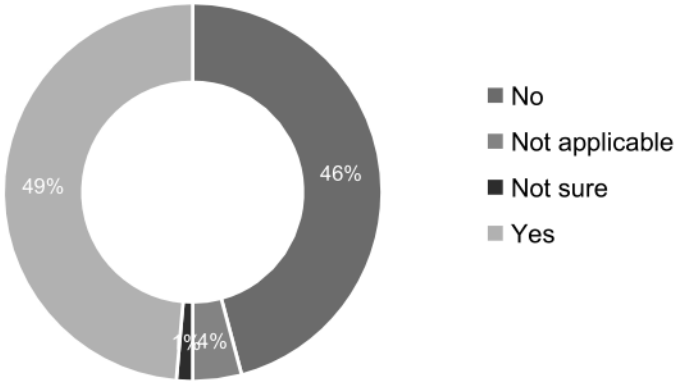
Notes:

1. An online survey was emailed to LEEP attendees using contact information provided by the local Homebuilder's Association. Attendees were asked to respond to the survey within 72 hours of receiving the email.
2. Total of 72 responses received across the sessions in Vancouver, Nanaimo, Victoria, Nanaimo, Abbotsford and Prince George. A response rate of approximately 26%.

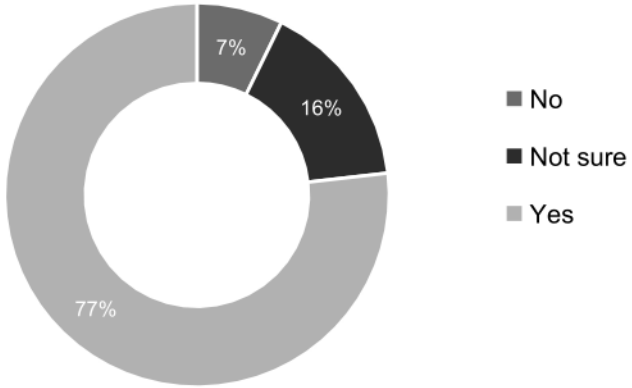
LEEP Attendee Survey

49% reported using a heat pump in 2019
74% planned to use a heat pump in 2020
42% reported feeling more confident in their ability to use heat pumps as their reason

Have you used a heat pump(s) in 2019



Are you planning to use a heat pump(s) in 2020



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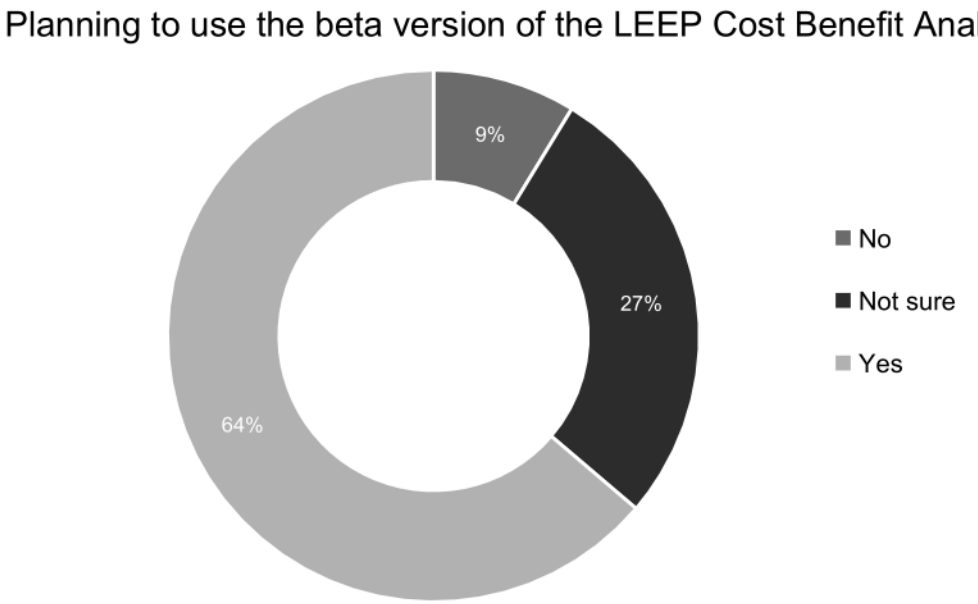
LEEP Attendee Survey

64% reported they planned to use the beta version of the LEEP Cost Benefit Analysis Tool



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Fwd: AGENDA | MAH & UDI | March 05

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 4, 2020 6:29:36 PM PST
Attachments: AGENDA_MAH_UDI_MARCH05.pdf

FYI

Andrew Pape-Salmon | P.Eng., MRM, FCAE
Executive Director
Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

---------- Forwarded message ----------
From: "Kubisheski, Carlee MAH:EX" <Carlee.Kubisheski@gov.bc.ca>
Date: Mar 4, 2020 5:21 PM
Subject: AGENDA | MAH & UDI | March 05
To: "Steves, Gregory OHCS:EX" <Gregory.Steves@gov.bc.ca>,"Enemark, Gord OHCS:EX" <Gord.Enemark@gov.bc.ca>,"Pape-Salmon, Andrew OHCS:EX" <Andrew.PapeSalmon@gov.bc.ca>,AMcMullin@udi.org,Marissa Chan-Kent <mchan-kent@udi.org>,"Faganello, Tara MAH:EX" <Tara.Faganello@gov.bc.ca>
Cc: "Papadopoulos, Nikki OHCS:EX" <Nikki.Papadopoulos@gov.bc.ca>,"Wilkins, Christina MAH:EX" <Christina.Wilkins@gov.bc.ca>,"Andrade, Ana MAH:EX" <Ana.Andrade@gov.bc.ca>,"Ramsay, Launa P OHCS:EX" <Launa.Ramsay@gov.bc.ca>,"Gedney, Vanessa R MAH:EX" <Vanessa.Gedney@gov.bc.ca>,Andrea Nicholls <anicholls@udi.org>
Please find attached the agenda for the MAH & UDI meeting tomorrow.

Thank you,

Carlee Kubisheski | Acting Senior Executive Assistant
To Deputy Minister, Kaye Krishna
Ministry of Municipal Affairs and Housing
778-698-1828

Agenda

MAH/UDI MEETING

Boardroom 615 | 800 Johnson Street | Victoria

March 05, 2020

10:00 – 10:30 am

#	ITEM	PURPOSE
1	Working with key stakeholders and UBCM to promote and monitor the provincial matching Municipal Revitalization Tax Exemptions for new rental units	Discussion
2	Encourage MAH staff engagement with UDI's Rental Housing Committee	Discussion
3	BC Building Code Changes and Policy Work	Discussion
4	Rental Task Force Recommendations o Renovictions o AGI Implementation	Discussion
5	Rental Zoning o Bulletin/Guidelines o Monitoring	Discussion
6	Development Approval Process Review o Pilot Program for Municipalities	Discussion
7	Round Table	Discussion

RE: UDI meeting bullets

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 4, 2020 9:21:38 PM PST

Thanks.

I note that the UDI agenda changed from last week to this week and removed explicit mention of the Energy Step Code. It is good that it hasn't been singled out.

I will forward to Greg.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 4, 2020 2:27 PM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: UDI meeting bullets

Please let me know if you would like more detail on any of this. I know you are aware of many of these details, but wanted to draft in a way that you could forward to Greg/Kaye as required.

None of this would be a surprise to Jeff Fisher, but Anne may not be totally aware of the details. At a high level, the status quo will continue in terms of Step Code as the dominant construction standard, and the baseline code will be improving for communities and projects that aren't already requiring Steps 2/3 of the ESC for Part 3.

Energy Step Code

- UDI is a foundational and active member on the Energy Step Code Council.
- The Ministry is seeking input from the Energy Step Code Council to identify the most effective options for achieving the Province's CleanBC goal of a 20% energy efficiency improvement in the BC Building Code in 2022, as well as increased harmonization with the model national codes.
- For large buildings (Part 3), the 20% goal may be achieved by adopting the anticipated national code changes in the 2020 National Energy Code for Buildings, expected later this year.
- The 20% improvement will also require adjustments to the Energy Step Code to continue to provide a clear roadmap between the minimum efficiency of the BC Building Code and the long term goal of Net Zero Energy Ready performance by 2032.
- Some Energy Step Code targets may be adjusted, based on consultation with stakeholders, to ensure that all building types are treated equitably in the 2022 BC Building Code. It will not be as simple as requiring a different step for large buildings.
- Local governments will continue to be able to incentivize or require performance levels above the minimums in the BC Building Code, using the Energy Step Code.
- In 2022 the BC Building Code may also consider emerging issues such as overheating risks and greenhouse gas emissions, which have both been raised as priority issues at the Energy Step Code Council and in CleanBC.
- The 2022 energy efficiency requirements may be considered for adoption as soon as spring 2021, with an effective date of December 2022. This extended implementation approach would allow for industry to prepare and local governments to consult on and implement any necessary changes to bylaws and policies.
- For houses and small residential buildings (Part 9), a similar approach will be followed, although more substantial changes to the model national code may be necessary to achieve the CleanBC 20% improvement commitment.

Alterations to Existing Buildings

- The Ministry is currently in the early stages of consultation on this initiative, with draft policy options expected in fall 2020.
- Engagement will continue to occur through the Energy Step Code Council as well as direct engagement with impacted stakeholders.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

UDI meeting bullets

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: Steves, Gregory OHCS:EX <Gregory.Steves@gov.bc.ca>
Cc: Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 4, 2020 9:27:40 PM PST

Greg, for the UDI meeting tomorrow.

Note that we will have a Minister Briefing Note for Decision ready for you shortly – which will inform the discussion at the March 23 Minister's Council meeting. One of the bullets below is for decision by the Minister on or after March 23 (2nd last Energy Step Code Bullet: spring 2021 adoption, Dec 2022 effective date).

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 4, 2020 2:27 PM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
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Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

FW: AGENDA | MAH & UDI | March 05

From: Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>
To: Faganello, Tara MAH:EX <Tara.Faganello@gov.bc.ca>
Cc: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>, Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: March 5, 2020 6:42:45 AM PST
Attachments: AGENDA_MAH_UDI_MARCH05.pdf

Tara, #1 on the list is something we have discussed internally. Promoting the revitalization tax program to muni's is a good idea (open to how we might do that) but also monitoring take up is something I have discussed with Jessica and Eric. We have informally talked about an annual survey of muni's to assess how many units are being stimulated by both this policy and rental zoning. You may want speak to this at the meeting.

Gord

From: Kubisheski, Carlee MAH:EX <Carlee.Kubisheski@gov.bc.ca>
Sent: March 4, 2020 5:21 PM
To: Steves, Gregory OHCS:EX <Gregory.Steves@gov.bc.ca>; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; 'AMcMullin@udi.org' <AMcMullin@udi.org>; Marissa Chan-Kent <mchan-kent@udi.org>; Faganello, Tara MAH:EX <Tara.Faganello@gov.bc.ca>
Cc: Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>; Wilkins, Christina MAH:EX <Christina.Wilkins@gov.bc.ca>; Andrade, Ana MAH:EX <Ana.Andrade@gov.bc.ca>; Ramsay, Launa P OHCS:EX <Launa.Ramsay@gov.bc.ca>; Gedney, Vanessa R MAH:EX <Vanessa.Gedney@gov.bc.ca>; Andrea Nicholls <anicholls@udi.org>
Subject: AGENDA | MAH & UDI | March 05

Please find attached the agenda for the MAH & UDI meeting tomorrow.

Thank you,

Carlee Kubisheski | Acting Senior Executive Assistant
To Deputy Minister, Kaye Krishna
Ministry of Municipal Affairs and Housing
778-698-1828

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Notes

Date and Time of Meeting: Friday February 28, 2019 | Time: 9:00 a.m. to 3:45 p.m. Pacific Time
Venue: BC Hydro Office – 333 Dunsmuir St., Vancouver, B.C. & by teleconference
Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Participants

1. Dale Andersson, BSSB and co-chair, CBC Subcommittee
2. Bea Bains, FortisBC
3. Maya Chorobik, Chair, Small LG Peer Network
4. Christian Cianfrone, ZEBx
5. Norm Connolly, Richmond/PIBC, and co-chair, Technical Subcommittee
6. Patrick Enright, City of Vancouver
7. Jeff Fisher, UDI
8. Chris Frye, NRCan Housing Division
9. Maura Gatensby, AIBC.
10. Joe Hart, Icon Homes/CHBA BC
11. Toby Lau, BC Hydro and co-chair, Technical Subcommittee
12. Wilma Leung, BC Housing
13. Megan Lohmann, CEA and UBCM rep
14. John Madden, UBC
15. Lisa Mak, BC Hydro
16. Warren Perks, BCCA
17. Harshan Radhakrishnan, EGBC
18. Kelly Reid, HKR Builders/CHBA BC
19. Mark Sakai, HAVAN
20. Muneesh Sharma, BOMA
21. Manjit Sohi, BOABC
22. Maxwell Sykes, City of Surrey/UBCM Rep and Chair, Large LG Peer Network
23. By teleconference – MAH: Holly Wacker (Local Government Division, Planning and Land Use Management); , BSSB Staff: Kylie Sandham; Nicole Vukosavljevic; Scott Williams; Hugo Wong;
24. By Teleconference: Tom Berkhout, MEMPR; Mark Bernhardt, Bernhardt Contracting and CHBA BC (guest); Catherine Ernst, BOABC; Nicholas Heap, City of Richmond and co-chair, CaEASC; Vanessa Joehl, CHBA BC and co-chair, CaEASC; Adrian Mohareb, Climate Action Secretariat, ENV, Andrew Pride, SCEE

Guests: Wendy Acheson, BC Housing; Pauline Rupp, CHBA BC; Gary Hamer, BC Hydro; Bertine Stelzer, BC Hydro

25. Regrets: Jason Jung, ASTTBC; Mary McWilliam, BCIT, co-chair, CBC Subcommittee

1. Welcome and Introductions

Zachary May welcomed Council members and guests. New Council members include Manjit Sohi of BOABC. Zac briefed members on current Step Code adoption plan, still TBC: aiming for spring 2021 adoption with an effective date in December 2022.

2. Regional Roundup

Hugo Wong presented a short summary of an informal consultation he conducted of Building Officials and CHBA regional chapters, particularly on rural implementation in colder climates. His main findings:

For building officials:

- EAs and building officials sometimes interpret requirements differently
- Education opportunities (manuals, BCIT roadshow) are very helpful and welcome
- Functionally, building officials often educate stakeholders on Step Code
- New buildings for natural resource projects (e.g. LNG) stretch building officials capacity to take on other works
- They want:

- Simpler, consistent targets (e.g. a single %-better target instead of 3 separate targets)
- Consideration of microclimate variations in Step Code targets

For home builders:

- Kamloops got their first energy advisor (EA) last year. Previously, one EA covered Kelowna, Vernon and Kamloops
- Recent TEDI metric changes dropped a demonstration house from Step 4 to Step 1.
- Climate data is not always granular enough (Cranbrook climate data used for Kimberley despite twice the snow load in Kimberley)
- High-performance building materials aren't always available in their area (e.g. Kitimat)
- They want:
  - Clarity on 2022 code objective
  - Consistent compliance forms/methods across AHJs
  - Better relationships between EAs and AHJs
  - Clarity on how the ESCC makes decisions

Council members asked for clarification on a few points:

- "buildings for natural resource projects" refers to LNG and mining buildings in Kitimat
- The TEDI metric changes that dropped a demonstration home from Step 4 to Step 1 referred to the "Y Dream Home" built by CHBA-CI (which has since risen again after the Dec. 2019 TEDI metric changes)

Council members raised the following points:

- These issues will take time to address.
- Some EAs report a lack of trust between them and building officials. EAs, like interior designers, seek professionalization and a clear place in the building regulatory system.
- NRCan is hoping to triple their climate files in HOT2000 to better address climate variability in regions.
- Many northern communities still don't require Step 1, which is concerning if blower door tests become mandatory in 2022.
- BC Housing reports some First Nations are interested in improving housing but cannot train or attract an EA.
- Consumer demand for more energy efficient homes is not as highly appreciated as premium interior finishings.

Suggestions from around the table:

- Hold more individual phone calls with local municipalities to increase local government confidence and answer their specific questions.
- The Canadian Association of Consulting Energy Advisors is discussing how to train new EAs, and would be worth consulting on this issue.
- Shorter, plainer language bulletins on the Step Code website could supplement technical bulletins and address implementation issues.
- Pay attention to the Columbia and Elk Valley, where 70% of builders are from AB and are not trained to build Step Code homes. Consider increasing training for out-of-province builders.
- Train Realtors and real estate appraisers to value energy efficiency when selling/pricing homes.
- Architects are apparently interested in becoming EAs (to evaluate their own buildings), but are unsure how to do so. May address other capacity needs. (Richard Kudalski apparently does EA training for architects. CBCSC to examine this issue, too.)

ACTION ITEMS

- BSSB: Reach out to BOABC which offered to help by hosting a seminar on the role of EAs and their authority, accountability, etc. (possibly at spring conference)

- Hugo Wong to provide info to Chris Frye on EA capacity issues/climate files
- Chris Frye to connect with Manjit S on rural EA capacity
- Maura Gatensby to connect with Chris Frye and Robyn Wark on the EA/architect issue

3. Training and Research Update

Wilma updated the group on the market response monitoring report, the builder survey, and feedback from LEEP sessions. See slides for details. Wilma noted the sample is biased towards those who are already interested in Step Code. A cost-benefit tool with different Energy Conservation Measures (ECMs) is being developed by NRCan with estimated May/June release date; a webinar launch is scheduled for June 5. Christian Cianfrone indicated a web version of CBAT tool has similar functionality. UVic is developing a Part 3 net zero navigator. Wilma said the group is collaborating and aware of each other's projects.

4. New Support Role in BSSB (see report attached with meeting agenda)

5. Addressing Greenhouse Gas Performance Requirements in the BC Energy Step Code – Conor Reynolds and Erik Blair, Metro Van

See presentation attached with agenda. Metro Vancouver's member municipalities seek a consistent approach to GHG limits for Part 3/9 buildings, with zero carbon new buildings by 2032. Many members have declared a climate emergency, and Metro Van has a climate action strategic framework, with GHG targets, to be carbon neutral by 2050.

Members discussed several strategies, including funding for low carbon energy systems in Part 9 buildings, which Victoria is also considering. Local governments could also make GHG emissions a condition of rezoning. However, these novel approaches reduce alignment across municipalities, which is not ideal.

In Richmond's analysis, district energy systems with 70% ground source and 30% natural gas will consume all available RNG. FortisBC is considering purchasing additional RNG from outside BC.

Metro Van emphasized that by 2032 Metro Van needs to halve GHG emissions and reduce to zero by 2050, and wants to send early market signals. Council discussion included:

- Support for decarbonization, but reminder that electrically heated homes are present unique challenges in the north
- RNG is an option for lowering carbon emissions
- Province is considering possible approaches to support reduced carbon emissions from building and ESCC can provide guidance
- Clear, flexible, and simple targets could be guiding principles
- Code harmonization with national must also be considered

BC Housing is conducting the MBAR project – see info online: "Mobilizing Building Adaptation and Resilience (MBAR) is a multi-year, multi-stakeholder knowledge and capacity building project led by BC Housing, with participation and contribution from over 30 organizations, including national, provincial, and local agencies; and industry partners."

ACTION ITEMS

- Subcommittees to map out their priorities for the next BCBC edition quickly, as they need to do research (and secure funding for that research). Priorities to be discussed at the June ESCC meeting.
    - Technical subco to examine limits (commission new studies or review old ones)
    - Policy options require development, could engage UBCM Climate Change Committee

6. **Part 9 Homes in Richmond; 2020 National Code Changes and Effect on BC Energy Step Code**

Richmond presented their early findings on Step Code homes built in their jurisdiction. Acknowledging the limited sample size, they nonetheless emphasized that these was the first analysis of actual homes, not reference homes. See slides for more details.

Summary: New metrics are most beneficial for Step 1, with %-better easier to achieve than TEDI. Formerly Step 1 homes could now be Step 3. They are concerned that new %-better and envelope metrics make it easier to reach certain Steps, and create an even wider gulf between the Lower and Upper Steps (in construction methods and cost), thus making it harder for municipalities to reach their emissions reduction targets. The table discussed the benefits of increased airtightness of these homes (regardless of Step), and saw the general improvement of homes as a net benefit.

The %-better approach is the national approach, which B.C. has committed to harmonizing with as much as possible. Some were concerned that a less energy efficient home would be more difficult to convert to a low-carbon energy system.

Nationally, Zac said the process of code harmonization will require input from Step Code members. He introduced the national energy tiers, and remarked on their similarity to Step Code. EUIs are not part of this national code change due to lack of time, but they are to be discussed in the next national code development cycle.

ACTION ITEMS

- Richmond's findings could be used to influence %-better at national.
- Zac to send email out March 5 for working session

7. Proposed New Subcommittee Structure and Priorities: Council Discussion

- Dale Andersson provided an overview of proposed changes to the Subcommittee structure, per the draft Subcommittees' and Council's Terms of Reference provided in the meeting materials. The Subcommittees' Terms of Reference identifies proposed priorities for each Subcommittee in 2020/21.
- The afternoon Subcommittee Breakout Sessions were deferred due to time; teleconferences will be booked instead (one for each Subcommittee) to discuss the proposed priorities of each.

ACTION ITEMS

- BSSB to book 4 teleconferences, one for each Subcommittee – to discuss the priority action items for each. Once all teleconferences are held, BSSB to finalize the updated draft ToRs.

8. CleanBC Annual Report

See report attached with meeting agenda. Report includes update on local government adoption of the BC Energy Step Code.

9. Existing Buildings Project Update, Kylie Sandham, BSSB

Kylie Sandham from BSSB presented a summary of the Fall 2019 stakeholder consultation for BSSB's Alterations to Existing Buildings Project (see attached). Government's commitment is to adopt a code for existing buildings by 2024 as part of CleanBC.

BSSB has just begun developing policy options after first hearing stakeholders, and is considering a broad range of options. Those policy options will be presented for stakeholder feedback in Fall 2020.

Table feedback:

- Feedback from local governments can take more than a month due to council approval. Leave lots of time.

- Limited annual rent increases limit available funds to upgrade buildings. Hopefully it is not targeted to buildings not worth saving.
- Link upgrades with land use planning so upgraded buildings aren't, for example, demolished to increase population density on a future transit line
- The table had questions about what actions will trigger upgrades. This is currently under consideration by BSSB.
- The What We Heard Report from stakeholders will be published externally in the future.
- Maxwell asked BSSB to present on this issue to Metro Vancouver's Local Government Subcommittee

10. Final Comments and Adjournment

- Members thanked the following Subcommittee Co-chairs who have resigned their co-chairing positions: Vanessa Joehl/C&EASC; Christian Cianfrone, CBCSC; Maxwell Sykes, Large Communities Peer Network.
- Scott thanked all those who provided input for the Part 9 Compliance Calculator and Manual.
- Next in-person meetings are planned for June and October 2020.
- Meeting adjourned 3:50 p.m.

RE: 251825: Invitation to Participate in Roundtable to Discuss Housing

From: Henry, Molly MAH:EX <Molly.Henry@gov.bc.ca>
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: March 5, 2020 5:16:51 PM PST
Attachments: image002.png, image004.jpg, image001.png
Thanks.

We've had to change rooms for the D&I meeting so we can't accommodate anyone else.

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: March 5, 2020 5:06 PM
To: Henry, Molly MAH:EX <Molly.Henry@gov.bc.ca>
Subject: RE: 251825: Invitation to Participate in Roundtable to Discuss Housing

Dev & Industry is 9/12 and Indigenous Orgs is 10/13 (incl. Marcel Swain calling in).

Developers & Industry			
YES	**Gary Pooni**	Brook Pooni and Associates	Attended 2017 roundtable and conference
YES	**Tony Pappajohn**	Jameson Development Corp.	Attended 2017 roundtable and conference
YES	**David Sander**	Hollyburn Properties	One of BC's largest owners and operators of purpose-built rental housing. David Sander was at the 2017 roundtable. Sent Joy Hayden (jhayden@hollyburn.ca) to the 2017 conference.
NO	**Anne McMullin**	Urban Development Institute	Was at the 2017 roundtable and at the conference. Kathy Hogan (khogan@udi.org), Jeff Fisher and Anne McMullin (amcmullin@udi.org) were also at the conference. Beau Jarvis (Wesgroup attending for UDI on Anne's behalf)
YES	**Beau Jarvis**	Wesgroup Properties	Was at the 2017 roundtable and conference. Peeter Wesik unable to attend; sending President Beau Jarvis in his place. Beau attending on behalf of UDI.
YES	**Craig Lochhead**	Townline Homes/TL Housing Solutions	Was at the 2017 roundtable and conference.
YES	**David Hutniak**	Landlord BC	Participated in DAPR.
YES	**Luke Mari**	Aryze Developments	Infill developer.
YES	**Neil Moody**	Canadian Home Builder's Association of BC	Participated in DAPR. Molly let Alycia from CHBA know that it won't be possible for them to send an extra person
	Robert Brown	Catalyst Community Developments	Wrote an article, *Below-Market Rental Housing Builds Community*, in the Summer 2019 edition of Input Magazine, the newsletter of the Real Estate Institute of British Columbia.
YES	**Brian McCauley**	Concert Properties	
	David Negrin	MST Development Corporation	MST was formed by the Musqueam, Squamish and Tsleil-Waututh to manage the billion dollars' worth of land that they own.

Indigenous Orgs

YES	**Margaret Pfoh**	Aboriginal Housing Management Association	
YES TELEPHONE	**Marcel Swain**	Lu'ma Native Housing Society	Was at the 2017 roundtable.

YES	**Kevin Albers**	M'akola Housing Society	Was at the 2017 roundtable. Add: Charla Huber chuber@makola.bc.ca and update Kevin's email on the master list
YES	**Fran Hunt-Jinnouchi**	Aboriginal Coalition to End Homelessness	
YES	**Claire Marshall**	Aboriginal Land Trust Society	Best contact I could find was for Indigenous Corporate Training Inc. camarshall@telus.net
YES	**Christos Vardacostas**	Aboriginal Housing Society of Prince George	
YES	**Rupinder Cheema**	Kekinow Native Housing Society	s.22 CEO — Rupinder Cheema is interim
YES	**Janice Silver**	Mamele'awt Qweesome Housing Society	
	David Eddy	Vancouver Native Housing Society	Wrote an article, *Housing and Reconciliation*, in the Summer 2019 edition of Input Magazine, the newsletter of the Real Estate Institute of British Columbia.
YES	**Austin Parisien**	Aganttanam Housing Society	
	Reg Sampson	Lax Kw'alaams WAAP Housing Society	Most of the housing being built will be off-reserve and in Prince George. Could not find contact information for the Housing Society, only for the band.
	Tina Larouche	Ki Low Na Friendship Society	
YES	**Norman Laube**	Metis Nation BC	Norman attending on behalf of Chris Gall.

Cimarron Corpé

Director, Housing Secretariat

Municipal Affairs and Housing
Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

From: Henry, Molly MAH:EX <Molly.Henry@gov.bc.ca>
Sent: March 5, 2020 4:48 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: RE: 251825: Invitation to Participate in Roundtable to Discuss Housing

What's our RSVP count?

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: March 4, 2020 4:20 PM
To: Henry, Molly MAH:EX <Molly.Henry@gov.bc.ca>
Subject: FW: 251825: Invitation to Participate in Roundtable to Discuss Housing

Per David's inquiry below, do you want to extend an invitation to Scott Cressey to the Developers & Industry Roundtable?

Cimarron Corpé
Director, Housing Secretariat

Municipal Affairs and Housing
Main: 778.974.3902

Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

From: Minister, MAH MAH:EX <MAH.Minister@gov.bc.ca>
Sent: March 4, 2020 4:08 PM
To: 'David Sander' <david@hollyburn.com>
Cc: OHCS Housing Policy Branch OHCS:EX <Housing.Policy@gov.bc.ca>
Subject: RE: 251825: Invitation to Participate in Roundtable to Discuss Housing

Good Afternoon,

Please send all Roundtable Housing invitation inquiries and RSVPs to our Housing Policy branch at Housing.Policy@gov.bc.ca.

I have cc'd them on this email. Thank you

Thank you

Jena Rayner

Administrative Assistant to the
Honourable Selina Robinson
Minister of Municipal Affairs and Housing
Room 310, Parliament Buildings
Office: 250-387-2283

From: David Sander <david@hollyburn.com>
Sent: March 4, 2020 3:50 PM
To: Minister, MAH MAH:EX <MAH.Minister@gov.bc.ca>
Subject: Re: 251825: Invitation to Participate in Roundtable to Discuss Housing

Good afternoon,

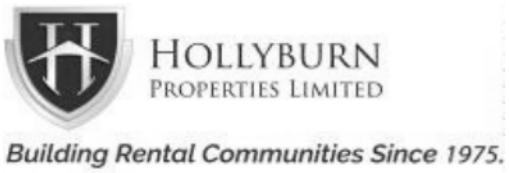
Just a quick note to see if it might be possible to for me (or you) to invite Scott Cressey to the upcoming roundtable housing discussion taking place next monday?

I recently connected with Scott and he was unaware of the meeting. As you may know Cressey has a long history of building rental housing in the province and has likely built more than any other private group.

Scott's email is: scottcressey@cressey.com

Best regards,
David

--



David Sander MSc | *Director*
E: david@hollyburn.com | www.hollyburn.com
T: 604.662.7346 ext 1103 | F: 604.662.7355
Vancouver > Calgary > Toronto > Ottawa
Facebook | Twitter | LinkedIn | Instagram

From: "Minister, MAH MAH:EX" <MAH.Minister@gov.bc.ca>
Date: Monday, January 27, 2020 at 1:43 PM
To: David Sander <david@hollyburn.com>
Subject: 251825: Invitation to Participate in Roundtable to Discuss Housing

Good afternoon,

Please find attached a letter from the Honourable Selina Robinson, Minister of Municipal Affairs and Housing.

Thank you.

FW: Enhancing Real Estate Value Stakeholder Roundtable Webinar: 3/26 1-5pm ET

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>

To: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, Terhune, Katie EMPR:EX <Katie.Terhune@gov.bc.ca>, Moonie, Grant EMPR:EX <Grant.Moonie@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Lang, Micah <Micah.Lang@vancouver.ca>, chris.higgins@vancouver.ca, Brady Faught <Brady.Faught@vancouver.ca>, Patrick.Enright@vancouver.ca, Wark, Robyn <Robyn.Wark@bchydro.com>, King, Katherine <katherine.king@bchydro.com>, Jeff Fisher <jfisher@udi.org>, mark@havan.ca <'mark@havan.ca'>, christian@zebx.org <'christian@zebx.org'>, Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>, Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>, Megan Lohmann <mlohmann@communityenergy.bc.ca>, 'maya chorobik <mchorobik@communityenergy.bc.ca>, Allison Ashcroft <allison@cuspnetwork.ca>, 'Caroline Jackson <cjackson@cnv.org>, Courtney Miller <cmiller@westvancouver.ca>, Deborah Herbert <Deborah.Herbert@Saanich.ca>, Emilie Adin <eadin@newwestcity.ca>, 'Erik Blair <erik.blair@metrovancouver.org>, Glen Cheetham <gcheetham@kamloops.ca>, Heap, Nicholas <NHeap@richmond.ca>, Josh Power <joshua.power@metrovancouver.org>, Larisa Lensink <llensink@cnv.org>, Luisa Jones <LUJones@abbotsford.ca>, 'Laura Benson - Maple ridge <lbenson@mapleridge.ca>, Laura Sampliner <lsampliner@portmoody.ca>, Mary De Paoli <mdepaoli@portmoody.ca>, Nikki Elliott <nelliott@crd.bc.ca>, Norm Connolly <nconnolly@richmond.ca>, Pat Bell <pbell@communityenergy.bc.ca>, Ralph Wells <ralph.wells@ubc.ca>, 'Rebecca Newlove <rebecca.newlove@saanich.ca>, Robyn Webb <rwebb@victoria.ca>, Rory Tooke <rtooke@victoria.ca>, rschmidt@tol.ca <'rschmidt@tol.ca'>, Sepehr Foroushani <SForoushani@richmond.ca>, Ted Battiston <tbattiston@whistler.ca>, Tess Rouse <trouse@tol.ca>, wyip@westvancouver.ca <'wyip@westvancouver.ca'>, Tanya Drouillard <tdrouillard@tol.ca>, Matt Greeno <mgreeno@crd.bc.ca>, Kevin Ramlu <kramlu@tol.ca>, Seabrooke, Amy <Amy.Seabrooke@bchydro.com>, Stelzer, Bertine <Bertine.Stelzer@bchydro.com>, Neuberger, Michaela <Michaela.Neuberger@bchydro.com>, Michasiw, Mariko <mmichasiw@coquitlam.ca>, Hannah Teicher - Researcher in Residence <picsbe@uvic.ca>, Anastasia Lukyanova <alukyanova@powellriver.ca>, Mark Sloat <Mark.Sloat@burnaby.ca>

Sent: March 17, 2020 9:23:31 AM PDT

Hi everyone,

NYSERDA is hosting another meeting/webinar that looks valuable for existing building decarbonization. See below. I have registered, but do not think I will have time to attend. In the past, they have recorded and shared these upon request.

If anyone attends, it would be valuable to share some of the learnings.

Stay isolated,
Max

MAXWELL SYKES, MRM, HBA | CLIMATE AND ENERGY MANAGER
CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
T 604.592.7022 | C 604.317.0422 | F 604.591.4357 www.surrey.ca

Visit the City's Step Code webpage and sign-up here to stay up-to-date on Step Code in Surrey.
Show your leadership among large building and get insights on your energy performance by signing up for Building Benchmark BC.

Upcoming Out of Office Alert: Parental leave from around Jun 1 to Dec 31 2020

From: Haramati, Mikhail (NYSERDA) <Mikhail.Haramati@nyserda.ny.gov>
Sent: March 17, 2020 9:05 AM
To: Haramati, Mikhail (NYSERDA) <Mikhail.Haramati@nyserda.ny.gov>
Subject: Enhancing Real Estate Value Stakeholder Roundtable Webinar: 3/26 1-5pm ET

You are invited to attend NYSERDA's**Enhancing Real Estate Value Stakeholder** webinar on**Thursday, March 26th, 1:00 p.m.– 5:00 p.m.** The goal of the webinar is to engage the real estate professionals to better

understand how to influence decision makers at key inflection points in a building's capital cycle, to facilitate upgrades in support of the statewide decarbonization goals.

This webinar is part of an ongoing effort by New York State Energy Research and Development Authority (NYSERDA) to gather information in support of the development of a Carbon Neutral Buildings Roadmap. The Roadmap, expected to be completed in 2021, will lay the framework to scale the economy for the design, construction, renovation, and operation of buildings that achieve superior energy performance, use energy from renewable sources, and are cost effective. This Roadmap will be completed in Q1 2021 and will assist the State in achieving its goal of an 85 percent reduction in greenhouse gas emissions by 2050 and transition to economy-wide carbon neutrality.

The Real Estate Value Stakeholder Roundtable webinar will cover the following discussion topics.

- Topic #1: How do we convince those making upgrade decisions (owners, property managers, industry professionals) to go all-electric, high performance, and/or install distributed generation?
- Topic #2: Messaging: How do we engage the Real Estate Industry Professionals?
- Topic #3: Financing: How do we Fund Deep Retrofits and Upgrades?

Registration

This session will be a webinar. Registration is available at https://nyserda-events.webex.com/nyserda-events/onstage/g.php?MTID=ece4d3b51bcb1884cfe390ca2325bd5e1.

Contact

If you have any questions, please reach out to Mikhail Haramati (mikhail.haramati@nyserda.ny.gov) or Pooja Chawda (pooja.chawda@nyserda.ny.gov).

Thank you for your interest in this topic. We look forward to hearing from you soon.

Sincerely,

NYSERDA Carbon Neutral Buildings Team

Mikhail Haramati

NYSERDA Carbon Neutral Buildings

NYSERDA

1359 Broadway, 19th Floor | New York, NY 10018-7842

P: 212-971-5342 x3136| F: 518-862-1091| E:Mikhail.Haramati@nyserda.ny.gov

nyserda.ny.gov

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RE: Enhancing Real Estate Value Stakeholder Roundtable Webinar: 3/26 1-5pm ET

From: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 19, 2020 3:42:14 PM PDT

Thanks Scott, I got this from Max too and will register.

Kylie

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: March 19, 2020 2:02 PM
To: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Enhancing Real Estate Value Stakeholder Roundtable Webinar: 3/26 1-5pm ET

Hi Kylie,

This may be of some interest to you.
See below.

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Sent: March 17, 2020 9:24 AM
To: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; Terhune, Katie EMPR:EX <Katie.Terhune@gov.bc.ca>; Moonie, Grant EMPR:EX <Grant.Moonie@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Lang, Micah <Micah.Lang@vancouver.ca>; chris.higgins@vancouver.ca; 'Brady Faught' <Brady.Faught@vancouver.ca>; Patrick.Enright@vancouver.ca; Wark, Robyn <Robyn.Wark@bchydro.com>; King, Katherine <katherine.king@bchydro.com>; Jeff Fisher <jfisher@udi.org>; 'mark@havan.ca'; 'christian@zebx.org'; Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>; Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>; 'Megan Lohmann' <mlohmann@communityenergy.bc.ca>; ''maya chorobik' <mchorobik@communityenergy.bc.ca>; 'Allison Ashcroft' <allison@cuspnetwork.ca>; ''Caroline Jackson' <cjackson@cnv.org>; 'Courtney Miller' <cmiller@westvancouver.ca>; 'Deborah Herbert' <Deborah.Herbert@Saanich.ca>; 'Emilie Adin' <eadin@newwestcity.ca>; ''Erik Blair' <erik.blair@metrovancouver.org>; 'Glen Cheetham' <gcheetham@kamloops.ca>; 'Heap, Nicholas' <NHeap@richmond.ca>; 'Josh Power' <joshua.power@metrovancouver.org>; 'Larisa Lensink' <llensink@cnv.org>; Luisa Jones <LUJones@abbotsford.ca>; ''Laura Benson - Maple ridge' <lbenson@mapleridge.ca>; 'Laura Sampliner' <lsampliner@portmoody.ca>; 'Mary De Paoli' <mdepaoli@portmoody.ca>; 'Nikki Elliott' <nelliott@crd.bc.ca>; 'Norm Connolly' <nconnolly@richmond.ca>; 'Pat Bell ' <pbell@communityenergy.bc.ca>; 'Ralph Wells' <ralph.wells@ubc.ca>; ''Rebecca Newlove ' <rebecca.newlove@saanich.ca>; 'Robyn Webb' <rwebb@victoria.ca>; 'Rory Tooke' <rtooke@victoria.ca>; 'rschmidt@tol.ca'; 'Sepehr Foroushani' <SForoushani@richmond.ca>; 'Ted Battiston' <tbattiston@whistler.ca>; 'Tess Rouse' <trouse@tol.ca>; 'wyip@westvancouver.ca'; 'Tanya Drouillard' <tdrouillard@tol.ca>; Matt Greeno <mgreeno@crd.bc.ca>; Kevin Ramlu <kramlu@tol.ca>; Seabrooke, Amy <Amy.Seabrooke@bchydro.com>; Stelzer, Bertine <Bertine.Stelzer@bchydro.com>; Neuberger, Michaela <Michaela.Neuberger@bchydro.com>; 'Michasiw, Mariko' <mmichasiw@coquitlam.ca>; 'Hannah Teicher - Researcher in Residence' <picsbe@uvic.ca>; Anastasia Lukyanova <alukyanova@powellriver.ca>; Mark Sloat <Mark.Sloat@burnaby.ca>
Subject: FW: Enhancing Real Estate Value Stakeholder Roundtable Webinar: 3/26 1-5pm ET

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Stay isolated,
Max

MAXWELL SYKES, MRM, HBA | CLIMATE AND ENERGY MANAGER
CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
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Upcoming Out of Office Alert: Parental leave from around Jun 1 to Dec 31 2020

From: Haramati, Mikhail (NYSERDA) <Mikhail.Haramati@nyserda.ny.gov>
Sent: March 17, 2020 9:05 AM
To: Haramati, Mikhail (NYSERDA) <Mikhail.Haramati@nyserda.ny.gov>
Subject: Enhancing Real Estate Value Stakeholder Roundtable Webinar: 3/26 1-5pm ET

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Contact

If you have any questions, please reach out to Mikhail Haramati (mikhail.haramati@nyserda.ny.gov) or Pooja Chawda (pooja.chawda@nyserda.ny.gov).

Thank you for your interest in this topic. We look forward to hearing from you soon.

Sincerely,

NYSERDA Carbon Neutral Buildings Team

Mikhail Haramati

NYSERDA Carbon Neutral Buildings

NYSERDA

1359 Broadway, 19th Floor | New York, NY 10018-7842
P: 212-971-5342 x3136| F: 518-862-1091| E:Mikhail.Haramati@nyserda.ny.gov

nyserda.ny.gov

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RE: COVID-19 Update #2 on Construction Sites

From: May, Zachary OHCS:EX
To: Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: March 19, 2020 4:38:28 PM PDT
Attachments: image001.jpg

That is news to me. It does sound consistent with the all supervisors call I heard, [s.22]
[s.22]

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: March 19, 2020 4:19 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: COVID-19 Update #2 on Construction Sites

Any idea who this 'senior official' may be?

TIFFANY WARKENTIN, BDes, LLB | Manager, Policy and Regulation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Wendy Acheson <wacheson@bchousing.org>
Sent: March 19, 2020 2:45 PM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: FW: COVID-19 Update #2 on Construction Sites

Andrew, I wasn't notified of this information below directly but if I can verify this direction is correct, it would be a good opportunity to also send out something to our licensees and industry stakeholders via email, unless you are. Can you confirm?

Thanks,
Wendy

BC HOUSING

Wendy Acheson LLB | VP & Registrar| Licensing & Consumer Services
Office: 604-646-7066| Mobile: 604-816-7202 wacheson@bchousing.org | www.bchousing.org
203 - 4555 Kingsway, Burnaby, BC V5H 4T8

From: Anne McMullin <amcmullin@udi.org>
Sent: March 19, 2020 2:18 PM
To: Wendy Acheson <wacheson@bchousing.org>
Subject: COVID-19 Update #2 on Construction Sites

COVID-19 UPDATE #2 ON CONSTRUCTION SITES

Dear Wendy

Further to our last bulletin sent Tuesday, March 17 regarding the BC Government's Public Emergency Order prohibiting gatherings of more than 50 people in one place, we would like to provide further clarity as this relates to construction sites.

A senior provincial government official has contacted UDI President & CEO Anne McMullin to assure our industry and membership **the 50-person limit does NOT apply to construction sites**. The provincial government official confirmed that all sites can and should remain operating.

Sites must continue to conform to Worksafe BC practices and current COVID-19 prevention protocols. That means additional handwashing stations should be made available, that workers should maintain their social distance of 1-2 metres from one another and during any on-site meetings.

In addition, the Provincial Health Officer Dr. Bonnie Henry said during the March 17, 2020 news conference, shortly after the 1:02 mark that **"**Construction work outside is not as much of a risk that we are concerned about***...but anyone who's sick should not be going to work*****."**

Additional Resources:

- New B.C. COVID-19 self-assessment tool found online here
- Latest **non-medical** COVID-19 updates, including travel recommendations, please call or text the provincial government through a newly created hotline at 1-888-268-4319 (1-888-COVID19) between 7:30 a.m. and 8 p.m. daily
- Latest orders and directives from the provincial health officer
- If you or a family member have symptoms or need medical advice, **call 811**
- For prevention and treatment, visit BC Centre for Disease Control or follow @CDCofBC
- Latest COVID-19 BC Government Updates

We will continue to keep you posted on all COVID-19 developments. Please let me know if you have any additional questions or concerns by contacting me at AMcMullin@udi.org.

Thank you,

Anne McMullin, President & CEO, UDI

This email was sent on behalf of Urban Development Institute by GrowthZone, 4837 County Road 77, Nisswa, MN 56468.To unsubscribe click here. If you have questions or comments concerning this email or GrowthZone services in general, please contact us by email at support@growthzone.com.

RE: Energy Step Code update

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>

To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Guido.Wimmers@unbc.ca <'Guido.Wimmers@unbc.ca'>, christian@zebx.org <'christian@zebx.org'>, mmcwilliam3@bcit.ca <'mmcwilliam3@bcit.ca'>, mark@havan.ca <'mark@havan.ca'>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, jjung@asttbc.org <'jjung@asttbc.org'>, bea.bains@fortisbc.com <'bea.bains@fortisbc.com'>, Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>, robyn.wark@bchydro.com <'robyn.wark@bchydro.com'>, catherine.ernst@boabc.org <'catherine.ernst@boabc.org'>, NConnolly@richmond.ca <'NConnolly@richmond.ca'>, hradhakrishnan@egbc.ca <'hradhakrishnan@egbc.ca'>, jfisher@udi.org <'jfisher@udi.org'>, ralph.wells@ubc.ca <'ralph.wells@ubc.ca'>, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, bdeeks@rdcfinehomes.com <'bdeeks@rdcfinehomes.com'>, Maxwell.Sykes@surrey.ca <'Maxwell.Sykes@surrey.ca'>, MGatensby@aibc.ca <'MGatensby@aibc.ca'>, J.Madden@ubc.ca <'J.Madden@ubc.ca'>, warrenp@bccassn.com <'warrenp@bccassn.com'>, nheap@richmond.ca <'nheap@richmond.ca'>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, mchorobik@communityenergy.bc.ca <'mchorobik@communityenergy.bc.ca'>, wileung@bchousing.org <'wileung@bchousing.org'>, christopher.mclellan@canada.ca <'christopher.mclellan@canada.ca'>, nconnolly@newwestcity.ca <'nconnolly@newwestcity.ca'>, sean.pander@vancouver.ca <'sean.pander@vancouver.ca'>, patrick.enright@vancouver.ca <'patrick.enright@vancouver.ca'>, toby.lau@bchydro.com <'toby.lau@bchydro.com'>, msohi@boabc.org <'msohi@boabc.org'>, gary.hamer@bchydro.com <'gary.hamer@bchydro.com'>, joe.iconhomes@shaw.ca <'joe.iconhomes@shaw.ca'>, Lisa.Mak@bchydro.com <'Lisa.Mak@bchydro.com'>, Sandham, Kylie HOUS:EX <Kylie.Sandham@gov.bc.ca>, kelly@hkrbuilders.com <'kelly@hkrbuilders.com'>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, christopher.frye@canada.ca <'christopher.frye@canada.ca'>, muneesh@boma.bc.ca <'muneesh@boma.bc.ca'>, christine.gillis@canada.ca <'christine.gillis@canada.ca'>, SHorsburgh@rdn.bc.ca <'SHorsburgh@rdn.bc.ca'>, vanessa@chbabc.org <'vanessa@chbabc.org'>, mlohmann@communityenergy.bc.ca <'mlohmann@communityenergy.bc.ca'>, Wells, Ralph <ralph.wells@ubc.ca>, Higgins, Chris (Sustainability) <Chris.Higgins@vancouver.ca>, Maura Gatensby <mgatensby@aibc.ca>, Warren Perks <warrenp@bccassn.com>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, nheap <nheap@richmond.ca>, Jason Jung <jjung@asttbc.org>, Madden, John (C+CP) <j.madden@ubc.ca>, Bains, Bea <bea.bains@fortisbc.com>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Vanessa Joehl <vanessa@chbabc.org>, Wilma Leung <wileung@bchousing.org>, Christopher Frye <christopher.frye@canada.ca>, Enright, Patrick <patrick.enright@vancouver.ca>, Hamer, Gary <gary.hamer@bchydro.com>, nconnolly <nconnolly@richmond.ca>, Jeff Fisher <jfisher@udi.org>, Catherine Ernst <catherine.ernst@boabc.org>, Bailey, Margaret (NRCAN/RNCAN) <margaret.bailey@canada.ca>, s.22 , Bob Deeks <bdeeks@rdcfinehomes.com>, Joe Hart <joe.iconhomes@shaw.ca>, Lau, Toby <Toby.Lau@bchydro.com>, Gillis, Christine (NRCAN/RNCAN) <christine.gillis@canada.ca>, Muneesh Sharma <muneesh@boma.bc.ca>, Mark Sakai <mark@havan.ca>, Maya Chorobik <mchorobik@communityenergy.bc.ca>

Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>

Sent: March 20, 2020 3:08:36 PM PDT

Good afternoon Energy Step Code community,

First and foremost, I hope everyone is finding ways to keep you, your family, and your community safe, healthy, and connected. s.22

s.22 The latest COVID-19 information from the Province is available here: https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/covid-19-provincial-support?utm_campaign=20200319_GCPE_AM_COVID_6_NOTIFICATION_BCGOVNEWS_BCGOV_EN_BC__NOTIFICATION

Over the past week the Building and Safety Standards Branch has been focused on transitioning our teams to working from home, supporting employees with family care arrangements, and supporting the Ministry with urgent issues related to the State of Emergency declaration. As we have more clarity on our workplan for the next few weeks and months we will work with the Step Code Council and Subcommittees to update priorities and workplans appropriately.

We anticipate that work supporting the Energy Step Code and implementation of CleanBC will continue, but the nature of this work will change according to the evolving public health situation and associated impacts on the construction sector and the economy. I will do my best to provide updates as they are available. Thank you all for your patience and flexibility.

If you have any questions, please feel free to reach out by phone or email.

Wishing you, your families, and your communities a safe and healthy weekend.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Rezoning Policy Update and Step Code Costs

From: Pander, Sean <sean.pander@vancouver.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Robyn Wark (Robyn.Wark@bchydro.com) <Robyn.Wark@bchydro.com>
Cc: Enright, Patrick <Patrick.Enright@vancouver.ca>, Christian Cianfrone (christian@zebx.org) <christian@zebx.org>
Sent: March 20, 2020 3:47:46 PM PDT

Lady and Gentleman,

s.22

I hope you are both well – seems like so far me team s.22 and continuing to work. s.22
s.22

Wanted to let you know that Patrick is gearing up for when life begins to resemble normal to start consulting on updates to our Green Building Policy for Rezonings (4-6 storey and >6 storey residential focus). UDI has flagged that they would like to have a discussion about the real costs of the current requirements first so we are starting to do some background work in this regard, speaking to some designers, builders, and then eventually developers that have more than one or two projects under their belts about their experiences. Aim is to ID some of the (mis)perceptions that need discussion, people with knowledge of specific issues, and then assemble a bit of a workshop (timing likely a couple months out?) to daylight the perceptions and realities.

At such a time as we do have this discussion, is there someone from the Council you would like us to invite to such a workshop?

Stay/keep well!

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver
City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
t: 604.871.6542
sean.pander@vancouver.ca

RE: DISCUSSION | Early Step Code Adoption

From: Steves, Gregory OHCS:EX <Gregory.Steves@gov.bc.ca>
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 31, 2020 2:35:24 PM PDT

Thank you for this. AS I said before I want to understand the benefits and rationale for doing this at this time

---

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 31, 2020 2:34 PM
To: Steves, Gregory OHCS:EX <Gregory.Steves@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Re: DISCUSSION | Early Step Code Adoption

Greg,

I spoke with Zac about this in preparation for the 3pm meeting.

At the Exec meeting this morning I raised the issue of local government bylaw amendment as being a central argument in favour of pre-election adoption to provide lots of time (18-24 months) before the December 2022 effective date.

I failed to mention a more important argument in favour of proceeding now, one being aligned with economic recovery: providing certainty in the marketplace at a time of economic uncertainty, and "uploading" the central responsibility from local governments to the province to deliver CleanBC goals.

UDI would appreciate the consistency of a single provincial standard. We could seek a letter of support from UDI if you want.

With this, we could improve the investment climate through certainty, support investment in a sector that is one of BC's strengths (green buildings), and deliver upon climate action commitments in CleanBC.

For me, this feels like a repeat of 2015 when we standardized the patchwork quilt of variable local government standards in bylaws with the BC Building Code via the Building Act.

Some local governments will want to go beyond what we adopt in 2022. We should discuss this item this afternoon.

Cheers,

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Cell/Text: 250.812.1933
Office: 250.387.3133
Email: Andrew.PapeSalmon@gov.bc.ca

Please see our website: www.gov.bc.ca/buildingcodes

From: Papadopoulos, Nikki OHCS:EX on behalf of Steves, Gregory OHCS:EX
Sent: Tuesday, March 31, 2020 11:35 AM
To: Pape-Salmon, Andrew OHCS:EX; May, Zachary OHCS:EX
Subject: DISCUSSION | Early Step Code Adoption
When: Tuesday, March 31, 2020 3:00 PM-3:30 PM.
Where: Skype Meeting

Join Skype Meeting

Trouble Joining? Try Skype Web App

Join by phone

s.15

AHJs - UDI Summary Table

From: Greg McCall <s.22
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 2, 2020 10:48:51 AM PDT

Zach,
You mentioned BSSB would be interested in what AHJs are doing.
This was put out by UDI and may be helpful if you have not already seen it.

https://udi.bc.ca/covid-19-municipal-updates/

Cheers,
G

M. Greg McCall
B.Sc.(Gen), P.Eng., LEED AP
Energy Policy Specialist
Office of the Chief Building Official
City of Vancouver
Tel: 604.873.7531
Email: Gregory.McCall@vancouver.ca

Energy webpage: http://vancouver.ca/building-energy-requirements
Field Review webpage: http://vancouver.ca/home-property-development/field-review-inspection.aspx

RE: New Economic Recovery Task Force

From: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>, Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>, Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 2, 2020 4:22:52 PM PDT

Hi Zac

Just wanted to flag that I think Aura has some capacity to assist. As you May recall I was going to get her to help on the compulsory trade file but that has fallen off with COVID.Not sure when it might start up. In talking to Aura, it sounds like BERT is not fully occupying her time.

Just wanted to flag this is if you or another wanted to pull her onto another file.

~ Shannon

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 2, 2020 4:15 PM
To: Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>; Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>
Subject: RE: New Economic Recovery Task Force

Nicole is leading the analysis.

I would assume there must be some staff level committees supporting this task force, similar to CleanBC. Will see if I can find out more. Hopefully we can get Kaye looped in soon.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>
Sent: April 2, 2020 3:38 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>
Subject: RE: New Economic Recovery Task Force

Interesting.
Our usual suspects aren't listed as members. The industry reps are from the larger umbrella groups.
It would be good for to us to understand how our stakeholders are represented by these larger associations:

- Greg D'Avignon, president and CEO, Business Council of BC
- Val Litwin, president and CEO, BC Chamber of Commerce
- Bridgitte Anderson, CEO, Vancouver Board of Trade
- Anita Huberman, CEO, Surrey Board of Trade
- Laird Cronk, president, BC Federation of Labour

For example, does UDI, BOMA or CHBA BC see themselves as stakeholders of one or more of these groups? Are their interests aligned? Is these groups the means by which they would make their needs known?
Zac is our Economic Recovery lead. Do we have an analyst assigned?

Jarrett Hutchinson | Director, Building Policy
Building & Safety Standards Branch

250-208-7277

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 2, 2020 2:29 PM
To: Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>; Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>
Subject: RE: New Economic Recovery Task Force

Looks like we have a task force. Thanks for picking this up, Tiffany!

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: April 2, 2020 2:22 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: New Economic Recovery Task Force

Not sure whether you saw this yet:

https://news.gov.bc.ca/releases/2020PREM0046-000618

TIFFANY WARKENTIN, BDes, LLB | Manager, Policy and Regulation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

RE: District Energy meeting Thursday May 12, 1.30pm

From: Rick Hopp (rhopp@evergreenbioheat.com) <sherilikes@cpws.net>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 7, 2020 2:21:26 PM PDT

Hello,

Take a look at this and see if everything is up to code. Let me know if there's anything wrong.

ATTACHMENT DOCUMENT

Thank you

Hello Everyone,

Please find the attached presentation materials for this afternoon's meeting.

Best,

Zachary D. May, MBA
Compliance Advisor – Energy
Senior Codes Administrator

Building and Safety Standards Branch | Office of Housing and Construction Standards
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Looking for resources for Energy Efficiency requirements in the BC Building Code? Visit our new Energy Efficiency website!

From: Frost, Andrea OHCS:EX
Sent: May 10, 2016 5:35 PM
To: May, Zachary OHCS:EX; Sheldon, Ted W MEM:EX; Frost, Andrea OHCS:EX; Aharonian, Dave ENV:EX; Porter, Kenneth ENV:EX; Russell, Patricia ENV:EX; Storzer, Mary CSCD:EX; Bedford, Brian CSCD:EX; 'bthemens@LonsdaleEnergy.ca'; 'alen.postolka@richmond.ca'; 'Jowen@surrey.ca'; 'Chris.baber@vancouver.ca'; 'sfevrier@lonsdaleenergy.ca'; 'itang@lonsdaleenergy.ca'; 'PRussell2@richmond.ca'; 'levi.higgs@richmond.ca'; 'Patrick.Shek@burnaby.ca'; 'Lise.Townsend@burnaby.ca'; 'lou.pelletier@burnaby.ca'; 'dsoong@coquitlam.ca'; 'epw@coquitlam.ca'; 'MBurton@coquitlam.ca'; 'rcarle@newwestcity.ca'; 'patrick_deakin@portalberni.ca'; 'sabina.foofat@vancouver.ca'; 'wil.wedel@city.pg.bc.ca'; 'Carlos.Hunte@metrovancouver.org'; 'Eve.Hou@metrovancouver.org'; 'jason.emmert@metrovancouver.org'; 'jeff.carmichael@metrovancouver.org'; 'Mia.Edbrooke@metrovancouver.org'; 'Paul.Kadota@metrovancouver.org'; 'aboel@gibsons.ca'; 'dnewman@gibsons.ca'; 'jragsdale@burnslake.ca'; 'AviniM@dnv.org'; 'Desrochersd@dnv.org'; 'mgould@kitimat.ca'; 'nconnolly@newwestcity.ca'; 'lgroulx@docbc.ca'; 'scottbeck@telkwa.com'; 'atucker@whistler.ca'; 'jertel@whistler.ca'; 'mlaidlaw@whistler.ca'; 'cao@portclements.ca'; 'dtelford@crd.bc.ca'; 'rmathews@squamish.ca'; 'bmcewen@richmond.ca'; 'jfisher@udi.org'; 'Stu.MacGillivray@decmail.ca'; 'knairne@davidnairne.com'; 'rthe@wesgroup.ca'; 'neilmoody@chbabc.org'; 'vanessa@chbabc.org'; 'nathan@odessagroup.ca'; 'mark@gvhba.org'; 'bjarvis@wesgroup.ca'; 'Jmeads@concertproperties.com'; 'rrenner@atticusfinancial.com'; 'cornelius@biomassenergyresearch.ca'; 'qwright@molehillhousing.ca'; 'Andrew.Byrnes@decmail.ca'; 'Richard.Marier@decmail.ca'; 'anijjar@docksidegreen.com'; 'info@telusgarden.com'; 'bstyles@baldyhughes.ca'; 'Rpetri@Parklane.com'; 'cmccurry@aqam.net'; 'jnyboer@sfu.ca'; 'bradford_griffin@sfu.ca'; 'orion.henderson@ubc.ca'; 'jeff.giffin@utilities.ubc.ca'; 'rstonge@okanagan.bc.ca'; 'Leanne.Bilodeau@ubc.ca'; s.22 ; XT:Acosta, Mauricio HLTH:IN; 'Deanna.Fourt@viha.ca';

'colin.richardson@ubc.ca'; 'maurice.bedard@kpu.ca'; 'alexandre_hebert@bcit.ca'; 'jennie.moore@bcit.ca'; 'claus@unbc.ca'; 'mikkelsen@univercity.ca'; 'wsutherl@uvic.ca'; 'patriciabaker@langara.bc.ca'; 'Jennifer_Aldcroft@yvr.ca'; 'Justin_Fox@yvr.ca'; 'Marion_Town@yvr.ca'; 'Stephen_Little@yvr.ca'; 'betty.kan@forces.gc.ca'; 'jeff.kobayashi@forces.gc.ca'; 'ddubois@communityenergy.bc.ca'; 'pbell@communityenergy.bc.ca'; 'wcleveland@reshapestrategies.com'; 'gmacdonald@reshapestrategies.com'; 'tberry@reshapestrategies.com'; 'yuill@sustainabilitysolutions.ca'; 'rlaszlo@questcanada.org'; 'farallon@telus.net'; 'kmarietta@FVBenergy.com'; 'dtrigg@fvbenergy.com'; 'dlittlejohn@communityenergy.bc.ca'; 'Probinson@communityenergy.bc.ca'; 'KarenTW@pembina.org'; 'Bea.bains@fortisbc.com'; 'Charlene.Rowan@corix.com'; 'M.McLarty@creativeenergycanada.com'; 'Edward.Olson@fortisbc.com'; 'Ryan.Dibai@fortis.com'; 'Michael.Brawley@corix.com'; 'Ivana.Safar@corix.com'; 'Travis.Kulak@corix.com'; 'S.Bernier@creativeenergycanada.com'; 'K.McConnell@creativeenergycanada.com'; 'brad.idea@districtenergy.org'; 'maryellen.richardson@rogers.com'; 'pbohan@enmax.com'; 'rhopp@evergreenbioheat.com'; 'burkhard@finkmachine.com'; 'stephen@finkmachine.com'; 'Robyn.Wark@bchydro.com'; AnandSanghera, Ashita BCUC:EX; Morton, David BCUC:EX; Smith, J. Todd BCUC:EX; Vourlis, Viki V BCUC:EX; 'ppmi@telus.net'; 'steven.mercedes@princegeorge.ca'; 'kchurch@NRCan.gc.ca'
Subject: District Energy meeting Thursday May 12, 1.30pm
Importance: High

Good afternoon District Energy Task Group members,

Please find attached two documents in preparation for Thursday afternoon's meeting.

(a) Meeting notes from April 28, 2016
(b) Agenda for May 12, 2016

For anyone who is dialing in to this Thursday's meeting, please use the Dial in #[s.15] **and Participant ID:** [s.15]

Thank you for anyone who has already provided written comments for consideration; we have had some great feedback which will all assist with the formulation of ideas and recommendations.

For those who are unable to be a part of this week's meeting, I will of course keep you updated via email. You are also welcome to send me any additional comments which may assist with the summary report.

Thanks again for all your support,

Andrea Frost | Policy Analyst

Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Natural Gas Development and Minister Responsible for Housing
Cell: 250-812-7175
Email: andrea.frost@gov.bc.ca
Check out our new website: www.gov.bc.ca/buildingcodes
cid:image001.png@01D1900

RE: Conversation with Finkelstein, Ben ENV:EX

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 8, 2020 11:24:22 AM PDT
Attachments: image001.jpg

I wasn't aware of the plan to seek the Minister's decision in December but will add that to our project plan. That's a helpful step to include. I will include the project plan in our next check-in for your review.

Would you like us to postpone the planned consultation in fall 2020 until after we have a decision from the Minister, or is the consultation intended to inform the Minister's decision? I understood the timelines in the BC Hydro agreement to be a "no later than" timeline, as opposed to a specific date we are committed to. The planned fall 2020 consultation is intended to satisfy this requirement in the agreement.

Please let me know how you would like us to proceed.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 8, 2020 10:47 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Conversation with Finkelstein, Ben ENV:EX

Yes, I was operating on the assumption that we will submit the draft strategy to the Minister by December. This is contained in the BC Hydro Contribution Agreement. The Minister will decide if we release it publicly in early 2021.

I don't see a down side of delaying that submission to the Minister by say, the end of February 2021. There would still be faint hope that the strategy could be released publicly after that, even in an election year. The Strategy will be good news for most stakeholders, including UDI/CHBA-BC who want us to take action on existing buildings, the climate action community, and consumers. It may not be received positively by the owner associations (BOMA, Landlord BC, CHOA). We need to ensure that the strategy is well received by BC Non-Profit Housing Association. They are critical to get on board and should be a validator of our strategy. I expect BOMA will also be willing to be a validator, given that they are pursuing the 2030 Resiliency District concept.

If we delay the submission to February 2021, then we should amend the BC Hydro contribution agreement to reflect that, or at least include it in a quarterly report to BCH.

It is critical that you prioritize your time on this project – it is the number one priority on your plate, even ahead of BCBC adoption of CleanBC. The reason I say this is that the DM is very engaged. We have 2 bullets in the MAH Strategic Plan that point to this project – CleanBC and assessing risk for existing buildings.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 8, 2020 10:15 AM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: RE: Conversation with Finkelstein, Ben ENV:EX

Thanks for forwarding.

Our messaging internally and to stakeholders has been focused on a public engagement for our draft framework for AEB in fall 2020 (see the snip below from the what we heard report) . Were you referring to a decision on the framework after the public engagement this fall?

Next Steps

Development of Policy Options: Spring/Summer 2020

In 2020, BSSB will develop policy options that will support a future alterations code for existing buildings.

Phase 2 Consultation: Discuss Policy Options - Fall 2020

The second phase of consultation will be used to seek input from stakeholders on policy options. The desired outcome of this phase is that stakeholders and BSSB develop a shared understanding of options, policy trade offs, and policy preferences.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 8, 2020 9:35 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Conversation with Finkelstein, Ben ENV:EX

FYI

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: Finkelstein, Ben ENV:EX <ben.finkelstein@gov.bc.ca>
Sent: April 8, 2020 9:33 AM
To: Finkelstein, Ben ENV:EX <Ben.Finkelstein@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: Conversation with Finkelstein, Ben ENV:EX

Finkelstein, Ben ENV:EX 9:31 AM:

Thanks for the call yesterday. One more thing. Retrofit code? It keeps coming up with the UBCM Special Committee on Climate Action. What is the official line on this?

Pape-Salmon, Andrew OHCS:EX 9:32 AM:

Retrofit code continues to move forward. A strategy will be submitted to the Minister in December 2020. It will go public in the new year if deemed appropriate for public consumption in an election year.

RE: Economic recovery

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 9, 2020 9:52:23 AM PDT

Sounds good. Will make progress on the BN this morning and can follow up at the mgmt. team meeting this afternoon.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 9, 2020 9:50 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Economic recovery

Sorry, this note was incorrect and I lost my edits.

I suggest you proceed with a briefing note now. The BN can focus on the short-term stuff. A Cabinet Concept paper can come later this month.

The Briefing Note will:

- Note the importance of the built environment as a component of economic recovery
- Highlight the opportunity for BSSB/MAH to provide leadership for all of government on the built environment, in concert with our partners
- Introduce the concept of linking investment stimulus with a focus on long-term resiliency and sustainability of the built environment
- Note broadly that BC has “strengths” in those sector
- Speak very broadly to the policy levers available to us and our sister Branches
- Allude to the development of a Cabinet Concept Paper (the “proposal”)

The MAH Cabinet Concept will:

- s.12
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-

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: Pape-Salmon, Andrew OHCS:EX
Sent: April 9, 2020 8:53 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Economic recovery

My comments are added. No edits.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 8, 2020 4:40 PM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: Economic recovery

Hi Andrew,

As discussed, we have considered a concept paper option, based on the feedback from the management team to the BN.

Concept Paper:
s.15

Briefing Note:
s.15

There is still some work to do to on either approach, so interested in your thoughts on which format is best and how we can refine the message into something clear and direct (the general concern from the mgmt. team in the comments and emails).

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

FW: Economic recovery

From: May, Zachary OHCS:EX
To: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Sent: April 9, 2020 10:16:15 AM PDT

Hi Jessica,

As per Andrew's feedback below, we will be making edits to the BN not the concept paper. Hopefully this is also aligned with your recommended approach and will minimize confusion. Should have an updated version to you in eapps end of today.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 9, 2020 9:50 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Economic recovery

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Executive Director, Building and Safety Standards Branch
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To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
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Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Update: please find attached the following documents for today's SC meeting:
* Agenda
* Slide deck
* Draft key strategies document
* Draft phased actions for new commercial and institutional buildings
* Draft report outline

* Link to Google docs focus group stakeholder list:
s.15

Thank you,
Michaela

Office Live Meeting client is required to join the meeting. Please contact the meeting organizer for assistance.

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-BCHydroDisclaimerID5.2.8.1541

FYI - project updates

From: May, Zachary OHCS:EX
To: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: April 15, 2020 2:09:07 PM PDT

	April 15 ADM update	**Notes and Next Steps**
Built Environment Economic Recovery Planning	• BN with PLUM for feedback • Developing project tracking document	• What's our strategy? • DAPR support for LG online services? (asked JB) • What's our plan in BSSB?
Building Energy Requirements Tool	• Prototype completed • Releasing online checklist through ESCC and ZEBEx • Coordinating the policy need, technical requirements, and financial requirements into a business case. • Next steps to coordinate with Andreas, brief Greg, brief DM (late May?)	• Develop a business case • Follow up with Andreas • Establish ADM/DM briefing dates • Establish steering committee • Establish funding partners
Alterations to Existing Buildings	• Continuing strategy development and detailed project planning • Waiting for opportunity to brief Greg and Kaye re intended scope and approach. May? • What We Heard report being finalized by GCPE - release in May • BN with Greg as FYI • Still planning for targeted engagement this summer and draft policy framework (policy options) fall 2020 • Planning to provide recommendation to Minister in December	
Clean BC committees	• ED Working Group continues to meet • CAS is moving forward with public engagement on phase 2 - no specific sectoral targets • BSSB has concerns that buildings targets are not validated against real world conditions and impact analysis is not complete • Built Environment Working Group (reports to ED working group) is unpacking policies and will be conducing more modelling this summer • Not clear what delays or changes will result from COVID • Coordinating with B. Finkelstein to support requests from UBCM Climate Action Committee - report expected in June with specific requests re building code, GHG emissions, existing buildings code, and investments in affordable housing.	
Energy Step Code Council	• Council met in February and supported need for adoption of 2022 requirements (20% improvement) prior to provincial election • Significant discussion regarding regulating GHGs and request from industry stakeholders to have ESCC lead this discussion	
Capacity Building and Communications	• Dale is focused on measuring capacity for planned 20% improvement + mandatory energy advisor for homes, including remote communities • Working with EMPR, Fortis, BC Housing, BC Hydro, BCIT to identify capacity gaps, develop solutions (training, information, etc.), and fund programs	

	• Secured 100k funding from BC Hydro to support research and training work towards 2022 Step Code implementation (Section 25 account)	
CleanBC adoption in BCBC by 2022	• Proposal to prepare a Building Code Regulation amendment for Minister's signature by December 2020 - business-as-usual • Communicate that timing of adoption is uncertain • Continue with code development and impact analysis through the summer • Ideally brief the Minister on proposals and impacts no later than September, prior to seeking Energy Step Code Council endorsement • If we move ahead in spring 2021, then all subsequent input would be through Non-Disclosure Agreements	• Scott is leading this work • Detailed project plan underway
2022 Implementation (GHG + LG BP Guide)	• Need to address GHG emissions - pressure from local governments, CAS, EMPR, industry groups (UDI, CHBA) • BSSB commissioned a report in spring 2019 to identify policy options - available on energystepcode.ca • Discussion between BSSB and Fortis BC to find a collaborative approach to (1) understand GHG emissions measurement and (2) establish targets for voluntary adoption by local governments • Pressure likely to increase in June as UBCM committee requests ability to address GHG emissions as part of Energy Step Code • Next steps to establish a committee of energy experts to make sure we have a transparent and defensible approach to measuring and addressing GHG emissions related to fuel source - Likely May 2019 Start • We have a Briefing Note on this topic that can be advanced if desired	
GBA+ Working Group	On Pause	
Public Sector Buildings Energy Step Code	• Virtual workshop completed in March • Consultant has delivered report for review • Will finalize report in May and provide recommended next steps to CAS • BSSB is no longer prioritizing this work and will expect CAS to lead	
Seismic Retrofit Guidelines	• EGBC project team is developing expanded technical guidelines for at-risk building types • NRC and NRCan financially supporting this project • BSSB technical team invited to workshop next week to unpack the methodology used for school program • NRCan is interested in additional project following this one to address additional building types • BSSB is doing internal analysis to determine how this project will inform future code requirements for alterations to existing buildings or pilot projects with communities • Project wrap-up March 2021	

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

FW: Save the Date - Upcoming Carbon Neutral Buildings Roadmap Information Gathering Session on Workforce Development!

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>

To: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, Terhune, Katie EMPR:EX <Katie.Terhune@gov.bc.ca>, Moonie, Grant EMPR:EX <Grant.Moonie@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Lang, Micah <Micah.Lang@vancouver.ca>, chris.higgins@vancouver.ca, Brady Faught <Brady.Faught@vancouver.ca>, Patrick.Enright@vancouver.ca, Wark, Robyn <Robyn.Wark@bchydro.com>, King, Katherine <katherine.king@bchydro.com>, Jeff Fisher <jfisher@udi.org>, mark@havan.ca <'mark@havan.ca'>, christian@zebx.org <'christian@zebx.org'>, Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>, Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>, Megan Lohmann <mlohmann@communityenergy.bc.ca>, 'maya chorobik <mchorobik@communityenergy.bc.ca>, Allison Ashcroft <allison@cuspnetwork.ca>, 'Caroline Jackson <cjackson@cnv.org>, Courtney Miller <cmiller@westvancouver.ca>, Deborah Herbert <Deborah.Herbert@Saanich.ca>, Emilie Adin <eadin@newwestcity.ca>, 'Erik Blair <erik.blair@metrovancouver.org>, Glen Cheetham <gcheetham@kamloops.ca>, Heap, Nicholas <NHeap@richmond.ca>, Josh Power <joshua.power@metrovancouver.org>, Larisa Lensink <llensink@cnv.org>, Luisa Jones <LUJones@abbotsford.ca>, 'Laura Benson - Maple ridge <lbenson@mapleridge.ca>, Laura Sampliner <lsampliner@portmoody.ca>, Mary De Paoli <mdepaoli@portmoody.ca>, Nikki Elliott <nelliott@crd.bc.ca>, Norm Connolly <nconnolly@richmond.ca>, Pat Bell <pbell@communityenergy.bc.ca>, Ralph Wells <ralph.wells@ubc.ca>, 'Rebecca Newlove <rebecca.newlove@saanich.ca>, Robyn Webb <rwebb@victoria.ca>, Rory Tooke <rtooke@victoria.ca>, rschmidt@tol.ca <'rschmidt@tol.ca'>, Sepehr Foroushani <SForoushani@richmond.ca>, Ted Battiston <tbattiston@whistler.ca>, Tess Rouse <trouse@tol.ca>, wyip@westvancouver.ca <'wyip@westvancouver.ca'>, Tanya Drouillard <tdrouillard@tol.ca>, Matt Greeno <mgreeno@crd.bc.ca>, Kevin Ramlu <kramlu@tol.ca>, Seabrooke, Amy <Amy.Seabrooke@bchydro.com>, Stelzer, Bertine <Bertine.Stelzer@bchydro.com>, Neuberger, Michaela <Michaela.Neuberger@bchydro.com>, Michasiw, Mariko <mmichasiw@coquitlam.ca>, Hannah Teicher - Researcher in Residence <picsbe@uvic.ca>, Anastasia Lukyanova <alukyanova@powellriver.ca>, Mark Sloat <Mark.Sloat@burnaby.ca>

Sent: April 20, 2020 1:13:03 PM PDT

Hi All,

FYI regarding another valuable sounding webinar from NYSERDA in NY.

I believe they do not record these sessions, so you would need to join live if interested.

Cheers
Max

MAXWELL SYKES, MRM, HBA | CLIMATE AND ENERGY MANAGER
CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
T 604.592.7022 | C 604.317.0422 | F 604.591.4357 www.surrey.ca

Show your leadership among large building and get insights on your energy performance by signing up for Building Benchmark BC.
Visit the City's Step Code webpage and sign-up here to stay up-to-date on Step Code in Surrey.

Upcoming Out of Office Alert: Parental leave from Jun 1 through Jan 3 2021.

From: Chawda, Pooja (NYSERDA) <Pooja.Chawda@nyserda.ny.gov>
Sent: April 20, 2020 1:07 PM
Subject: Save the Date - Upcoming Carbon Neutral Buildings Roadmap Information Gathering Session on Workforce Development!

SAVE THE DATE!

NYSERDA is hosting a webinar on May 20th from 1pm – 4:30pm on **'Exploring Workforce Development Needs and Resources for a Decarbonized Built Environment'**.

This event will stimulate in-depth discussions on workforce development and will help the Roadmap team understand and prioritize key workforce needs and solutions for decarbonizing and electrifying New York State's building stock. More information to follow in a formal invitation to be sent out in the coming weeks.

If you have any questions, please reach out to Pooja Chawda at pooja.chawda@nyserda.ny.gov or Kaitlin Moody at Kaitlin.moody@nyserda.ny.gov.

We look forward to working with you on this exciting initiative and hope you can join us for this event.

Sincerely,
NYSERDA's Carbon Neutral Buildings Team

Call from UDI

From: May, Zachary OHCS:EX
To: Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>, Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 22, 2020 1:59:10 PM PDT

Jarrett and Andrew,

I just got off the phone with Jeff from UDI. He had a few issues to raise that apply to several initiatives at BSSB.

1. **Delays in construction causing permits to lapse** - A UDI member is concerned that they have paid DCCs, been issued a building permit, but may not be able to start work within the 6 months required by the AHJ. This may trigger a new building permit review and unknown impacts on DCCs. I mentioned that it's a LG policy in this case, but also indirectly related to the language in the Minister's order for the code that talks about work starting promptly and continuing without unusual stoppages. Might be something to provide guidance on in these COVID times. Jeff will be providing a written request to BSSB on this.
2. **Wood construction and insurance** - Jeff has participated on several webinars by the insurance bureau of Canada where they link wood construction to high insurance rates. This is confusing for UDI and seems to present a possible barrier to wider adoption of wood construction, which UDI is otherwise very supportive of. This was an FYI at this point. May become more of an issue if/when embodied carbon starts to be measured or regulated.
3. **Energy Step Code and carbon** – UDI is very interested in clarity on GHG emissions and seeing this discussion managed through the Energy Step Code Council. It would be good if GHG could provide options to industry rather than being piled on top of energy efficiency (e.g. low carbon + Step 3 as an alternative to Step 4). No action required here but I mentioned we are reviewing the issue internally right now to determine what next steps are reasonable.
4. **Economic Recovery** – UDI is hoping there is a way to encourage AHJs to focus on improving the efficiency of their internal processes during COVID rather than establishing new policies that may add costs and confusion. The market is impossible to read right now and new policies further complicate the business cases for projects. Jeff will also provide this request in writing. Aligns well with the DAPR items in our recovery framework.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: [External] RE: VBBL for zero emissions heating and hotwater - report and questions about rate structure

From: Wark, Robyn <Robyn.Wark@bchydro.com>
To: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, Pander, Sean <sean.pander@vancouver.ca>
Cc: George Benson <gbenson@vancouvereconomic.com>, Tom Berkhout (tom.berkhout@integralgroup.com) <tom.berkhout@integralgroup.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 23, 2020 9:30:16 AM PDT
Attachments: image001.png

Thx Sean

I will see if there is any updated messaging on our end.

R

From: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>
Sent: 2020, April 23 8:38 AM
To: Pander, Sean <sean.pander@vancouver.ca>; Wark, Robyn <Robyn.Wark@bchydro.com>
Cc: George Benson <gbenson@vancouvereconomic.com>; Tom Berkhout (tom.berkhout@integralgroup.com) <tom.berkhout@integralgroup.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: [External] RE: VBBL for zero emissions heating and hotwater - report and questions about rate structure

Caution: This is an **external** email. Do not open attachments or click on links from unknown senders.
Thanks for the update, Sean. let me check-in on additional messaging on P2R. I'd like to hear more of this drama you speak of.

Nat Gosman | Executive Director, Built Environment
Electricity and Alternative Energy Division
BC Ministry of Energy, Mines and Petroleum Resources
O 778.698.7282 (new number)
C 250.886.1755

From: Pander, Sean <sean.pander@vancouver.ca>
Sent: April 22, 2020 6:26 PM
To: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; Robyn Wark (Robyn.Wark@bchydro.com) <Robyn.Wark@bchydro.com>
Cc: George Benson <gbenson@vancouvereconomic.com>; Tom Berkhout (tom.berkhout@integralgroup.com) <tom.berkhout@integralgroup.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: VBBL for zero emissions heating and hotwater - report and questions about rate structure

Two things FYI

Our report recommending changes to the Vancouver Building Bylaw requiring Energy Step Code 4 envelopes ("% better than" approach is not allowed though) and zero emissions heating and hot water for new Part 9 residential construction as of Jan1 2022 is on Council's agenda for next Wednesday (though not without the most drama behind the scenes I've ever had to deal with). This is a big win for Climate Emergency Response Big Move 4 (all new and replacement heating and hotwater equipment zero emissions by 2025).

https://council.vancouver.ca/20200429/documents/pspc3.pdf

HAVAN/UDI/CIPH/TECA and even Fortis are not in opposition. We may take some fire from Board of Trade as they have made it clear to our Provincial friends they are opposed to any new policies for CleanBC so suspect they might have something to say for us here.

Also to note, one outspoken builder has flagged for one of our Councilors that Hydro rate structures mean that even with the most efficient equipment that these homes can remain more expensive to operate. The **builder has urged our Councilor to have the City work with Hydro to change their rate structures.** It will likely come up on Wednesday given affordability and COVID recovery sensitivities – **anything more I might be able to say other than simply "Hydro Phase II Review includes exploration of how Hydro can support CleanBC and that rate structure has been identified as one possible area for change"?**

Just FYI at a staff level, we felt the Province's Interim Report on Hydro Phase II review lacked sufficient ambition and emphasis on this issue but we will be preparing a more formal letter that includes this soon.

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver
City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
t: 604.871.6542
sean.pander@vancouver.ca

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FW: VBBL for zero emissions heating and hotwater - report and questions about rate structure

From: May, Zachary OHCS:EX
To: Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>, Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Gill, Aman X OHCS:EX <Aman.X.Gill@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>, Roter, Lori OHCS:EX <Lori.Roter@gov.bc.ca>, Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: April 23, 2020 9:31:47 AM PDT

A couple interesting items below – further City of Vancouver adoption of Step Code (although not the metric we have pulled from the NBC, interestingly) and division between the Board of Trade and the other industry groups we deal with more regularly.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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Planning, Urban Design & Sustainability | City of Vancouver

City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4

t: 604.871.6542
sean.pander@vancouver.ca

FW: the exchange: Climate Mobilization Act Series Event Now Online!

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>

To: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, Terhune, Katie EMPR:EX <Katie.Terhune@gov.bc.ca>, Moonie, Grant EMPR:EX <Grant.Moonie@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Lang, Micah <Micah.Lang@vancouver.ca>, chris.higgins@vancouver.ca, Brady Faught <Brady.Faught@vancouver.ca>, Patrick.Enright@vancouver.ca, Wark, Robyn <Robyn.Wark@bchydro.com>, King, Katherine <katherine.king@bchydro.com>, Jeff Fisher <jfisher@udi.org>, mark@havan.ca <'mark@havan.ca'>, christian@zebx.org <'christian@zebx.org'>, Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>, Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>, Megan Lohmann <mlohmann@communityenergy.bc.ca>, 'maya chorobik <mchorobik@communityenergy.bc.ca>, Allison Ashcroft <allison@cuspnetwork.ca>, 'Caroline Jackson <cjackson@cnv.org>, Courtney Miller <cmiller@westvancouver.ca>, Deborah Herbert <Deborah.Herbert@Saanich.ca>, Emilie Adin <eadin@newwestcity.ca>, 'Erik Blair <erik.blair@metrovancouver.org>, Glen Cheetham <gcheetham@kamloops.ca>, Heap, Nicholas <NHeap@richmond.ca>, Josh Power <joshua.power@metrovancouver.org>, Larisa Lensink <llensink@cnv.org>, Luisa Jones <LUJones@abbotsford.ca>, 'Laura Benson - Maple ridge <lbenson@mapleridge.ca>, Laura Sampliner <lsampliner@portmoody.ca>, Mary De Paoli <mdepaoli@portmoody.ca>, Nikki Elliott <nelliott@crd.bc.ca>, Norm Connolly <nconnolly@richmond.ca>, Pat Bell <pbell@communityenergy.bc.ca>, Ralph Wells <ralph.wells@ubc.ca>, 'Rebecca Newlove <rebecca.newlove@saanich.ca>, Robyn Webb <rwebb@victoria.ca>, Rory Tooke <rtooke@victoria.ca>, rschmidt@tol.ca <'rschmidt@tol.ca'>, Sepehr Foroushani <SForoushani@richmond.ca>, Ted Battiston <tbattiston@whistler.ca>, Tess Rouse <trouse@tol.ca>, wyip@westvancouver.ca <'wyip@westvancouver.ca'>, Tanya Drouillard <tdrouillard@tol.ca>, Matt Greeno <mgreeno@crd.bc.ca>, Kevin Ramlu <kramlu@tol.ca>, Seabrooke, Amy <Amy.Seabrooke@bchydro.com>, Stelzer, Bertine <Bertine.Stelzer@bchydro.com>, Michaela Neuberger <michaela@zebx.org>, Michasiw, Mariko <mmichasiw@coquitlam.ca>, Hannah Teicher - Researcher in Residence <picsbe@uvic.ca>, Anastasia Lukyanova <alukyanova@powellriver.ca>, Mark Sloat <Mark.Sloat@burnaby.ca>

Sent: April 23, 2020 10:32:52 AM PDT

Hi all,

Another valuable looking event out of NYC. Early morning for the west coast.

Please let me know if receiving these is more nuisance than benefit and I'll keep you off future emails.

Climate Mobilization Act Series: Staircase to Electrification [ONLINE]

Wednesday April 29, 2020 – 9 to 10:30am

Join NRDC and BE-Ex for the latest installment in our Climate Mobilization Act Series: Staircase to Electrification—a live online event.

Like all sectors of the economy, the building sector must move toward replacing fossil fuels with electricity. There are solutions available to achieve this, but the process and timing of these changes will vary dramatically across different building typologies. What are the primary challenges faced by the major typologies of New York City buildings? Where should each begin this process, and what technologies will help the sector achieve these steps? What is the likely role of on-site generation and energy storage? These questions and more will be addressed by our highly esteemed panel of speakers.

read more

Cheers,
Max

MAXWELL SYKES, MRM, HBA | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
T 604.592.7022 | C 604.317.0422 | F 604.591.4357 www.surrey.ca

Show your leadership among large building and get insights on your energy performance by signing up for Building Benchmark BC.
Visit the City's Step Code webpage and sign-up here to stay up-to-date on Step Code in Surrey.

Upcoming Out of Office Alert: Parental leave from Jun 1 through Jan 3 2021.

From: Building Energy Exchange <info@be-exchange.org>
Sent: April 23, 2020 9:00 AM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Subject: the exchange: Climate Mobilization Act Series Event Now Online!

April 23, 2020

Climate Mobilization Act Series: Staircase to Electrification [ONLINE]

Wednesday April 29, 2020 – 9 to 10:30am

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Page 204 of 241

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Energy Step Code Council - Proposed COVID-19 Teleconference - Doodle Poll for May 4, 5, or 6

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>

To: msohi@boabc.org, catherine.ernst@boabc.org, sean.pander@vancouver.ca, NConnolly@richmond.ca, Maxwell.Sykes@surrey.ca, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, jjung@asttbc.org, MGatensby@aibc.ca, warrenp@bccassn.com, muneesh@boma.bc.ca, bdeeks@rdcfinehomes.com, joe.iconhomes@shaw.ca, kelly@hkrbuilders.com, hradhakrishnan@egbc.ca, mark@havan.ca, Todd.cumiskey@icba.ca, jfisher@udi.org, christian@zebx.org, Guido.Wimmers@unbc.ca, robyn.wark@bchydro.com, bea.bains@fortisbc.com, wileung@bchousing.org, Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, toby.lau@bchydro.com, nconnolly@newwestcity.ca, nheap@richmond.ca, vanessa@chbabc.org, mmcwilliam3@bcit.ca, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, mchorobik@communityenergy.bc.ca, Lisa.Mak@bchydro.com, patrick.enright@vancouver.ca, SHorsburgh@rdn.bc.ca, ralph.wells@ubc.ca, hgoodland@brantwoodreci.com, rthe@wesgroup.ca, gary.hamer@bchydro.com, christopher.mclellan@canada.ca, Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>

Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

Sent: April 27, 2020 11:44:40 AM PDT

Dear Energy Step Code Council members and alternates,

We hope you are safe during these unprecedented times.

We would like to propose a teleconference with you next week. The agenda is still being prepared, but we would like to gather as a community to start identifying the **issues that are emerging as a result of COVID-19** and **what we should be working to address**.

Would you please indicate your availability for a 1.5 hour teleconference the mornings of May 4, 5 and 6 at the following Doodle Poll:

https://doodle.com/poll/fm97v5t65ck3aeic

We hope to confirm the date later this week. Please reach out to me or Hugo Wong if you have questions.

Thank you,
Dale

DALE ANDERSSON | Building and Safety Standards Branch

Email: Dale.Andersson@gov.bc.ca

UDI webinar: green building regulatory update

From:	Michaela Neuberger <michaela@zebx.org>
To:	Pander, Sean (sean.pander@vancouver.ca) <sean.pander@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Norm Connolly <NConnolly@richmond.ca>
Cc:	Bertine Stelzer <bertine.stelzer@bchydro.com>, Christian Cianfrone <christian@zebx.org>
Sent:	May 5, 2020 12:58:03 PM PDT
Attachments:	UDI Webinar_GB Regulatory Update_Draft.docx

Dear Sean, Zac and Norm,

UDI has moved their breakfast seminar online. They would like to host a **green building regulatory update webinar** for their members. They have asked ZEBx to moderate the session. BC Hydro's New Construction program is providing educational support for the event.

We wanted to ask whether you would be interested and available to be **panelists for the session**. Please see attached a draft outline with suggested topics which are also summarised below. UDI and ZEBx would, of course, work with you to coordinate and finalise the content.

- **City of Vancouver**: Climate Emergency Response, zero emission space & water heating, green building regulatory update
- **Province**: Energy Step Code & Alterations to Existing Building Code update
- **City of Richmond**: Energy Step Code implementation example (including development & permitting, airtightness testing)

Possible dates:
May 26, 27, or 28
June 8 - 12 and 15 - 19

Time: 9:30 am - 10:30/45 am

Please let me know if you are interested to participate and if so, which date(s) would work for you. I would be happy to receive any feedback regarding the content or answer any questions you might have.

Thank you,
Michaela
--

Michaela Neuberger | Director of Operations
Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

UDI Breakfast Webinar: Green Building Regulatory Update

Possible dates: May 26, 27, or 28 I June 8 - 12 and 15 – 19, 2020

Time: 9:30 – 10:30/45 am

Event duration: 60 – 75 minutes

Moderator: Christian Cianfrone, ZEBx

Educational support: BC Hydro, New Construction Program

Suggested Panel (5 – 7 minutes presentation time):
- City of Vancouver: Sean Pander, Green Building Manager
- Province: Zachary May, Director of Strategic Policy, BSSB
- Lower Mainland municipality: Norm Connolly, City of Richmond

Content:

BC Hydro (2 minutes)
- Why is BC Hydro supporting this session?
- Outline resources, incentives available to support developers achieve high performance new construction (and potentially existing buildings)

ZEBx Introduction (5 minutes)
- What is ZEBx?
- ZEBx & UDI collaboration (GDS)
- ZEBx programming and offers to support developers (Design Charrettes, Pattern Language course, NZER workshops, Decarb Lunch series)
- Introduction to today's session & speakers

CoV Regulatory Update
- Climate Emergency Response: Big Move 4 for zero emissions space and water heating new and existing buildings

- Climate Emergency Requirements for New Housing 3-Storeys and Under (Council approved on April 29, 2020):

    - VBBL has been amended requiring all residential space or water heating systems to be zero-GHG-emitting, effective January 2022.
    - A 2 tonne carbon pollution cap has been introduced for new single family and duplex dwellings 325m2+ to lower emissions form the largest new homes, effective January 2021.

- Other Updates

BC Energy Step Code Regulatory Update

- Number of BC municipalities adopted ESC vs have started consultation on ESC: focus on adoption in the Lower Mainland; (This resource would be good way to summarize information but needs to be updated; two examples to mention are the recent Step 5 adoption by West Vancouver and that Prince George started consultation on implementation in February 2020.)
- Overview for which building types ESC metrics have been developed & adopted and which are still outstanding (e.g. public buildings; hospitals)
- Overview of LGs who have approved a lower step for Part 3 buildings with a Low Carbon District Energy System connection
- Resources available: Summary slide with guides available on ESC website, focus on large building resources such as the Guide to Low Thermal Energy Demand for Large Buildings
- LG Development / Building Permit processes: What are the major changes for developers in their touch points with LGs? Provide example of one municipality and highlight commonalities in processes / documents for Part 3 buildings that need to be provided, such as energy modeling results, airtightness testing etc
- Airtightness Testing: BC Energy Step Code requirements for airtightness testing for Part 3 buildings: outline requirements & procedure on a high-level
- Other Updates?

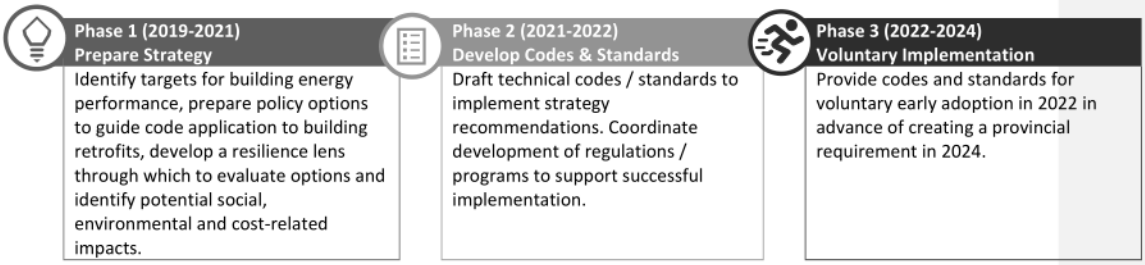
BC Alterations to Existing Building Code

- Development of an Alterations to Existing Building Code (AEB Code) policy framework has started in 2019.
- Project Goal: To provide clear requirements for existing buildings that will enable GHG reductions and increase life safety and resilience for British Columbians.
- Stakeholder feedback: started in 2019 and will continue through the fall of 2020.
- AEB Code to consider seismic and climate risks.
- It is anticipated that the AEB Code will be implemented in 2024.

Commented [MN1]: Is the CoV ready to talk about existing buildings yet? Even just announcing that they are preparing a retrofit strategy to go to Council in the fall of 2020?

Commented [MN2]: UDI has asked whether an update on the AEB Code is possible to include. Discuss whether the Province and CoV feel comfortable talking about this subject.

Project Timeline



RE: delays in work and the BC Building Code

From: May, Zachary OHCS:EX
To: Jeff Fisher <jfisher@udi.org>
Cc: Anne McMullin <AMcMullin@udi.org>, Marissa Chan-Kent <mchan-kent@udi.org>, Cassandra McColman <cmccolman@udi.org>, Andrea Nicholls <anicholls@udi.org>, Richard Demkiw <rdemkiw@UrbDevIns.onmicrosoft.com>
Sent: May 5, 2020 3:51:59 PM PDT
Attachments: image001.png

Thank you very much for the message, Jeff.

I will review the materials with our team here at the Building and Safety Standards Branch and provide a response to your requests and comments.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: May 5, 2020 3:36 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Anne McMullin <AMcMullin@udi.org>; Marissa Chan-Kent <mchan-kent@udi.org>; Cassandra McColman <cmccolman@udi.org>; Andrea Nicholls <anicholls@udi.org>; Richard Demkiw <rdemkiw@UrbDevIns.onmicrosoft.com>
Subject: RE: delays in work and the BC Building Code

Zachary, thanks for the information regarding delays in work and the *BC Building Code* (*BCBC*) which informs local governments that there are limits to how long Building Permits can last if delays occur in construction. There is a concern that several local governments have established time limits due to this provincial regulation. As I said in our phone call on April 23, the Province may need to extend these time periods during the COVID-19 pandemic. Would the Province's emergency powers allow you to extend the time limits on municipal Building Permits? The *BCBC* measure was put in place to ensure new buildings comply with the latest version of it. However, it does not appear that there will be another update for a while.

As I said during our call, I also think we need to start looking at how current regulations can be met at lower costs and faster approval times as opposed to creating new requirements. I am attaching a recent letter we wrote to the Hon. Michelle Mungall, Minister of Jobs, Economic Development and Competitiveness, in which we ask the Province (and local governments) to suspend any new requirements and improve processing times while we are facing the COVID-19 pandemic and the economic repercussions from it. In terms of the *BC Energy Step Code*, if we make changes to it related to greenhouse gas emissions, it needs to done in a way that reduces – not increases - costs to new projects.

In terms of your question about our COVID-19 survey, please see attached the results from it. It was done in early April, but we will be conducting another one later this month. Are there any specific questions, you would like us to add? Also, we have built a municipal matrix on our website. It includes details about how local governments are changing development review processes during the emergency period. We contact local governments on an ongoing basis to update it.

Finally, I would also like reiterate my concern regarding UDI'S discussions with the Insurance Bureau of Canada (IBC) about wood-frame and tall timber construction. They clearly indicated to us in several seminars that the insurance industry has substantial concerns with these types of construction. Increasing wood and CLT in new projects is a key issue for the Province, as it reduces embodied carbon in new construction and assists with economic development of forestry dependant communities across the Province. Vancouver is moving forward with embodied carbon regulations and I believe the Province is considering something similar under the *CleanBC Plan*. I think we need to involve the IBC in any future discussions about embodied carbon and tall wood-frame/CLT construction incentives or requirements.

Jeff Fisher, M.PL., CAE, MCIP, RPP

Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 22, 2020 1:11 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: delays in work and the BC Building Code

British Columbia Building Code established

1 The British Columbia Building Code is established by adopting,

(a) as Book I (General), Divisions A to C of the National Building Code of Canada 2015, a June 1, 2018, with the changes considered necessary and incorporated in it in the attache 1, and

(b) as Book II (Plumbing Systems), Divisions A to C of the National Plumbing Code of Cana it was on June 1, 2018, with the changes considered necessary and incorporated in it in Schedule 2.

Application of British Columbia Building Code

2 The British Columbia Building Code established by section 1 applies except insofar as B.C. Reg applies under section 3.

Application of B.C. Reg. 264/2012

3 (1) In this section, "building permit" means a building permit issued

(a) by a "local authority" as defined in the *Building Act*, or

(b) under the *University Endowment Land Act*.

(2) B.C. Reg. 264/2012, the British Columbia Building Code Regulation, applies only to the con alteration of a building as follows

(a) if a building permit is required,

(i) the building permit is applied for before the effective date of this order, and

(ii) the building permit applied for is issued and work commences and continues to completion without interruption, other than work stoppages considered reasonable building industry, or

(b) if no building permit is required, the construction or alteration of the building has started as of the effective date of this order and work continues to completion without other than work stoppages considered reasonable in the building industry.

(3) All work referred to in subsections 2(a) and (b) must be carried out in conformity with B.C. Reg

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Energy Step Code Council mtg, COVID-19

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bdeeks@rdcfinehomes.com <'bdeeks@rdcfinehomes.com'>, bea.bains@fortisbc.com <'bea.bains@fortisbc.com'>, catherine.ernst@boabc.org <'catherine.ernst@boabc.org'>, christian@zebx.org <'christian@zebx.org'>, christine.gillis@canada.ca <'christine.gillis@canada.ca'>, christopher.frye@canada.ca <'christopher.frye@canada.ca'>, christopher.mclellan@canada.ca <'christopher.mclellan@canada.ca'>, gary.hamer@bchydro.com <'gary.hamer@bchydro.com'>, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, Guido.Wimmers@unbc.ca <'Guido.Wimmers@unbc.ca'>, hradhakrishnan@egbc.ca <'hradhakrishnan@egbc.ca'>, J.Madden@ubc.ca <'J.Madden@ubc.ca'>, jfisher@udi.org <'jfisher@udi.org'>, jjung@asttbc.org <'jjung@asttbc.org'>, joe.iconhomes@shaw.ca <'joe.iconhomes@shaw.ca'>, kelly@hkrbuilders.com <'kelly@hkrbuilders.com'>, Lisa.Mak@bchydro.com <'Lisa.Mak@bchydro.com'>, mark@havan.ca <'mark@havan.ca'>, Maxwell.Sykes@surrey.ca <'Maxwell.Sykes@surrey.ca'>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, mchorobik@communityenergy.bc.ca <'mchorobik@communityenergy.bc.ca'>, MGatensby@aibc.ca <'MGatensby@aibc.ca'>, mlohmann@communityenergy.bc.ca <'mlohmann@communityenergy.bc.ca'>, mmcwilliam3@bcit.ca <'mmcwilliam3@bcit.ca'>, msohi@boabc.org <'msohi@boabc.org'>, muneesh@boma.bc.ca <'muneesh@boma.bc.ca'>, NConnolly@richmond.ca <'NConnolly@richmond.ca'>, nheap@richmond.ca <'nheap@richmond.ca'>, patrick.enright@vancouver.ca <'patrick.enright@vancouver.ca'>, robyn.wark@bchydro.com <'robyn.wark@bchydro.com'>, sean.pander@vancouver.ca <'sean.pander@vancouver.ca'>, SHorsburgh@rdn.bc.ca <'SHorsburgh@rdn.bc.ca'>, toby.lau@bchydro.com <'toby.lau@bchydro.com'>, Todd.cumiskey@icba.ca <'Todd.cumiskey@icba.ca'>, vanessa@chbabc.org <'vanessa@chbabc.org'>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>, warrenp@bccassn.com <'warrenp@bccassn.com'>, wileung@bchousing.org <'wileung@bchousing.org'>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>, Dean, Jeff OHCS:EX <Jeff.Dean@gov.bc.ca>

Cc: Maura Gatensby <MGatensby@aibc.ca>, Wark, Robyn <Robyn.Wark@bchydro.com>, Mark Sakai <mark@havan.ca>, Pander, Sean <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Connolly,Norm <NConnolly@richmond.ca>, Lau, Toby <Toby.Lau@bchydro.com>, Wilma Leung <wileung@bchousing.org>, Muneesh Sharma <muneesh@boma.bc.ca>, Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>, Bains, Bea <Bea.Bains@fortisbc.com>, Catherine Ernst <catherine.ernst@boabc.org>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, christian@zebx.org, Stelzer, Bertine <Bertine.Stelzer@bchydro.com>, Joe Hart <joe.iconhomes@shaw.ca>, vanessa@chbabc.org, pauline@chbabc.org, s.22 Bob Deeks <bdeeks@rdcfinehomes.com>, Maya Chorobik <mchorobik@communityenergy.bc.ca>, Madden, John (C+CP) <j.madden@ubc.ca>, Heap,Nicholas <NHeap@richmond.ca>, Hamer, Gary <Gary.Hamer@bchydro.com>, Enright, Patrick <Patrick.Enright@vancouver.ca>, Warren Perks <warrenp@bccassn.com>, Mary McWilliam <mmcwilliam3@bcit.ca>

Sent: May 5, 2020 3:54:40 PM PDT

Attachments: ESCC-Agenda-2020-05-06 v2.docx

Hello, everyone,

Attached is the agenda for tomorrow's special Energy Step Code Council meeting regarding COVID-19. The agenda contains discussion questions that we hope to address.

I will also update the calendar invitation to include the same agenda.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards

Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting

Meeting Package

Date and Time of Meeting
May 6, 2020 | Time: 9:45 a.m. to 11:15 p.m. Pacific Time

Venue
Skype teleconference

Teleconference Line
s.15

Chair
Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing

Co-Vice Chairs
Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Meeting Materials

- Agenda

Contacts if You Require Assistance

- Hugo Wong, BSSB – 250 880 6418 (call or text)
- Dale Andersson, BSSB – 778-679-9653 (call or text)

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Agenda

Time	Topic	Speaker(s)	Purpose(s)
09:45	Welcome and Introductions	Zachary May, ESCC Chair	▪ Welcome participants ▪ Approval of Agenda
09:50	Roundtable: COVID-19 impacts on the construction sector	Zachary May, ESCC Chair	▪ To provide feedback on how the current COVID-19 pandemic has affected your sector ▪ See discussion questions
11:00	Adjournment		

Discussion questions

1. Check in: How has the COVID-19 pandemic affected you and your members?
2. Are your members/employees healthy? Are current measures successful in preventing the spread of COVID-19 in the sector? Do you have best practices to share?
3. Do you notice specific, short and long-term changes to your business or the sector due to COVID-19?
4. Does your organization have information or data that would help the Province understand the impact of COVID-19 on the market in the short and long term?
5. Is there information or data that should be gathered to support a successful recovery?
6. Are there issues that need to be addressed to enable work to proceed safely and efficiently now, and in the long term?
7. Are there positive impacts and changes you have noticed that the ESCC or the Province should support and encourage?
8. How can the ESCC support industry in achieving CleanBC goals as the economy ramps back up?

Hello, everyone:

We look forward to this special, 1.5 hour teleconference on COVID-19. We'll have an agenda to send early next week, but we expect to discuss:

* Current COVID-19-related issues for the sector
* How construction will fit into B.C.'s economic recovery
* What the ESCC should address
* Next steps

This meeting is outside of our normal meeting cycle. We expect to have another meeting, about normal ESCC business, in mid to late June.

Best,
Hugo

.....
s.15

.....

FW: delays in work and the BC Building Code

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: Steves, Gregory OHCS:EX <Gregory.Steves@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 5, 2020 5:22:16 PM PDT
Attachments: UDI Letter - Building Sector's Role in Economic Recovery Post-COVID-19 .pdf, COVID-19 Impacts Survey Summary_April 2020.docx, image001.png

Greg, FYI – from UDI. Lots of topic areas.

Would you like to sign the response, or are you OK with my signature? Or DM signature?

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 5, 2020 3:55 PM
To: OHCS Building & Safety Standards Branch OHCS:EX <Building.Safety@gov.bc.ca>
Cc: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>; Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: FW: delays in work and the BC Building Code

Hi Anna,

Can you add this to eapps and assign to me?

I responded to Jeff to let him know that we would review this info and provide a response. Many areas to cover here including building permits, economic recovery, wood, and Energy Step Code.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: May 5, 2020 3:36 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Anne McMullin <AMcMullin@udi.org>; Marissa Chan-Kent <mchan-kent@udi.org>; Cassandra McColman <cmccolman@udi.org>; Andrea Nicholls <anicholls@udi.org>; Richard Demkiw <rdemkiw@UrbDevIns.onmicrosoft.com>
Subject: RE: delays in work and the BC Building Code

Zachary, thanks for the information regarding delays in work and the *BC Building Code* (*BCBC*) which informs local governments that there are limits to how long Building Permits can last if delays occur in construction. There is a concern that several local governments have established time limits due to this provincial regulation. As I said in our phone call on April 23, the Province may need to extend these time periods during the COVID-19 pandemic. Would the Province's emergency powers allow you to extend the time limits on municipal Building Permits? The *BCBC* measure was put in place to ensure new buildings comply with the latest version of it. However, it does not appear that there will be another update for a while.

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pandemic and the economic repercussions from it. In terms of the *BC Energy Step Code*, if we make changes to it related to greenhouse gas emissions, it needs to done in a way that reduces – not increases - costs to new projects.

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Jeff Fisher, M.PL., CAE, MCIP, RPP
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Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 22, 2020 1:11 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: delays in work and the BC Building Code

British Columbia Building Code established

1 The British Columbia Building Code is established by adopting,

(a) as Book I (General), Divisions A to C of the National Building Code of Canada 2015, a June 1, 2018, with the changes considered necessary and incorporated in it in the attache 1, and

(b) as Book II (Plumbing Systems), Divisions A to C of the National Plumbing Code of Cana it was on June 1, 2018, with the changes considered necessary and incorporated in it in Schedule 2.

Application of British Columbia Building Code

2 The British Columbia Building Code established by section 1 applies except insofar as B.C. Reg applies under section 3.

Application of B.C. Reg. 264/2012

3 (1) In this section, "building permit" means a building permit issued

(a) by a "local authority" as defined in the *Building Act*, or

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(b) if no building permit is required, the construction or alteration of the building has started as of the effective date of this order and work continues to completion without other than work stoppages considered reasonable in the building industry.

(3) All work referred to in subsections 2(a) and (b) must be carried out in conformity with B.C. Reg

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: delays in work and the BC Building Code

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 6, 2020 9:44:26 AM PDT
Attachments: image001.png

One additional idea – we invite UDI and CHBA-BC to participate in the costing study. They contribute $10k each and be on the project oversight committee. And this time, we don't include the utilities, as they will be focus on their own fuel/programmatic interests.

I could participate in this project given my skillset, along with Jeff Dean.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: Pape-Salmon, Andrew OHCS:EX
Sent: May 6, 2020 9:38 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: delays in work and the BC Building Code

Thanks Zac,

I think we can characterize the Clean BC adoption as cost reducing within those municipalities that currently reference the Step Code. It creates consistency which increases certainty. We can "upload" responsibility for leadership on energy efficiency and decarbonization to the Province, but also allow leading municipalities to continue to reference higher standards (such as North Van).

I want to make sure that we don't advance cost reduction at the expense of consumer affordability. Thus, we need to stick with our message of "efficient electrification" or "efficient RNG" which allows for affordability.

For discussion, I think we need to commission a costing study again to convince groups like UDI. This time, the costing could include administrative costs of compliance – dealing with building permits, etc. I suggest a simple before and after study for pre- and post- BCBC 2022. I suggest 2 tables like the one below, (1) for 12-storey MURB (concrete or wood) (focus on UDI audience) and (2) for 6- or 10-unit townhouses (focus on CHBA-BC audience)

Description	**2018 BCBC Costs**	**2017 ESC Costs (for munis referencing)**	**2022 BCBC Costs**
Capital Costs (excluding professional fees)	NECB/ASHRAE	Step 3 MURB	Cite the least capital cost scenario
Professional fees	Professional reliance costs	Illustrate the variable professional costs, depending on jurisdiction	Lower costs via BERT
NPV for capital and operating costs	Reflect fuel mix that is common (needs professional input)	Reflect fuel mix that is common in (needs professional input)	Cite the highest NPV scenario (more affordable than ESC)
Administrative/permitting costs	TBC	Variable administrative costs of complying with ESC	Consistent approach through BERT/DAPR
Additional internal costs associated with regulatory compliance		Mandatory ESC training	Better alignment of training with code
Energy supply / Carbon related costs	Mandatory district energy	Variable references to ESC for different fuels.	Could we move district energy back into the Building Act restriction,

		Mandatory district energy.	freeing developers of this cost?
Marketing / realtor costs	Limited to none	Consumer confusion and higher costs of marketing	Improved consistency

Some early thinking for us to discuss at our next bilateral.

Cheers,

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 5, 2020 3:55 PM
To: OHCS Building & Safety Standards Branch OHCS:EX <Building.Safety@gov.bc.ca>
Cc: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>; Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>
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Energy Step Code Council mtg, COVID-19

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bdeeks@rdcfinehomes.com <'bdeeks@rdcfinehomes.com'>, bea.bains@fortisbc.com <'bea.bains@fortisbc.com'>, catherine.ernst@boabc.org <'catherine.ernst@boabc.org'>, christian@zebx.org <'christian@zebx.org'>, christine.gillis@canada.ca <'christine.gillis@canada.ca'>, christopher.frye@canada.ca <'christopher.frye@canada.ca'>, christopher.mclellan@canada.ca <'christopher.mclellan@canada.ca'>, gary.hamer@bchydro.com <'gary.hamer@bchydro.com'>, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, Guido.Wimmers@unbc.ca <'Guido.Wimmers@unbc.ca'>, hradhakrishnan@egbc.ca <'hradhakrishnan@egbc.ca'>, J.Madden@ubc.ca <'J.Madden@ubc.ca'>, jfisher@udi.org <'jfisher@udi.org'>, jjung@asttbc.org <'jjung@asttbc.org'>, joe.iconhomes@shaw.ca <'joe.iconhomes@shaw.ca'>, kelly@hkrbuilders.com <'kelly@hkrbuilders.com'>, Lisa.Mak@bchydro.com <'Lisa.Mak@bchydro.com'>, mark@havan.ca <'mark@havan.ca'>, Maxwell.Sykes@surrey.ca <'Maxwell.Sykes@surrey.ca'>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, mchorobik@communityenergy.bc.ca <'mchorobik@communityenergy.bc.ca'>, MGatensby@aibc.ca <'MGatensby@aibc.ca'>, mlohmann@communityenergy.bc.ca <'mlohmann@communityenergy.bc.ca'>, mmcwilliam3@bcit.ca <'mmcwilliam3@bcit.ca'>, msohi@boabc.org <'msohi@boabc.org'>, muneesh@boma.bc.ca <'muneesh@boma.bc.ca'>, NConnolly@richmond.ca <'NConnolly@richmond.ca'>, nheap@richmond.ca <'nheap@richmond.ca'>, patrick.enright@vancouver.ca <'patrick.enright@vancouver.ca'>, robyn.wark@bchydro.com <'robyn.wark@bchydro.com'>, sean.pander@vancouver.ca <'sean.pander@vancouver.ca'>, SHorsburgh@rdn.bc.ca <'SHorsburgh@rdn.bc.ca'>, toby.lau@bchydro.com <'toby.lau@bchydro.com'>, Todd.cumiskey@icba.ca <'Todd.cumiskey@icba.ca'>, vanessa@chbabc.org <'vanessa@chbabc.org'>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>, warrenp@bccassn.com <'warrenp@bccassn.com'>, wileung@bchousing.org <'wileung@bchousing.org'>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>, Dean, Jeff OHCS:EX <Jeff.Dean@gov.bc.ca>

Cc: Maura Gatensby <MGatensby@aibc.ca>, Wark, Robyn <Robyn.Wark@bchydro.com>, Mark Sakai <mark@havan.ca>, Pander, Sean <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Connolly,Norm <NConnolly@richmond.ca>, Lau, Toby <Toby.Lau@bchydro.com>, Wilma Leung <wileung@bchousing.org>, Muneesh Sharma <muneesh@boma.bc.ca>, Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>, Bains, Bea <Bea.Bains@fortisbc.com>, Catherine Ernst <catherine.ernst@boabc.org>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, christian@zebx.org, Stelzer, Bertine <Bertine.Stelzer@bchydro.com>, Joe Hart <joe.iconhomes@shaw.ca>, vanessa@chbabc.org, pauline@chbabc.org,[s.22] Bob Deeks <bdeeks@rdcfinehomes.com>, Maya Chorobik <mchorobik@communityenergy.bc.ca>, Madden, John (C+CP) <j.madden@ubc.ca>, Heap,Nicholas <NHeap@richmond.ca>, Hamer, Gary <Gary.Hamer@bchydro.com>, Enright, Patrick <Patrick.Enright@vancouver.ca>, Warren Perks <warrenp@bccassn.com>, Mary McWilliam <mmcwilliam3@bcit.ca>, Todd Cumiskey <todd.cumiskey@icba.ca>

Sent: May 6, 2020 9:51:25 AM PDT

Attachments: COVID Roundtable - 2020-05-06.pptx

Hi all,

Here's the PowerPoint being shared during the current Energy Step Code meeting.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY STEPCODE

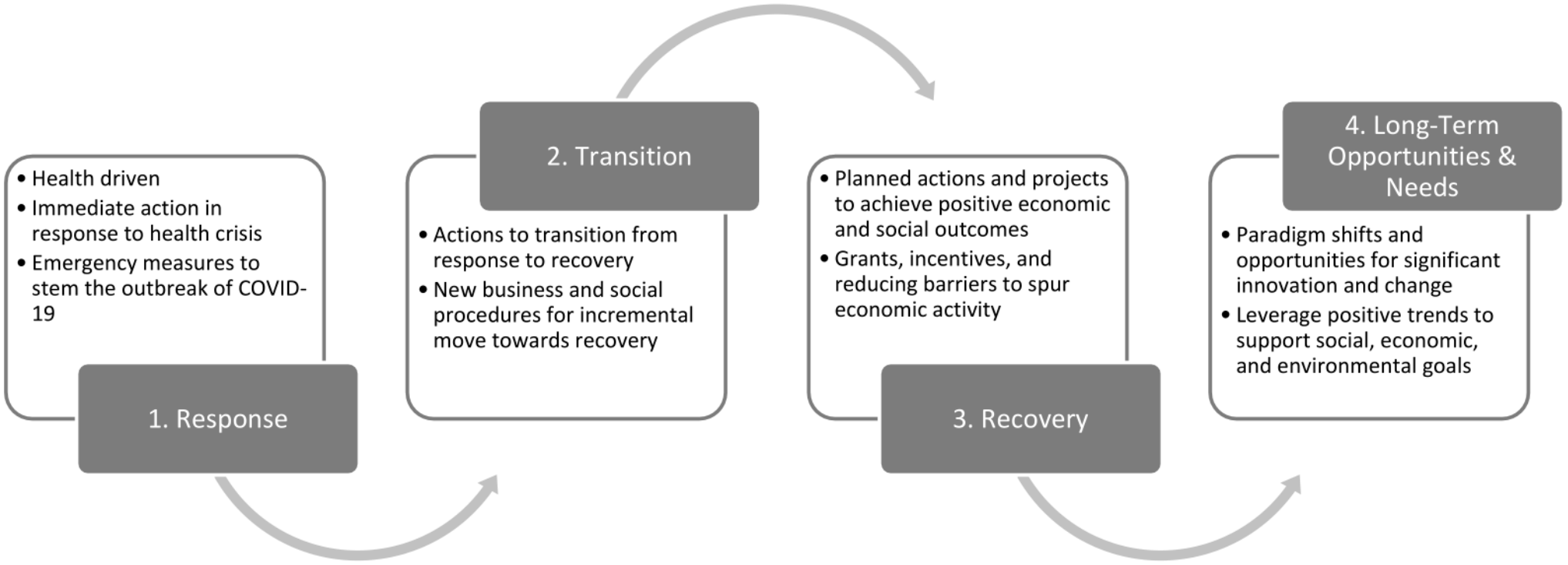
BUILDING BEYOND THE STANDARD



May 6, 2020

COVID-19 Roundtable Discussion

COVID-19


1. Response
• Health driven
• Immediate action in response to health crisis
• Emergency measures to stem the outbreak of COVID-19
2. Transition
• Actions to transition from response to recovery
• New business and social procedures for incremental move towards recovery
3. Recovery
• Planned actions and projects to achieve positive economic and social outcomes
• Grants, incentives, and reducing barriers to spur economic activity
4. Long-Term Opportunities & Needs
• Paradigm shifts and opportunities for significant innovation and change
• Leverage positive trends to support social, economic, and environmental goals

COVID-19

Provincial Transition and Recovery Planning – Premier's Task Force

Ministry – Leverage existing networks and relationships to understand the needs and opportunities for transition, recovery and long term transformation

Energy Step Code Council – build consensus on successful implementation of the Energy Step Code and addressing the related impacts of COVID-19

Discussion

Check-in
How has the COVID-19 pandemic affected you and your members?

Are your members/employees healthy?

Are current measures successful in preventing the spread of COVID-19 in the sector?

Do you have best practices to share?

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Discussion

Sharing information and planning for the short and long term

Are there issues that need to be addressed to enable work to proceed safely and efficiently now, and in the long term?

Are there positive impacts and changes you have noticed that the ESCC or the Province should support and encourage?

How can the ESCC support industry in achieving CleanBC goals as the economy ramps back up?

Discussion

Sharing information and planning for the short and long term

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FW: Energy Step Code Council mtg, COVID-19

From: Jeff Fisher <jfisher@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 6, 2020 10:13:56 AM PDT

Here is the website I mentioned on the call

Jeff Fisher, M.PL., CAE, MCIP, RPP
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Vancouver, BC V6E 3S7 Canada
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Cell 604 340-8019 |E-mail jfisher@udi.org
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From: Cassandra McColman <cmccolman@udi.org>
Sent: May 5, 2020 4:41 PM
To: Jeff Fisher <jfisher@udi.org>; Marissa Chan-Kent <mchan-kent@udi.org>
Subject: RE: Energy Step Code Council mtg, COVID-19

Construction best practices:

https://udi.bc.ca/wp-content/uploads/2020/03/Covid19-sitesafety-1.pdf

---

From: Jeff Fisher <jfisher@udi.org>
Sent: May 5, 2020 4:27 PM
To: Marissa Chan-Kent <mchan-kent@udi.org>; Cassandra McColman <cmccolman@udi.org>
Subject: Fwd: Energy Step Code Council mtg, COVID-19

Jeff Fisher, M.PL., CAE, MCIP, RPP
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Urban Development Institute

Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web udi.bc.ca

Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada

Sent from iPhone

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Tuesday, May 5, 2020 3:54:40 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'bdeeks@rdcfinehomes.com' <'bdeeks@rdcfinehomes.com'>; 'bea.bains@fortisbc.com' <'bea.bains@fortisbc.com'>; 'catherine.ernst@boabc.org' <'catherine.ernst@boabc.org'>; 'christian@zebx.org' <'christian@zebx.org'>; 'christine.gillis@canada.ca' <'christine.gillis@canada.ca'>; 'christopher.frye@canada.ca' <'christopher.frye@canada.ca'>; 'christopher.mclellan@canada.ca' <'christopher.mclellan@canada.ca'>; 'gary.hamer@bchydro.com' <'gary.hamer@bchydro.com'>; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; 'Guido.Wimmers@unbc.ca' <'Guido.Wimmers@unbc.ca'>; 'hradhakrishnan@egbc.ca' <'hradhakrishnan@egbc.ca'>; 'J.Madden@ubc.ca' <'J.Madden@ubc.ca'>; 'jfisher@udi.org' <'jfisher@udi.org'>; 'jjung@asttbc.org' <'jjung@asttbc.org'>;

'joe.iconhomes@shaw.ca' <'joe.iconhomes@shaw.ca'>; 'kelly@hkrbuilders.com' <'kelly@hkrbuilders.com'>; 'Lisa.Mak@bchydro.com' <'Lisa.Mak@bchydro.com'>; 'mark@havan.ca' <'mark@havan.ca'>; 'Maxwell.Sykes@surrey.ca' <'Maxwell.Sykes@surrey.ca'>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; 'mchorobik@communityenergy.bc.ca' <'mchorobik@communityenergy.bc.ca'>; 'MGatensby@aibc.ca' <'MGatensby@aibc.ca'>; 'mlohmann@communityenergy.bc.ca' <'mlohmann@communityenergy.bc.ca'>; 'mmcwilliam3@bcit.ca' <'mmcwilliam3@bcit.ca'>; 'msohi@boabc.org' <'msohi@boabc.org'>; 'muneesh@boma.bc.ca' <'muneesh@boma.bc.ca'>; 'NConnolly@richmond.ca' <'NConnolly@richmond.ca'>; 'nheap@richmond.ca' <'nheap@richmond.ca'>; 'patrick.enright@vancouver.ca' <'patrick.enright@vancouver.ca'>; 'robyn.wark@bchydro.com' <'robyn.wark@bchydro.com'>; 'sean.pander@vancouver.ca' <'sean.pander@vancouver.ca'>; 'SHorsburgh@rdn.bc.ca' <'SHorsburgh@rdn.bc.ca'>; 'toby.lau@bchydro.com' <'toby.lau@bchydro.com'>; 'Todd.cumiskey@icba.ca' <'Todd.cumiskey@icba.ca'>; 'vanessa@chbabc.org' <'vanessa@chbabc.org'>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>; 'warrenp@bccassn.com' <'warrenp@bccassn.com'>; 'wileung@bchousing.org' <'wileung@bchousing.org'>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>; Dean, Jeff OHCS:EX <Jeff.Dean@gov.bc.ca>
Cc: Maura Gatensby <MGatensby@aibc.ca>; Wark, Robyn <Robyn.Wark@bchydro.com>; Mark Sakai <mark@havan.ca>; Pander, Sean <sean.pander@vancouver.ca>; Jeff Fisher <jfisher@udi.org>; Connolly,Norm <NConnolly@richmond.ca>; Lau, Toby <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Muneesh Sharma <muneesh@boma.bc.ca>; Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>; Bains, Bea <Bea.Bains@fortisbc.com>; Catherine Ernst <catherine.ernst@boabc.org>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; christian@zebx.org <christian@zebx.org>; Stelzer, Bertine <Bertine.Stelzer@bchydro.com>; Joe Hart <joe.iconhomes@shaw.ca>; vanessa@chbabc.org <vanessa@chbabc.org>; pauline@chbabc.org <pauline@chbabc.org>;s.22 >; Bob Deeks <bdeeks@rdcfinehomes.com>; Maya Chorobik <mchorobik@communityenergy.bc.ca>; Madden, John (C+CP) <j.madden@ubc.ca>; Heap,Nicholas <NHeap@richmond.ca>; Hamer, Gary <Gary.Hamer@bchydro.com>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Warren Perks <warrenp@bccassn.com>; Mary McWilliam <mmcwilliam3@bcit.ca>
Subject: Energy Step Code Council mtg, COVID-19

Hello, everyone,

Attached is the agenda for tomorrow's special Energy Step Code Council meeting regarding COVID-19. The agenda contains discussion questions that we hope to address.

I will also update the calendar invitation to include the same agenda.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: delays in work and the BC Building Code

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: May 6, 2020 11:28:59 AM PDT
Attachments: image001.png

Thanks for the notes. The last two costing studies included UDI and CHBA (and the rest of the ESCC) in the steering committee to ensure we were asking the right questions and to improve confidence in the findings. I have asked Scott to consider the same approach this time. You and Jeff would be more than welcome to be involved in the costing study work. Based on the workplan that will be happening over the summer.

Let's discuss further at our next check in.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: May 6, 2020 9:44 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: delays in work and the BC Building Code

One additional idea – we invite UDI and CHBA-BC to participate in the costing study. They contribute $10k each and be on the project oversight committee. And this time, we don't include the utilities, as they will be focus on their own fuel/programmatic interests.

I could participate in this project given my skillset, along with Jeff Dean.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: Pape-Salmon, Andrew OHCS:EX
Sent: May 6, 2020 9:38 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: delays in work and the BC Building Code

Thanks Zac,

I think we can characterize the Clean BC adoption as cost reducing within those municipalities that currently reference the Step Code. It creates consistency which increases certainty. We can "upload" responsibility for leadership on energy efficiency and decarbonization to the Province, but also allow leading municipalities to continue to reference higher standards (such as North Van).

I want to make sure that we don't advance cost reduction at the expense of consumer affordability. Thus, we need to stick with our message of "efficient electrification" or "efficient RNG" which allows for affordability.

For discussion, I think we need to commission a costing study again to convince groups like UDI. This time, the costing could include administrative costs of compliance – dealing with building permits, etc. I suggest a simple before and after study for pre- and post- BCBC 2022. I suggest 2 tables like the one below, (1) for 12-storey MURB (concrete or wood) (focus on UDI audience) and (2) for 6- or 10-unit townhouses (focus on CHBA-BC audience)

Description	2018 BCBC Costs	2017 ESC Costs (for munis referencing)	2022 BCBC Costs

Capital Costs (excluding professional fees)	NECB/ASHRAE	Step 3 MURB	Cite the least capital cost scenario
Professional fees	Professional reliance costs	Illustrate the variable professional costs, depending on jurisdiction	Lower costs via BERT
NPV for capital and operating costs	Reflect fuel mix that is common (needs professional input)	Reflect fuel mix that is common in (needs professional input)	Cite the highest NPV scenario (more affordable than ESC)
Administrative/permitting costs	TBC	Variable administrative costs of complying with ESC	Consistent approach through BERT/DAPR
Additional internal costs associated with regulatory compliance		Mandatory ESC training	Better alignment of training with code
Energy supply / Carbon related costs	Mandatory district energy	Variable references to ESC for different fuels. Mandatory district energy.	Could we move district energy back into the Building Act restriction, freeing developers of this cost?
Marketing / realtor costs	Limited to none	Consumer confusion and higher costs of marketing	Improved consistency

Some early thinking for us to discuss at our next bilateral.

Cheers,

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 5, 2020 3:55 PM
To: OHCS Building & Safety Standards Branch OHCS:EX <Building.Safety@gov.bc.ca>
Cc: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>; Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: FW: delays in work and the BC Building Code

Hi Anna,

Can you add this to eapps and assign to me?

I responded to Jeff to let him know that we would review this info and provide a response. Many areas to cover here including building permits, economic recovery, wood, and Energy Step Code.

Best,
Zac

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Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: May 5, 2020 3:36 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>

Cc: Anne McMullin <AMcMullin@udi.org>; Marissa Chan-Kent <mchan-kent@udi.org>; Cassandra McColman <cmccolman@udi.org>; Andrea Nicholls <anicholls@udi.org>; Richard Demkiw <rdemkiw@UrbDevIns.onmicrosoft.com>
Subject: RE: delays in work and the BC Building Code

Zachary, thanks for the information regarding delays in work and the *BC Building Code* (*BCBC*) which informs local governments that there are limits to how long Building Permits can last if delays occur in construction. There is a concern that several local governments have established time limits due to this provincial regulation. As I said in our phone call on April 23, the Province may need to extend these time periods during the COVID-19 pandemic. Would the Province's emergency powers allow you to extend the time limits on municipal Building Permits? The *BCBC* measure was put in place to ensure new buildings comply with the latest version of it. However, it does not appear that there will be another update for a while.

As I said during our call, I also think we need to start looking at how current regulations can be met at lower costs and faster approval times as opposed to creating new requirements. I am attaching a recent letter we wrote to the Hon. Michelle Mungall, Minister of Jobs, Economic Development and Competitiveness, in which we ask the Province (and local governments) to suspend any new requirements and improve processing times while we are facing the COVID-19 pandemic and the economic repercussions from it. In terms of the *BC Energy Step Code*, if we make changes to it related to greenhouse gas emissions, it needs to done in a way that reduces – not increases - costs to new projects.

In terms of your question about our COVID-19 survey, please see attached the results from it. It was done in early April, but we will be conducting another one later this month. Are there any specific questions, you would like us to add? Also, we have built a municipal matrix on our website. It includes details about how local governments are changing development review processes during the emergency period. We contact local governments on an ongoing basis to update it.

Finally, I would also like reiterate my concern regarding UDI'S discussions with the Insurance Bureau of Canada (IBC) about wood-frame and tall timber construction. They clearly indicated to us in several seminars that the insurance industry has substantial concerns with these types of construction. Increasing wood and CLT in new projects is a key issue for the Province, as it reduces embodied carbon in new construction and assists with economic development of forestry dependant communities across the Province. Vancouver is moving forward with embodied carbon regulations and I believe the Province is considering something similar under the *CleanBC Plan*. I think we need to involve the IBC in any future discussions about embodied carbon and tall wood-frame/CLT construction incentives or requirements.

Jeff Fisher, M.PL., CAE, MCIP, RPP
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Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 22, 2020 1:11 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: delays in work and the BC Building Code

British Columbia Building Code established

1 The British Columbia Building Code is established by adopting,

(a) as Book I (General), Divisions A to C of the National Building Code of Canada 2015, a
June 1, 2018, with the changes considered necessary and incorporated in it in the attache
1, and

(b) as Book II (Plumbing Systems), Divisions A to C of the National Plumbing Code of Cana
it was on June 1, 2018, with the changes considered necessary and incorporated in it in
Schedule 2.

Application of British Columbia Building Code

2 The British Columbia Building Code established by section 1 applies except insofar as B.C. Reg
applies under section 3.

Application of B.C. Reg. 264/2012

3 (1) In this section, "building permit" means a building permit issued

(a) by a "local authority" as defined in the *Building Act*, or

(b) under the *University Endowment Land Act*.

(2) B.C. Reg. 264/2012, the British Columbia Building Code Regulation, applies only to the con
alteration of a building as follows

(a) if a building permit is required,

(i) the building permit is applied for before the effective date of this order, and

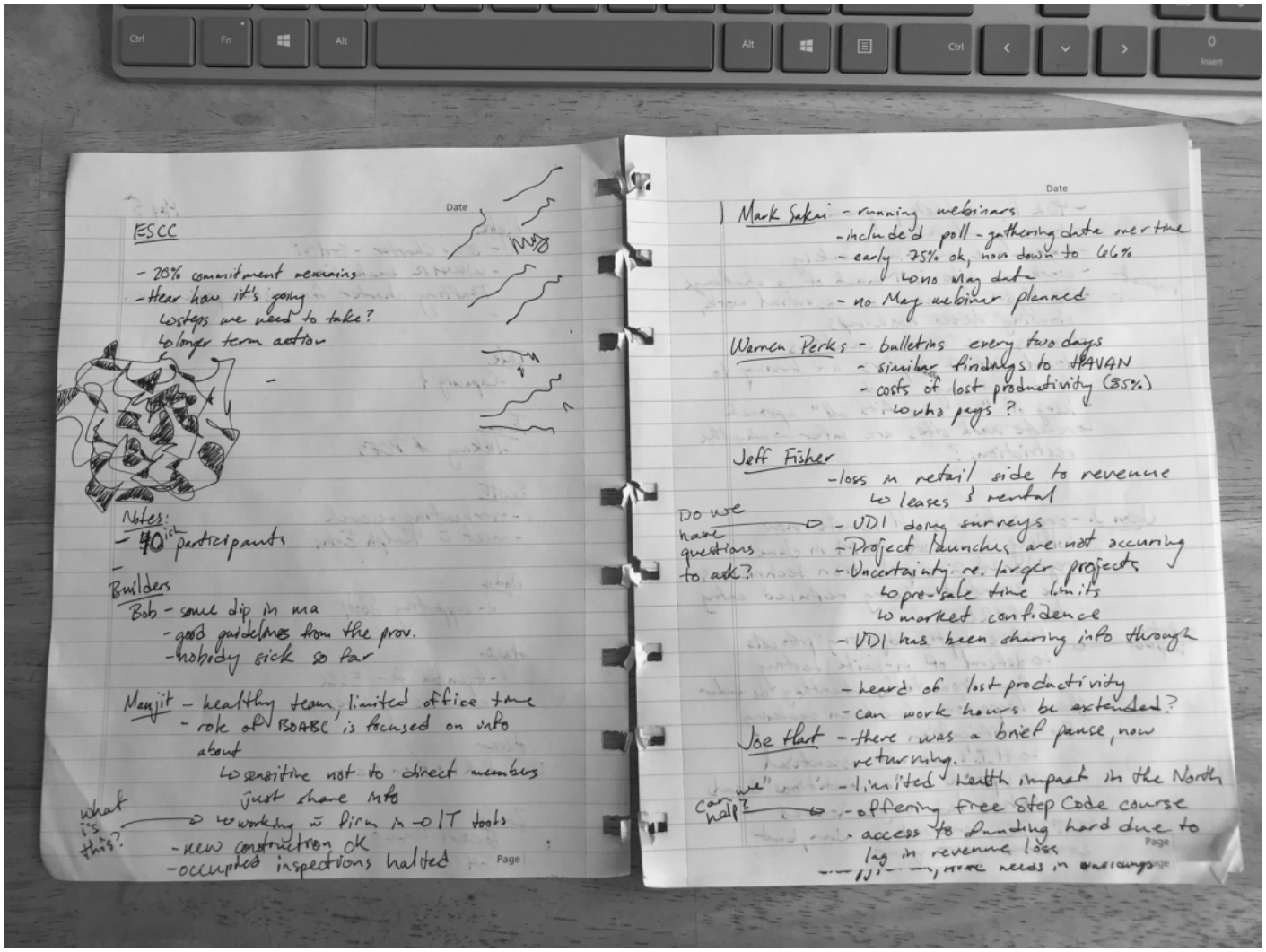
(ii) the building permit applied for is issued and work commences and continues to
completion without interruption, other than work stoppages considered reasonable
building industry, or

(b) if no building permit is required, the construction or alteration of the building has
started as of the effective date of this order and work continues to completion without
other than work stoppages considered reasonable in the building industry.

(3) All work referred to in subsections 2(a) and (b) must be carried out in conformity with B.C. Reg

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



ESCC

- 20% commitment remains
- Hear how it's going
  - ↳ steps we need to take?
  - ↳ longer term action

Notes:
- 40ish participants

Builders
Bob - some dip in ma
- good guidelines from the prov.
- nobody sick so far

Manjit - healthy team, limited office time
- role of BOABC is focused on info about
  - ↳ sensitive not to direct members just share info
  - ↳ working w̄ firm in → IT tools
- new construction ok
- occupied inspections halted

what is this?

Mark Sakai - running webinars
- included poll - gathering data over time
- early 75% ok, now down to 66%
  - ↳ no May data
- no May webinar planned

Warren Perks - bulletins every two days
- similar findings to HAVAN
- costs of lost productivity (85%)
  - ↳ who pays?

Jeff Fisher
- loss in retail side to revenue
  - ↳ leases & rental
- VDI doing surveys
- Project launches are not occuring
- Uncertainty re. larger projects
  - ↳ pre-sale time limits
  - ↳ market confidence
- VDI has been sharing info through

Do we have questions to ask?

- heard of lost productivity
- can work hours be extended?

Joe Hart - there was a brief pause, now returning.
- limited health impact in the North
- offering free Step Code course
- access to funding hard due to lag in revenue loss
- [illegible], [illegible] needs in buildings

Can we help?

RE: Economic Recovery

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Sent: May 6, 2020 5:09:27 PM PDT

Greetings both,

Adding to Jessica's points, I would add the Greg Steves gave us feedback that we will need to engage stakeholders soon. My comments/edits to the engagement plan document were evidently broader than engagement alone, as it is now time to start mapping out our workplan as well.

From a project management standpoint, I suggest the following framework:

- Initial information gathering (complete)
- Define preliminary objectives and scope (complete, in Concept paper)
- Early engagement with key influencers (complete, with EDs)
- Prepare Charter, prepare preliminary work and communications plans (in the 2nd document that Aura prepared)
- Present preliminary information (Friday)
- Confirm objectives, scope, and pitch preliminary workplan and communications plan with Executive (potentially on Friday)
- Revise work and communications plans
- Execution of work plan

I suggest we have three layers of engagement for each of our project components:

1. Internal, with MAH EDs and Executive
2. Other internal stakeholders (including Crowns) such as BC Housing, FLNRORD, JEDC, Finance, MEMPR, BC Hydro
3. External stakeholders (UDI, CHBA, UBCM, etc.)

I suggest we use similar materials for each of the three layers of engagement for each of the project components. Here is some early thinking on the components (this is evolving, but hopefully we can lock it down soon):

a. Problem definition, data gathering and opportunity identification phase. Key product: Concept Paper (complete)
b. Differentiation of transition versus recovery initiatives. We could prepare a table that illustrates transition versus recovery actions for each of the sectors we identified in the table of the concept paper. The two are evidently linked. We could review the materials from today's announcement by the Premier as a key source of information, and the paper that Cimarron was working on.
c. Confirmation of "recovery" opportunities (to make sure nothing was missed), brainstorm on "long-term paradigm-shifts" for each of them (in other words, we are limiting discussion to those opportunities that could facilitate a pivot to a "new normal"), and method for analyzing impacts and prioritizing opportunities. Evidently DAPR will surface to the top of priorities, along with innovation in building design.
d. Draft "plan", outlining recommended actions, pros and cons and impacts.

So far, we have completed (1)(a). We are already summarizing results from EDs as a basis for pitching this to MAH Executive. However, before we meet with people externally, we will want to confirm some points with key government Branches and Crown Corporations such as BC Housing. We can use the same Concept Paper to meet with them.

For discussion tomorrow afternoon.

Cheers,
Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 6, 2020 2:33 PM
To: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: RE: Economic Recovery

Thanks for this, Jessica.

First two bullets are straightforward to act on.

For alignment with the transition planning and Silas' vision I totally agree but am not sure how best to get insights on either. Do either of you have access to the transition plan that went up to the Minister this week? Is Friday our chance to seek Kaye and Silas' direction? If so, we may want to consider how much detail we put on our plan and where we leave room for discussion and direction.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Sent: May 6, 2020 2:04 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: RE: Economic Recovery

Hi Zac, many thanks to you and the team for your work on this. I think this is all heading in a good direction – a couple of preliminary thoughts for your consideration:

- I note that the ideas that were provided by the EDs vary from specific action ideas to outcome objectives. Given that we are looking to clarify outcomes at this stage I wonder if there is value in reframing the proposals that are action oriented into outcomes statements and moving the specific ideas into the 'catalogue tables'. We can then circulate the updated table back for feedback and comment
- Per our discussion earlier in the week, and in line with the engagement plan, we may want to include a section in the framework document that speaks more explicitly to the need to go out and do some preliminary analysis – this will also create a good tie in to the engagement plan.
- Similar to the note above, I think we also need ot build in some language and recognition around the transition plan that is being developed and the need to link that with recovery planning – I think we may also want to build this into the engagement plan as part of those conversations and also to ensure that we are leveraging any work or stakeholder tables that are already underway under the transition framework

I also note more generally that it sounds like this work may be flowing through Silas, in which case it might be helpful to have some conversations with him about his vision and thinking before we get too far down any specific path.

Happy to chat further as may be helpful,
Jessica

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 5, 2020 11:10 AM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Subject: Economic Recovery

Jessica and Andrew,

I'm not sure if we will have a chance to meet before tomorrow's meeting with Kaye, so please feel free to review the latest versions of the framework doc with ED feedback and the first draft at the engagement plan.

Please let me know if you need anything else prior to the meeting with Kaye tomorrow.

I am also meeting with the Energy Step Code Council tomorrow morning to have a roundtable discussion about COVID. If there is any information you think we should be seeking from those stakeholders I can add it to the agenda.

Best,

Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Follow-up: UDI webinar: green building regulatory update

From: May, Zachary OHCS:EX
To: Michaela Neuberger <michaela@zebx.org>, Norm Connolly <NConnolly@richmond.ca>
Sent: May 7, 2020 10:25:14 AM PDT

Happy to participate. The June dates work best for me.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Michaela Neuberger <michaela@zebx.org>
Sent: May 7, 2020 10:02 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Norm Connolly <NConnolly@richmond.ca>
Subject: Follow-up: UDI webinar: green building regulatory update

Zac and Norm,

I am following up on the UDI GB regulatory update webinar. Sean has confirmed that he or Patrick Enright will participate on behalf of the CoV and are available on May 28, Jun 8-11, 17 or 19.

Are you interested and available to join the session? It would be great to receive your response by tomorrow, Friday, May 8.

Thank you,
Michaela

---------- Forwarded message ---------
From: **Pander, Sean** <sean.pander@vancouver.ca>
Date: Wed, May 6, 2020 at 11:41 AM
Subject: RE: UDI webinar: green building regulatory update
To: Michaela Neuberger <michaela@zebx.org>, Zachary May <Zachary.May@gov.bc.ca>, Norm Connolly <NConnolly@richmond.ca>
Cc: Bertine Stelzer <bertine.stelzer@bchydro.com>, Christian Cianfrone <christian@zebx.org>, Enright, Patrick <Patrick.Enright@vancouver.ca>

Michaela,

Yes there are a number of pending and possible upcoming regulatory changes we would love to raise UDI member awareness of and/or get input on. I or someone from my team would be happy to participate.

May 28, Jun 8-11, 17 or 19 would work.

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver

City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
t: 604.871.6542
sean.pander@vancouver.ca

From: Michaela Neuberger [mailto:michaela@zebx.org]
Sent: Tuesday, May 05, 2020 12:58 PM
To: Pander, Sean; Zachary May; Norm Connolly
Cc: Bertine Stelzer; Christian Cianfrone
Subject: UDI webinar: green building regulatory update

Dear Sean, Zac and Norm,

UDI has moved their breakfast seminar online. They would like to host a **green building regulatory update webinar** for their members. They have asked ZEBx to moderate the session. BC Hydro's New Construction program is providing educational support for the event.

We wanted to ask whether you would be interested and available to be **panelists for the session**. Please see attached a draft outline with suggested topics which are also summarised below. UDI and ZEBx would, of course, work with you to coordinate and finalise the content.

- **City of Vancouver**: Climate Emergency Response, zero emission space & water heating, green building regulatory update
- **Province**: Energy Step Code & Alterations to Existing Building Code update
- **City of Richmond**: Energy Step Code implementation example (including development & permitting, airtightness testing)

Possible dates:
May 26, 27, or 28
June 8 - 12 and 15 - 19

Time: 9:30 am - 10:30/45 am

Please let me know if you are interested to participate and if so, which date(s) would work for you. I would be happy to receive any feedback regarding the content or answer any questions you might have.

Thank you,
Michaela

--
Michaela Neuberger | Director of Operations
Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

--
Michaela Neuberger | Director of Operations
Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

FW: delays in work and the BC Building Code

From: May, Zachary OHCS:EX
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: May 7, 2020 10:42:34 AM PDT
Attachments: COVID-19 Impacts Survey Summary_April 2020.docx, image001.png, UDI Letter - Building Sector's Role in Economic Recovery Post-COVID-19 .pdf

In case this is relevant.

Best,
Zac

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Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: May 5, 2020 5:22 PM
To: Steves, Gregory OHCS:EX <Gregory.Steves@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: delays in work and the BC Building Code

Greg, FYI – from UDI. Lots of topic areas.

Would you like to sign the response, or are you OK with my signature? Or DM signature?

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 5, 2020 3:55 PM
To: OHCS Building & Safety Standards Branch OHCS:EX <Building.Safety@gov.bc.ca>
Cc: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>; Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Warkentin, Tiffany MAH:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: FW: delays in work and the BC Building Code

Hi Anna,

Can you add this to eapps and assign to me?

I responded to Jeff to let him know that we would review this info and provide a response. Many areas to cover here including building permits, economic recovery, wood, and Energy Step Code.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: May 5, 2020 3:36 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Anne McMullin <AMcMullin@udi.org>; Marissa Chan-Kent <mchan-kent@udi.org>; Cassandra McColman <cmccolman@udi.org>; Andrea Nicholls <anicholls@udi.org>; Richard Demkiw <rdemkiw@UrbDevIns.onmicrosoft.com>
Subject: RE: delays in work and the BC Building Code

Zachary, thanks for the information regarding delays in work and the *BC Building Code* (*BCBC*) which informs local governments that there are limits to how long Building Permits can last if delays occur in construction. There is a concern that several local governments have established time limits due to this provincial regulation. As I said in our phone call on April 23, the Province may need to extend these time periods during the COVID-19 pandemic. Would the Province's emergency powers allow you to extend the time limits on municipal Building Permits? The *BCBC* measure was put in place to ensure new buildings comply with the latest version of it. However, it does not appear that there will be another update for a while.

As I said during our call, I also think we need to start looking at how current regulations can be met at lower costs and faster approval times as opposed to creating new requirements. I am attaching a recent letter we wrote to the Hon. Michelle Mungall, Minister of Jobs, Economic Development and Competitiveness, in which we ask the Province (and local governments) to suspend any new requirements and improve processing times while we are facing the COVID-19 pandemic and the economic repercussions from it. In terms of the *BC Energy Step Code*, if we make changes to it related to greenhouse gas emissions, it needs to done in a way that reduces – not increases - costs to new projects.

In terms of your question about our COVID-19 survey, please see attached the results from it. It was done in early April, but we will be conducting another one later this month. Are there any specific questions, you would like us to add? Also, we have built a municipal matrix on our website. It includes details about how local governments are changing development review processes during the emergency period. We contact local governments on an ongoing basis to update it.

Finally, I would also like reiterate my concern regarding UDI'S discussions with the Insurance Bureau of Canada (IBC) about wood-frame and tall timber construction. They clearly indicated to us in several seminars that the insurance industry has substantial concerns with these types of construction. Increasing wood and CLT in new projects is a key issue for the Province, as it reduces embodied carbon in new construction and assists with economic development of forestry dependant communities across the Province. Vancouver is moving forward with embodied carbon regulations and I believe the Province is considering something similar under the *CleanBC Plan*. I think we need to involve the IBC in any future discussions about embodied carbon and tall wood-frame/CLT construction incentives or requirements.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 22, 2020 1:11 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: delays in work and the BC Building Code

British Columbia Building Code established

1 The British Columbia Building Code is established by adopting,

(a) as Book I (General), Divisions A to C of the National Building Code of Canada 2015, a June 1, 2018, with the changes considered necessary and incorporated in it in the attache 1, and

(b) as Book II (Plumbing Systems), Divisions A to C of the National Plumbing Code of Cana it was on June 1, 2018, with the changes considered necessary and incorporated in it in Schedule 2.

Application of British Columbia Building Code

2 The British Columbia Building Code established by section 1 applies except insofar as B.C. Reg applies under section 3.

Application of B.C. Reg. 264/2012

3 (1) In this section, "building permit" means a building permit issued

(a) by a "local authority" as defined in the *Building Act*, or

(b) under the *University Endowment Land Act*.

(2) B.C. Reg. 264/2012, the British Columbia Building Code Regulation, applies only to the con alteration of a building as follows

(a) if a building permit is required,

(i) the building permit is applied for before the effective date of this order, and

(ii) the building permit applied for is issued and work commences and continues to completion without interruption, other than work stoppages considered reasonable building industry, or

(b) if no building permit is required, the construction or alteration of the building has started as of the effective date of this order and work continues to completion without other than work stoppages considered reasonable in the building industry.

(3) All work referred to in subsections 2(a) and (b) must be carried out in conformity with B.C. Reg

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#1100 – 1050 West Pender Street
Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691

May 1, 2020

Honourable Michelle Mungall
Minister of Jobs, Economic Development and Competitiveness
Room 301, Parliament Buildings
Victoria, BC V8V 1X4

Dear Minister:

Re: Building Sector's Role in Economic Recovery Post-COVID-19

I would like to thank you for the discussion we had on May 20 regarding preparing the province for economic recovery when the pandemic subsides. As you know, the Urban Development Institute (UDI) and its members are well positioned to assist your government in this endeavor. However, we need the province and local governments to take substantive and immediate steps to enable our members to continue to employ British Columbians and build homes and office space. These steps include:

- A one-year suspension of any new requirements, fees, charges, taxes and amenity contributions that add costs/delays to projects;
- Applying the same property tax reductions and deadline extensions that were announced for commercial land owners to Class 1 residential building sites that are exempt from the Speculation and Vacancy Tax (SVT) and Purpose Built Rental (PBR) buildings;
- Applying the SVT exemptions for sites under development and PBR to the Additional School Tax for the next year;
- Remove development land and unsold inventory from the Empty Homes Tax for the next year;
- Permanently extending the timelines set out in Policy Statements 5 and 6 issued by the Superintendent of Real Estate (pursuant to the *Real Estate Development Marketing Act (*REDMA)) to allow for an early marketing period of 12 months and a 15-month period to obtain a building permit and satisfactory financing commitment before buyers can unilaterally terminate their pre-sale contracts.
- Ensuring that municipalities continue to implement innovative changes to the development application process that are already permitted, such as holding virtual public hearings, waiving public hearings for Official Community Plan-compliant projects, and establishing clear and reasonable timeframes for development approvals.

Although British Columbia has seemed to flatten the COVID-19 curve better than most jurisdictions, our economy has been as vulnerable to the repercussions of the pandemic as the rest of the world. The Canadian economy had the largest one-month decline in GDP (9%) from February to March 2020 and over 4 million Canadians have applied for the new Canada Economic Recovery Benefit. In B.C. alone, 132,000 jobs were lost in March. It is increasingly clear that the impact of COVID-19 on the economy has not been fully realized.

Our industry is a significant economic generator in British Columbia. Our sector contributes over 230,000 well-paying jobs to B.C., as well as billions of dollars in government revenues and economic activity. The property development industry is a component of the B.C. real estate and construction sector, which accounts for roughly 15 per cent of the provincial GDP.

In communities across British Columbia, our industry builds homes for families at all income levels as well as job spaces - offices, retail buildings and industrial. We also make significant contributions to local neighbourhoods such as parks and recreational facilities, schools, libraries, childcare spaces, affordable housing units and community buildings. We have always been committed to being partners in community building and sustainable development.

Unfortunately, all these contributions are at risk. Over the past few years, we have seen a dramatic escalation of government taxes, fees, charges, and requirements including:

- *Budget 2018* provincial taxes that apply to development lands, including the Additional School Tax and the "Luxury" Property Transfer Tax;
- New TransLink Development Cost Charges (DCCs) which came into effect on January 1, 2020;
- The Greater Vancouver Sewerage and Drainage District DCCs, which increased up to 200%;
- A proposed future Metro Vancouver water DCC;
- Substantial increases to local government DCC rates (as high as 700%) and amenity contributions; and
- The added costs associated with the new building code and site requirements.

At a time when the federal and provincial governments are introducing massive stimulus packages to keep the economy going, and when industries and businesses, small and large, are doing their best to keep people employed, our industry is facing continuously escalating costs and regulatory requirements by municipalities and some provincial agencies.

Our sector is capable of being at the forefront of British Columbia’s economic recovery. However, we need your help to enable our industry to keep the economy going, continue to employ British Columbians and build the housing and job spaces

we need. By working collaboratively, we can quickly recover from the impacts of the COVID-19 pandemic.

If you have any questions regarding our proposed measures, please do not hesitate to contact me. I look forward to working with you to stabilize the economy and keep British Columbians employed.

Sincerely,



Anne McMullin
President & CEO

CC:
Premier John Horgan
Minister of Finance, Carole James
Minister of Municipal Affairs and Housing, Selina Robinson

Deputy Minister of Jobs, Economic Development and Competitiveness, Fazil Mihlar
Deputy Minister of Finance, Lori Wanamaker
Deputy Minister of Municipal Affairs and Housing, Kaye Krishna
Assistant Deputy Minister of Jobs, Economic Development and Competitiveness, International Division, Tracy Campbell
Chief of Staff to the Premier, Geoff Meggs

RE: Follow-up: UDI webinar: green building regulatory update

From: Michaela Neuberger <michaela@zebx.org>
To: Connolly,Norm <NConnolly@richmond.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 8, 2020 10:58:34 AM PDT

Hi Norm,

I have heard back from UDI and they would actually prefer you as a speaker since you are more involved in the Energy Step Code as the co-chair of the technical subcommittee. So if that's still ok with you, we will go ahead as initially intended. We have now also confirmed the date of June 11. I will send a separate email to all of you with more details.

Best,

Michaela
On May 7, 2020, 12:31 PM -0700, Connolly,Norm <NConnolly@richmond.ca>, wrote:

> Hi Michaela,
>
> I think that is a great idea, with respect to having Emilie speak to that, for the reason you noted below, definitely, but also because there's a lot of good stuff that she can speak to ☺
>
> Definitely know the mix of industry engagement / capacity-building, development of local incentives and Step Code requirements, and refining compliance verification processes with Development Services staff in New West. Good times!
>
> Happy to assist where needed, but you're in good hands with Emilie.
>
> -Norm
>
> **Norm Connolly | Sustainability Manager, MCIP, RPP**
>
> Engineering Department | City of Richmond
>
> 6911 No. 3 Road, Richmond BC V6Y 2C1
>
> **T**|604.247.4676 **C**|604.319.5373
>
> **E**|nconnolly@richmond.ca
>
> **From:** Michaela Neuberger [mailto:michaela@zebx.org]
> **Sent:** Thursday, 7 May 2020 11:58
> **To:** Connolly,Norm

Cc: May, Zachary OHCS:EX
Subject: Re: Follow-up: UDI webinar: green building regulatory update

Hi Norm,

That's great! Thank you. I will keep your June availability in mind. The webinar will be in the morning from 9:30 - 10:30 am (or 10:45 depending on number of questions).

I was reminded by UDI that ideally they would like to have at least one female speaker. So I have reached out to Emilie Adin at New West to inquire whether she might be available to take the Lower Mainland local government panelist role. I'll wait to hear back until Monday. But if not - you have the spot!

Best,

Michaela

On Thu, May 7, 2020 at 11:05 AM Connolly,Norm <NConnolly@richmond.ca> wrote:

> Hi Michaela and Zac,
>
> My apologies for being late in the game for a reply… Happy to participate in this event as well.
>
> Most of the June dates work for me as well. June 17 and 19 are open in my calendar, and are after two Council Reports that we are bringing forward that month. June 8th is tricky, but the rest of the week should be OK. Will these events be in the morning or at noon? Breakfast or lunch with speakers was typical for UDI pre-COVID.
>
> Best!
>
> -Norm
>
> **Norm Connolly | Sustainability Manager, MCIP, RPP**

Engineering Department | City of Richmond

6911 No. 3 Road, Richmond BC V6Y 2C1

T|604.247.4676 **C**|604.319.5373

E|nconnolly@richmond.ca

From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: Thursday, 7 May 2020 10:25
To: Michaela Neuberger; Connolly,Norm
Subject: RE: Follow-up: UDI webinar: green building regulatory update

Happy to participate. The June dates work best for me.

Best,

Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Michaela Neuberger <michaela@zebx.org>
Sent: May 7, 2020 10:02 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Norm Connolly <NConnolly@richmond.ca>
Subject: Follow-up: UDI webinar: green building regulatory update

Zac and Norm,

I am following up on the UDI GB regulatory update webinar. Sean has confirmed that he or Patrick Enright will participate on behalf of the CoV and are available on May 28, Jun 8-11, 17 or 19.

Are you interested and available to join the session? It would be great to receive your response by tomorrow, Friday, May 8.

Thank you,

Michaela

---------- Forwarded message ---------
From: **Pander, Sean** <sean.pander@vancouver.ca>
Date: Wed, May 6, 2020 at 11:41 AM
Subject: RE: UDI webinar: green building regulatory update
To: Michaela Neuberger <michaela@zebx.org>, Zachary May <Zachary.May@gov.bc.ca>, Norm Connolly <NConnolly@richmond.ca>
Cc: Bertine Stelzer <bertine.stelzer@bchydro.com>, Christian Cianfrone <christian@zebx.org>, Enright, Patrick <Patrick.Enright@vancouver.ca>

Michaela,

Yes there are a number of pending and possible upcoming regulatory changes we would love to raise UDI member awareness of and/or get input on. I or someone from my team would be happy to participate.

May 28, Jun 8-11, 17 or 19 would work.

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver

City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4

t: 604.871.6542

sean.pander@vancouver.ca

From: Michaela Neuberger [mailto:michaela@zebx.org]
Sent: Tuesday, May 05, 2020 12:58 PM
To: Pander, Sean; Zachary May; Norm Connolly
Cc: Bertine Stelzer; Christian Cianfrone
Subject: UDI webinar: green building regulatory update

Dear Sean, Zac and Norm,

UDI has moved their breakfast seminar online. They would like to host a **green building regulatory update webinar** for their members. They have asked ZEBx to moderate the session. BC Hydro's New Construction program is providing educational support for the event.

We wanted to ask whether you would be interested and available to be **panelists for the session**. Please see attached a draft outline with suggested topics which are also summarized below. UDI and ZEBx would, of course, work with you to coordinate and finalise the content.

- **City of Vancouver**: Climate Emergency Response, zero emission space & water heating, green building regulatory update

- **Province**: Energy Step Code & Alterations to Existing Building Code update

- **City of Richmond**: Energy Step Code implementation example (including development & permitting, airtightness testing)

Possible dates:

May 26, 27, or 28

June 8 - 12 and 15 - 19

Time: 9:30 am - 10:30/45 am

Please let me know if you are interested to participate and if so, which date(s) would work for you. I would be happy to receive any feedback regarding the content or answer any questions you might have.

Thank you,

Michaela

--

Michaela Neuberger | Director of Operations

Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

--

> **Michaela Neuberger** | Director of Operations
>
> Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

--

Michaela Neuberger | Director of Operations

Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

UDI webinar: GB regulatory update June 11

From:	Michaela Neuberger <michaela@zebx.org>
To:	Pander, Sean <sean.pander@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Norm Connolly <nconnolly@richmond.ca>
Cc:	Yvonne Lo <ylo@udi.org>, Stelzer, Bertine <bertine.stelzer@bchydro.com>, jfisher@udi.org, Christian Cianfrone <christian@zebx.org>, Patrick Enright <patrick.enright@vancouver.ca>
Sent:	May 8, 2020 12:09:36 PM PDT
Attachments:	65A6717AD5194B2989F7D2F30BA687EF.png, UDI Webinar_GB Regulatory Update_Draft.docx

Sean, Zac, and Norm,

Thank you for agreeing to provide a **Green Building Regulatory Update** to **UDI members**. We have now confirmed that the webinar will take place on **Thursday, June 11 at 9:30 am**. Christian from ZEBx will be moderating the session. BC Hydro is providing educational funding support.

Yvonne from UDI (cc:ed) is coordinating the event logistics. She has to set up the event site and has asked that all panelists please send her your **bio and headshot** for the event page.

Event title: Suggestions are welcome for a better title than "Green Building Regulatory Update". It might be easier to decide on the title once the content has been finalized.

Event length: I was wondering whether it might be worth extending the session length by 15 minutes (normal webinar length is 60 minutes), depending on how much content you would like to share and feedback you would like to receive. Yvonne - would this be feasible?

High-level content:

- City of Vancouver, Green Building Regulatory Update
- Building and Safety Standards Branch, Energy Step Code Update (including Alterations to Existing Building Code?)
- City of Richmond, Energy Step Code Implementation for Part 3 buildings

I have attached a draft session outline to serve as a basis for discussion. Your input will be important to finalize the content.

Panelists:

- Sean Pander, Green Building Manager, City of Vancouver (Sean, please let us know whether Patrick or you will be speaking)
- Zachary May, Director of Strategic Policy, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
- Norm Connolly, Sustainability Manager, City of Richmond

Yvonne will soon set up a coordination call so that we can discuss the above subjects further.

Thank you,
Michaela

Michaela Neuberger | Director of Operations
Zero Emissions Building Exchange | 604.330.2017 | @zebxchange
zebx
250 - 128 West Hastings Street

Vancouver, BC V6B 1G8

UDI Breakfast Webinar: Green Building Regulatory Update

Possible dates: May 26, 27, or 28 I June 8 - 12 and 15 – 19, 2020

Time: 9:30 – 10:30/45 am

Event duration: 60 – 75 minutes

Moderator: Christian Cianfrone, ZEBx

Educational support: BC Hydro, New Construction Program

Suggested Panel (5 – 7 minutes presentation time):
- City of Vancouver: Sean Pander, Green Building Manager
- Province: Zachary May, Director of Strategic Policy, BSSB
- City of Richmond: Norm Connolly, Sustainability Manager

Content:

BC Hydro (2 minutes)
- Why is BC Hydro supporting this session?
- Outline resources, incentives available to support developers achieve high performance new construction (and potentially existing buildings)

ZEBx Introduction (5 minutes)
- What is ZEBx?
- ZEBx & UDI collaboration (GDS)
- ZEBx programming and offers to support developers (Design Charrettes, Pattern Language course, NZER workshops, Decarb Lunch series)
- Introduction to today's session & speakers

CoV Regulatory Update (10 minutes)
- Climate Emergency Response: Big Move 4 for zero emissions space and water heating new and existing buildings

- Climate Emergency Requirements for New Housing 3-Storeys and Under (Council approved on April 29, 2020):

    - VBBL has been amended requiring all residential space or water heating systems to be zero-GHG-emitting, effective January 2022.
    - A 2 tonne carbon pollution cap has been introduced for new single family and duplex dwellings 325m2+ to lower emissions form the largest new homes, effective January 2021.

- Reminder of upcoming VBBL changes effective Jun 2021 (eg Step 3, GHGI 6 for MURBs 7 storey+).

- Other Updates

Comment: Sean would like to incorporate an easy to use participant live input tool (e.g. Zoom polling) to gather feedback on some pending ideas (embodied carbon in RZ, zero carbon heating and hot water in RZ and appropriate TEDI, logic structure for GHG reg for existing buildings, etc). He could see the presentation including up to 5 short briefs with a couple having one or two audience feedback questions.

BC Energy Step Code Regulatory Update (5 minutes)

- Number of BC municipalities adopted ESC vs have started consultation on ESC: focus on adoption in the Lower Mainland; (This resource would be good way to summarize information but needs to be updated; two examples to mention are the recent Step 5 adoption by West Vancouver and that Prince George started consultation on implementation in February 2020.)

- Overview for which building types ESC metrics have been developed & adopted and which are still outstanding (e.g. public buildings; hospitals)

- Overview of LGs who have approved a lower step for Part 3 buildings with a Low Carbon District Energy System connection

- Resources available: Summary slide with guides available on ESC website, focus on large building resources such as the Guide to Low Thermal Energy Demand for Large Buildings

City of Richmond Energy Step Code Implementation for Part 3 buildings (7 minutes)

- Development / Building Permit processes: What are the major changes for developers in their touch points with LGs? Provide examples for City of Richmon d and highlight commonalities in processes / documents for Part 3 buildings that need to be provided, such as energy modeling results, airtightness testing etc

- Airtightness Testing: BC Energy Step Code requirements for airtightness testing for Part 3 buildings: outline requirements & procedure on a high-level

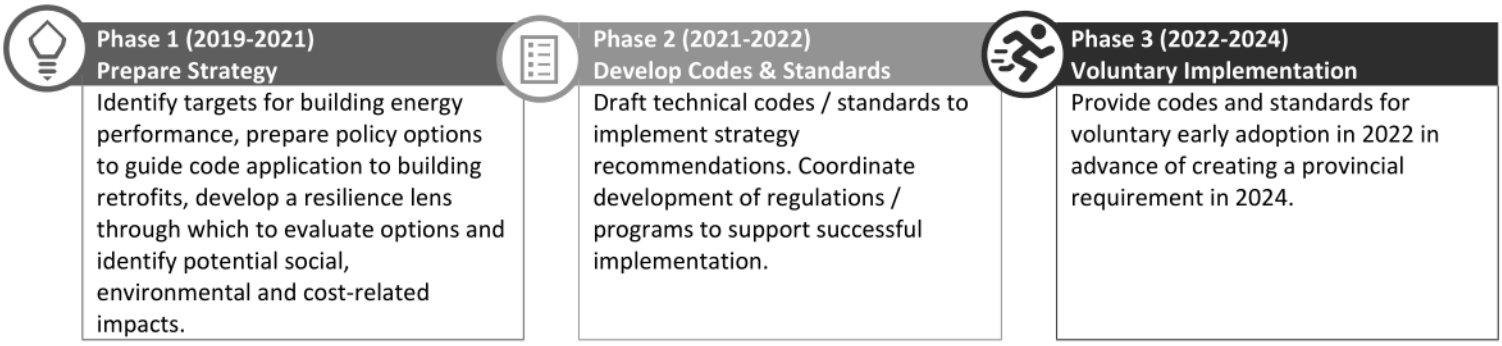
- Other Updates?

BC Alterations to Existing Building Code (3 – 5 minutes)

- Development of an Alterations to Existing Building Code (AEB Code) policy framework has started in 2019.

- Project Goal: To provide clear requirements for existing buildings that will enable GHG reductions and increase life safety and resilience for British Columbians.
- Stakeholder feedback: started in 2019 and will continue through the fall of 2020.
- AEB Code to consider seismic and climate risks.
- It is anticipated that the AEB Code will be implemented in 2024.

Project Timeline



Re: Building Construction Sector

From: Stegman, Martin JEDC:EX <Martin.Stegman@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 8, 2020 4:23:23 PM PDT

Hi Zachary,

I'm actually the one leading the Construction sector engagement/response on our side.

I'm off today, but let's aim to connect on Monday. My calendar is up to date if you want to send an invite, otherwise will just send a Skype message in the morning.

Have a great weekend.

Best,
Martin

Sent from my iPhone

On May 8, 2020, at 11:58 AM, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca> wrote:

> Hi Martin,
>
> I am working with Jessica Brooks on some economic recovery planning related to the building construction sector, and she suggested I reach out to you to see who at JEDC might also be working on this issue. Do you know if there is anyone already engaged on the issue?
>
> We have held some stakeholder meetings with UDI, homebuilders, and other key stakeholder groups to gather information on how things have been going and ensure we can coordinate a response with these groups. I would be happy to share the findings from these sessions with the right people at JEDC and make sure we're not duplicating efforts.
>
> Best,
> **Zachary D. May**, MBA
> Director, Strategic Policy
>
> Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
> Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Notes

Date and Time of Meeting: Wednesday May 6, 2020 | Time: 9:45 a.m. to 11:15 p.m. Pacific Time
Venue: Skype teleconference

Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Revised May 11, 2020

Participants

1. Bea Bains, FortisBC
2. Maya Chorobik, Chair, CEA/LG Peer Network
3. Christian Cianfrone, ZEBx
4. Norm Connolly, Richmond/PIBC, and co-chair, Technical Subcommittee
5. Bob Deeks, CHBA and co-Vice Chair
6. Patrick Enright, City of Vancouver
7. Catherine Ernst BOABC
8. Jeff Fisher, UDI
9. Chris Frye, NRCan Housing Division
10. Joe Hart, Icon Homes/CHBA BC
11. Jason Jung, ASTTBC
12. Vanessa Joehl, CHBA BC
13. Toby Lau, BC Hydro and co-chair, Technical Subcommittee
14. Wilma Leung, BC Housing
15. Megan Lohmann, CEA and UBCM rep
16. John Madden, UBC
17. Warren Perks, BCCA
18. Kelly Reid, HKR Builders/CHBA BC
19. Mark Sakai, HAVAN
20. Muneesh Sharma, BOMA
21. Manjit Sohi, BOABC
22. Maxwell Sykes, City of Surrey/UBCM
23. MAH: Holly Wacker (Local Government Division, Planning and Land Use Management)
24. Jeff Dean (Policy Analyst, Housing Policy Branch; OHCS)
25. BSSB Staff: Aura McCrae; Scott Williams; Hugo Wong; Dale Andersson, BSSB and co-chair, CBC Subcommittee
26. Nat Gosman, MEMPR
27. Catherine Ernst, BOABC; Nicholas Heap, City of Richmond and co-chair, P9 subco; Vanessa Joehl, CHBA BC
28. Robyn Wark, BC Hydro and co Vice-chai
29. Guests: Pauline Rupp, CHBA BC; Gary Hamer, BC Hydro; Bertine Stelzer, BC Hydro and potential others
30. Harshan Radikrishnan, EGBC Provided feedback after this meeting:

Regrets: Maura Gatensby, AIBC

Introduction to MAH Response

Zachary May from BSSB said the meeting is to survey BC Energy Step Code Council members on how COVID-19 has affected their sector, and how the construction sector can contribute to B.C.'s economic recovery. The Province is looking at four phases of recovery, response, transition, recovery, and long-term transformation. These phases represent a transition from health focused measures towards increasing emphasis on economic and social outcomes.

We want to know: What does recovery look like, what challenges do we need to overcome, what are the opportunities? Also, how should we work together as a Council?

Premier has economic recovery task force – MAH wants to leverage current relationships in the construction sector to understand short-term transition issues and also longer-term recovery issues. It's listening mode for BSSB – what's going on, how Province and ESCC can support recovery.

Discussion/shared information summarized by theme below. Please note, the following information is provided for discussion purposes and should not be relied on as official or authoritative.

Safety

- All sectors report staff from their organizations are largely safe with many/most working from home. All are communicating info to their members about COVID.
- Minimal reports of workers being sick from COVID (but a few, traced to Alberta work sites).
- Municipalities doing inspections/permitting still, but at a reduced pace with new safety procedures.
- BOMA releases lots of communication to building owners and managers on COVID (posters, best practices, etc.).
- HAVAN says builders implementing new safety procedures like one-way stairwells to increase physical distancing.

Innovation

- BOABC: A Finnish company is offering six months of free building permit software for municipalities still on paper, announcement to come.
- Richmond trialling virtual video inspections, accepts photos in inspections, but gas inspections are a challenge. Plan reviews generally maintained, online, courier, online signing of documents. Screening protocol for inspections.
- BCIT's offering virtual access to high-performance lab to offer *almost* "hands-on" experiences
- Lots of online work/online delivery of training and inspection which is new for some.

Productivity, employment and the business environment

- Productivity on jobsites is down slightly (BCCA estimates 80% of normal) due to new physical distancing and handwashing. Expenses have increased to buy handwashing stations, etc. BCCA concerned about who will pay for loss in productivity and new cleaning/sanitation costs.
- HAVAN: industry is reporting increasing slowdown in business, based on informal member surveys. In early April, 76% reported normal amount of business, by end of April, 67% reported normal amount of business.
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continues. Survey sent Fri May 8 to all EGBC members will collect further information. EGBC does not foresee huge impact on their own budget.

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NRCan/EnerGuide perspective (provided following the call)

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Other: For Information

- BCCA site = https://www.bccassn.com/covid-19/
- BSSB site = https://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards/forms-resources/covid-19

ESCC Teleconference May 6, 2020 - Summary Notes

From:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To:	msohi@boabc.org, catherine.ernst@boabc.org, sean.pander@vancouver.ca, NConnolly@richmond.ca, Maxwell.Sykes@surrey.ca, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, jjung@asttbc.org, MGatensby@aibc.ca, warrenp@bccassn.com, muneesh@boma.bc.ca, bdeeks@rdcfinehomes.com, joe.iconhomes@shaw.ca, kelly@hkrbuilders.com, hradhakrishnan@egbc.ca, mark@havan.ca, Todd.cumiskey@icba.ca, jfisher@udi.org, christian@zebx.org, Guido.Wimmers@unbc.ca, robyn.wark@bchydro.com, bea.bains@fortisbc.com, wileung@bchousing.org, Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, toby.lau@bchydro.com, nconnolly@newwestcity.ca, nheap@richmond.ca, vanessa@chbabc.org, mmcwilliam3@bcit.ca, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, mchorobik@communityenergy.bc.ca, Lisa.Mak@bchydro.com, patrick.enright@vancouver.ca, SHorsburgh@rdn.bc.ca, ralph.wells@ubc.ca, hgoodland@brantwoodreci.com, rthe@wesgroup.ca, gary.hamer@bchydro.com, christopher.mclellan@canada.ca, christopher.frye@canada.ca
Cc:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Dean, Jeff OHCS:EX <Jeff.Dean@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Sent:	May 11, 2020 9:54:56 AM PDT
Attachments:	ESCC-Notes-2020-05-06 vFIN.docx

Hello Energy Step Code Council members,

Thank you for joining us last Wednesday for our discussion of COVID-19 and how it is affecting your organization and members. We appreciate the incredibly rich feedback we received. A summary of our conversation is attached – if you feel anything was missed or is incorrect, please advise and we can adjust.

More info/next steps to come soon.

Thank you again - please be in touch if you have questions.

Kind regards,

DALE ANDERSSON, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Office: 778-974-3903 | Mobile: 778-679-9653
Email: Dale.Andersson@gov.bc.ca

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Notes

Date and Time of Meeting: Wednesday May 6, 2020 | Time: 9:45 a.m. to 11:15 p.m. Pacific Time
Venue: Skype teleconference

Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Participants

1. Bea Bains, FortisBC
2. Maya Chorobik, Chair, CEA/LG Peer Network
3. Christian Cianfrone, ZEBx
4. Norm Connolly, Richmond/PIBC, and co-chair, Technical Subcommittee
5. Bob Deeks, CHBA and co-Vice Chair
6. Patrick Enright, City of Vancouver
7. Catherine Ernst BOABC
8. Jeff Fisher, UDI
9. Chris Frye, NRCan Housing Division
10. Joe Hart, Icon Homes/CHBA BC
11. Vanessa Joehl, CHBA BC
12. Toby Lau, BC Hydro and co-chair, Technical Subcommittee
13. Wilma Leung, BC Housing
14. Megan Lohmann, CEA and UBCM rep
15. John Madden, UBC
16. Warren Perks, BCCA
17. Kelly Reid, HKR Builders/CHBA BC
18. Mark Sakai, HAVAN
19. Muneesh Sharma, BOMA
20. Manjit Sohi, BOABC
21. Maxwell Sykes, City of Surrey/UBCM Rep and Chair, Large LG Peer Network
22. MAH: Holly Wacker (Local Government Division, Planning and Land Use Management)
23. Jeff Dean (Policy Analyst, Housing Policy Branch; OHCS)
24. BSSB Staff: Aura McCrae; Scott Williams; Hugo Wong; Dale Andersson, BSSB and co-chair, CBC Subcommittee
25. Nat Gosman, MEMPR
26. Catherine Ernst, BOABC; Nicholas Heap, City of Richmond and co-chair, P9 subco; Vanessa Joehl, CHBA BC
27. Robyn Wark, BC Hydro and co Vice-chai
28. Guests: Pauline Rupp, CHBA BC; Gary Hamer, BC Hydro; Bertine Stelzer, BC Hydro and potential others
29. Harshan Radikrishnan, EGBC Provided feedback after this meeting:

Regrets: Mara Gatensby, AIBC

Introduction to MAH Response

Zachary May from BSSB said the meeting is to survey BC Energy Step Code Council members on how COVID-19 has affected their sector, and how the construction sector can contribute to B.C.'s economic recovery. The Province is looking at four phases of recovery, response, transition, recovery, and long-term transformation. These phases represent a transition from health focused measures towards increasing emphasis on economic and social outcomes.

We want to know: What does recovery look like, what challenges do we need to overcome, what are the opportunities? Also, how should we work together as a Council?

Premier has economic recovery task force – MAH wants to leverage current relationships in the construction sector to understand short-term transition issues and also longer-term recovery issues. It's listening mode for BSSB – what's going on, how Province and ESCC can support recovery.

Discussion/shared information summarized by theme below. Please note, the following information is provided for discussion purposes and should not be relied on as official or authoritative.

Safety

- All sectors report staff from their organizations are largely safe with many/most working from home. All are communicating info to their members about COVID.
- Minimal reports of workers being sick from COVID (but a few, traced to Alberta work sites).
- Municipalities doing inspections/permitting still, but at a reduced pace with new safety procedures.
- BOMA releases lots of communication to building owners and managers on COVID (posters, best practices, etc.).
- HAVAN says builders implementing new safety procedures like one-way stairwells to increase physical distancing.

Innovation

- BOABC: A Finnish company is offering six months of free building permit software for municipalities still on paper, announcement to come.
- Richmond trialling virtual video inspections, accepts photos in inspections, but gas inspections are a challenge. Plan reviews generally maintained, online, courier, online signing of documents. Screening protocol for inspections.
- BCIT's offering virtual access to high-performance lab to offer *almost* "hands-on" experiences
- Lots of online work/online delivery of training and inspection which is new for some.

Productivity, employment and the business environment

- Productivity on jobsites is down slightly (BCCA estimates 80% of normal) due to new physical distancing and handwashing. Expenses have increased to buy handwashing stations, etc. BCCA concerned about who will pay for loss in productivity and new cleaning/sanitation costs.
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From: Stegman, Martin JEDC:EX <Martin.Stegman@gov.bc.ca<mailto:Martin.Stegman@gov.bc.ca>>
Sent: May 8, 2020 4:23 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>
Subject: Re: Building Construction Sector

Hi Zachary,

I'm actually the one leading the Construction sector engagement/response on our side.

I'm off today, but let's aim to connect on Monday. My calendar is up to date if you want to send an invite, otherwise will just send a Skype message in the morning.

Have a great weekend.

Best,
Martin
Sent from my iPhone

On May 8, 2020, at 11:58 AM, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>> wrote:
Hi Martin,

I am working with Jessica Brooks on some economic recovery planning related to the building construction sector, and she suggested I reach out to you to see who at JEDC might also be working on this issue. Do you know if there is anyone already engaged on the issue?

We have held some stakeholder meetings with UDI, homebuilders, and other key stakeholder groups to gather information on how things have been going and ensure we can coordinate a response with these groups. I would be

happy to share the findings from these sessions with the right people at JEDC and make sure we're not duplicating efforts.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca<mailto:zachary.may@gov.bc.ca>

RE: ESCC Teleconference May 6, 2020 - Summary Notes

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To: Joe - Icon Homes <joe.iconhomes@shaw.ca>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 11, 2020 12:21:17 PM PDT

Thanks Joe!

Credit where due – **Hugo prepared it** – he's just off this week so I got to share it on his behalf.

Hope you and your work team – and family - are staying well.

Dale

From: Joe - Icon Homes <joe.iconhomes@shaw.ca>
Sent: May 11, 2020 12:16 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: RE: ESCC Teleconference May 6, 2020 - Summary Notes

Hi Dale,

This looks good. I feel that you have captured the meeting quite well.
Thank you.

Joe Hart
President

Icon Homes Ltd.
Joe.iconhomes@shaw.ca
250-983-9858

From: Andersson, Dale OHCS:EX
Sent: Monday, May 11, 2020 9:55 AM
To: 'msohi@boabc.org'; 'catherine.ernst@boabc.org'; 'sean.pander@vancouver.ca'; 'NConnolly@richmond.ca'; 'Maxwell.Sykes@surrey.ca'; 'mlohmann@communityenergy.bc.ca'; 'J.Madden@ubc.ca'; 'jjung@asttbc.org'; 'MGatensby@aibc.ca'; 'warrenp@bccassn.com'; 'muneesh@boma.bc.ca'; 'bdeeks@rdcfinehomes.com'; 'joe.iconhomes@shaw.ca'; 'kelly@hkrbuilders.com'; 'hradhakrishnan@egbc.ca'; 'mark@havan.ca'; 'Todd.cumiskey@icba.ca'; 'jfisher@udi.org'; 'christian@zebx.org'; 'Guido.Wimmers@unbc.ca'; 'robyn.wark@bchydro.com'; 'bea.bains@fortisbc.com'; 'wileung@bchousing.org'; Wacker, Holly MAH:EX; Gosman, Nat EMPR:EX; May, Zachary OHCS:EX; 'toby.lau@bchydro.com'; 'nconnolly@newwestcity.ca'; 'nheap@richmond.ca'; 'vanessa@chbabc.org'; 'mmcwilliam3@bcit.ca'; Andersson, Dale OHCS:EX; 'mchorobik@communityenergy.bc.ca'; 'Lisa.Mak@bchydro.com'; 'patrick.enright@vancouver.ca'; 'SHorsburgh@rdn.bc.ca'; 'ralph.wells@ubc.ca'; 'hgoodland@brantwoodreci.com'; 'vanessa@chbabc.org'; 'rthe@wesgroup.ca'; 'toby.lau@bchydro.com'; 'gary.hamer@bchydro.com'; 'christopher.mclellan@canada.ca'; 'christopher.frye@canada.ca'
Cc: May, Zachary OHCS:EX; Wong, Hugo OHCS:EX; Williams, Scott B OHCS:EX; Dean, Jeff OHCS:EX; McCrae, Aura OHCS:EX
Subject: ESCC Teleconference May 6, 2020 - Summary Notes

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DALE ANDERSSON, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Office: 778-974-3903 | Mobile: 778-679-9653
Email: Dale.Andersson@gov.bc.ca

FW: delays in work and the BC Building Code

From: May, Zachary OHCS:EX
To: Stegman, Martin JEDC:EX <Martin.Stegman@gov.bc.ca>
Sent: May 11, 2020 12:41:39 PM PDT
Attachments: COVID-19 Impacts Survey Summary_April 2020.docx, image001.png, UDI Letter - Building Sector's Role in Economic Recovery Post-COVID-19 .pdf

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: May 5, 2020 3:36 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Anne McMullin <AMcMullin@udi.org>; Marissa Chan-Kent <mchan-kent@udi.org>; Cassandra McColman <cmccolman@udi.org>; Andrea Nicholls <anicholls@udi.org>; Richard Demkiw <rdemkiw@UrbDevIns.onmicrosoft.com>
Subject: RE: delays in work and the BC Building Code

Zachary, thanks for the information regarding delays in work and the *BC Building Code* (*BCBC*) which informs local governments that there are limits to how long Building Permits can last if delays occur in construction. There is a concern that several local governments have established time limits due to this provincial regulation. As I said in our phone call on April 23, the Province may need to extend these time periods during the COVID-19 pandemic. Would the Province's emergency powers allow you to extend the time limits on municipal Building Permits? The *BCBC* measure was put in place to ensure new buildings comply with the latest version of it. However, it does not appear that there will be another update for a while.

As I said during our call, I also think we need to start looking at how current regulations can be met at lower costs and faster approval times as opposed to creating new requirements. I am attaching a recent letter we wrote to the Hon. Michelle Mungall, Minister of Jobs, Economic Development and Competitiveness, in which we ask the Province (and local governments) to suspend any new requirements and improve processing times while we are facing the COVID-19 pandemic and the economic repercussions from it. In terms of the *BC Energy Step Code*, if we make changes to it related to greenhouse gas emissions, it needs to done in a way that reduces – not increases - costs to new projects.

In terms of your question about our COVID-19 survey, please see attached the results from it. It was done in early April, but we will be conducting another one later this month. Are there any specific questions, you would like us to add? Also, we have built a municipal matrix on our website. It includes details about how local governments are changing development review processes during the emergency period. We contact local governments on an ongoing basis to update it.

Finally, I would also like reiterate my concern regarding UDI'S discussions with the Insurance Bureau of Canada (IBC) about wood-frame and tall timber construction. They clearly indicated to us in several seminars that the insurance industry has substantial concerns with these types of construction. Increasing wood and CLT in new projects is a key issue for the Province, as it reduces embodied carbon in new construction and assists with economic development of forestry dependant communities across the Province. Vancouver is moving forward with embodied carbon regulations and I believe the Province is considering something similar under the *CleanBC Plan*. I think we need to involve the IBC in any future discussions about embodied carbon and tall wood-frame/CLT construction incentives or requirements.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org

Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: April 22, 2020 1:11 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: delays in work and the BC Building Code

RE: data on BC construction sector

From: May, Zachary OHCS:EX
To: Clint Abbott <Clint.Abbott@technicalsafetybc.ca>, Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>, Julie Hewlett <Julie.Hewlett@technicalsafetybc.ca>
Sent: May 14, 2020 3:41:43 PM PDT
Attachments: ESCC-Notes-2020-05-06 vFIN.docx

Labour Force Survey – impacts of COVID-19 crisis

- Virtually all of the lost jobs that the Labour Force Survey observed in March were in the services sectors, not in goods-producing or construction. Data for April come out on Friday, May 8th and will probably radically change the picture.
- Job losses are weighted more towards women (who suffered 60% of the losses), private sector workers (96% of losses), part-time work (representing 57% of the lost jobs), and youth aged 15 to 24 (50,300 jobs lost, representing a 15% fall in employment for youth).
- One month of data can be unreliable, necessitating revisions and longer-term observation. Many analysts will be looking at this, including StatsCan which has created some new products to track the economic effects of the crisis, though most of their data hasn't yet caught up with the onset of the crisis.
- Long term economic impacts of the crisis are likely to be felt in unemployment in service sectors and in reduced discretionary spending. For the construction trades, this likely means lower spending on maintenance and renovation, with uncertainty in the housing market having a delayed effect on the development industry.
- Commentators on the B.C. outlook predict that, following the lockdown there will probably be a quick but partial rebound. Since many people will have taken a hit to their savings, Ken Peacock at the BC Business Council expects that discretionary spending will go down, including on things like luxury goods, household furnishings, travel and entertainment.
- The next Labour Force Survey, showing changes between March and April, will be released on Friday, May 8th. StatsCan will have conducted their phone survey for the next release over the period April 15 to 20th.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Clint Abbott <Clint.Abbott@technicalsafetybc.ca>
Sent: May 14, 2020 3:08 PM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>; Julie Hewlett <Julie.Hewlett@technicalsafetybc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: data on BC construction sector

Great – thanks Andrew.
Clint

Clint Abbott, BSc, MBA, PhD | Director, Policy and Regulatory Affairs

TECHNICAL SAFETY BC | Safe technical systems. Everywhere.
Direct: 778 396 2101 | Mobile: 778 875 7632 | Toll-free: 1 866 566 7233
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technicalsafetybc.ca

As a province-wide organization, Technical Safety BC respectfully recognizes that our employees live and work on the traditional and unceded territories of the many Indigenous Nations that have thrived throughout British Columbia since time immemorial.

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From: Pape-Salmon, Andrew OHCS:EX [mailto:Andrew.PapeSalmon@gov.bc.ca]
Sent: Thursday, May 14, 2020 3:06 PM
To: Clint Abbott
Cc: Shannon Horner; Julie Hewlett; Zachary May
Subject: #EXTERNAL# RE: data on BC construction sector

We have some labour market data I can send to you and Julie. We also have a summary of our findings from a recent Energy Step Code Council meeting that Zac can forward to you.

Regards,

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: Clint Abbott <Clint.Abbott@technicalsafetybc.ca>
Sent: May 13, 2020 9:07 AM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>; Julie Hewlett <Julie.Hewlett@technicalsafetybc.ca>
Subject: data on BC construction sector

Hi Andrew – we really appreciated the call and discussion regarding fees. During that call you mentioned stats on the activity within the construction sector – new construction and existing buildings. Might you have a data source that we could connect with so that we can get this type of data on a regular basis. We believe this type of information would be very helpful for our organization as we develop recovery scenarios and track progress going forward.
Thanks,
Clint

Clint Abbott, BSc, MBA, PhD | Director, Policy and Regulatory Affairs

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ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Notes

Date and Time of Meeting: Wednesday May 6, 2020 | Time: 9:45 a.m. to 11:15 p.m. Pacific Time
Venue: Skype teleconference

Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Revised May 11, 2020

Participants

1. Bea Bains, FortisBC
2. Maya Chorobik, Chair, CEA/LG Peer Network
3. Christian Cianfrone, ZEBx
4. Norm Connolly, Richmond/PIBC, and co-chair, Technical Subcommittee
5. Bob Deeks, CHBA and co-Vice Chair
6. Patrick Enright, City of Vancouver
7. Catherine Ernst BOABC
8. Jeff Fisher, UDI
9. Chris Frye, NRCan Housing Division
10. Joe Hart, Icon Homes/CHBA BC
11. Jason Jung, ASTTBC
12. Vanessa Joehl, CHBA BC
13. Toby Lau, BC Hydro and co-chair, Technical Subcommittee
14. Wilma Leung, BC Housing
15. Megan Lohmann, CEA and UBCM rep
16. John Madden, UBC
17. Warren Perks, BCCA
18. Kelly Reid, HKR Builders/CHBA BC
19. Mark Sakai, HAVAN
20. Muneesh Sharma, BOMA
21. Manjit Sohi, BOABC
22. Maxwell Sykes, City of Surrey/UBCM
23. MAH: Holly Wacker (Local Government Division, Planning and Land Use Management)
24. Jeff Dean (Policy Analyst, Housing Policy Branch; OHCS)
25. BSSB Staff: Aura McCrae; Scott Williams; Hugo Wong; Dale Andersson, BSSB and co-chair, CBC Subcommittee
26. Nat Gosman, MEMPR
27. Catherine Ernst, BOABC; Nicholas Heap, City of Richmond and co-chair, P9 subco; Vanessa Joehl, CHBA BC
28. Robyn Wark, BC Hydro and co Vice-chai
29. Guests: Pauline Rupp, CHBA BC; Gary Hamer, BC Hydro; Bertine Stelzer, BC Hydro and potential others
30. Harshan Radikrishnan, EGBC Provided feedback after this meeting:

Regrets: Mara Gatensby, AIBC

Introduction to MAH Response

Zachary May from BSSB said the meeting is to survey BC Energy Step Code Council members on how COVID-19 has affected their sector, and how the construction sector can contribute to B.C.'s economic recovery. The Province is looking at four phases of recovery, response, transition, recovery, and long-term transformation. These phases represent a transition from health focused measures towards increasing emphasis on economic and social outcomes.

We want to know: What does recovery look like, what challenges do we need to overcome, what are the opportunities? Also, how should we work together as a Council?

Premier has economic recovery task force – MAH wants to leverage current relationships in the construction sector to understand short-term transition issues and also longer-term recovery issues. It's listening mode for BSSB – what's going on, how Province and ESCC can support recovery.

Discussion/shared information summarized by theme below. Please note, the following information is provided for discussion purposes and should not be relied on as official or authoritative.

Safety

- All sectors report staff from their organizations are largely safe with many/most working from home. All are communicating info to their members about COVID.
- Minimal reports of workers being sick from COVID (but a few, traced to Alberta work sites).
- Municipalities doing inspections/permitting still, but at a reduced pace with new safety procedures.
- BOMA releases lots of communication to building owners and managers on COVID (posters, best practices, etc.).
- HAVAN says builders implementing new safety procedures like one-way stairwells to increase physical distancing.

Innovation

- BOABC: A Finnish company is offering six months of free building permit software for municipalities still on paper, announcement to come.
- Richmond trialling virtual video inspections, accepts photos in inspections, but gas inspections are a challenge. Plan reviews generally maintained, online, courier, online signing of documents. Screening protocol for inspections.
- BCIT's offering virtual access to high-performance lab to offer *almost* "hands-on" experiences
- Lots of online work/online delivery of training and inspection which is new for some.

Productivity, employment and the business environment

- Productivity on jobsites is down slightly (BCCA estimates 80% of normal) due to new physical distancing and handwashing. Expenses have increased to buy handwashing stations, etc. BCCA concerned about who will pay for loss in productivity and new cleaning/sanitation costs.
- HAVAN: industry is reporting increasing slowdown in business, based on informal member surveys. In early April, 76% reported normal amount of business, by end of April, 67% reported normal amount of business.
- UDI reports significant loss on retail side (tenants unable to pay rent). Sales centres for condos are closed, pre-sales down (time limits on pre-sales are an issue), some project launches not occurring, reduced market confidence and more uncertainty on accurate real estate pricing. UDI exploring how to extend construction hours to allow shifts. Some local governments are OK with this.
- Home inspectors severely affected: realtors can work but sales are often without inspections ("no conditions" deals).
- Municipalities have temporary layoffs in recreation and other facilities that are now closed.
- UBC: Capital projects mostly progressing, 1 student housing project on hold.
- CEA: New EA work fine, slow on retrofits.
- EGBC: Drop in industrial work, particularly oil and gas, aviation. Some municipal projects on hold, and EGBC thinks property tax deferral and lost revenue could further impact municipalities. Municipal layoffs have affected EGBC members (layoffs, 10% pay cuts, 4-day work weeks). Drop in RFPs, but energy work

continues. Survey sent Fri May 8 to all EGBC members will collect further information. EGBC does not foresee huge impact on their own budget.

How COVID affects normal business

- CHBA BC: BC Hydro is only offering essential services, no new hookups, which is holding things up. Banks also have reduced hours and services which causes delays. EMPR and BC Hydro were on the call and notes Hart's concern re: BC Hydro service.
- ASTTBC: registered fire protection technicians are deemed an essential service but being refused entry to some MURBs. Fire depts. Allowing deferrals of in-suite testing.
- BOMA hears about increased break-ins in garages and storefronts.

Financial assistance and incentives

- CHBA BC reports the $40k loan is helpful for them (Canada Emergency Business Account). For other gov assistance, they find it difficult to prove drop in income when applying for govt help because noticeable drop will only come in the later months (contracts)
- EMPR: no changes to provincial incentive programs for this fiscal. But some work to see how programs can be tuned to support economic benefits/recovery. Watching carefully to see if they need to adjust program design.
- BC Hydro: We have relief fund for residential and small biz. About 70k applications have applied for relief fund. New remote tools for education (Indigenous program energy savings kit.).
- Hydro: has repeated a funding offer to homebuilder associations to apply for $25k each for their membership to fund innovative online/remote training options
- One-size solutions don't fit all

Opportunities

- Collective sense of opportunity to consider new ways of thinking/doing/working.
- Richmond: We are ID-ing shovel-ready projects. Rec centres could take advantage of closure to undergo maintenance. Most LGs have extended tax deadlines to Sept. This is an opportunity to rethink public space (reclaiming road space for parks/pedestrians, bikes, etc.)
- CEA: offering tech training and heat pump training in Columbia Valley, huge opportunity here to move to lower carbon sources for communities. Don't miss this opportunity.
- BC Hydro: Focusing on education. High-performance building fund enabling remote integrated design for LEEP, 1 hour free training with good uptake. CHBABC is offering Step Code courses for free.
- Increased virtual learning from BC Hydro could help Step Code training/implementation in rural communities
- BC Hydro will ask building energy managers in some municipalities to see if they can check how COVID is affecting consumption.
- EGBC glad to see Hydro still funding a Climate Action position in Abbotsford.

Risks

- CEA: citizens may not understand why during a crisis we should invest money given layoffs, so some sensitivity needed. Robyn from Hydro: mayors are hearing/sympathizing with job losses/economic crisis in their community.
- Fortis: Hesitancy to allow people into homes. New construction is fine, but occupied space is a problem. Developing inspection/repair protocols when going into occupied spaces. Supply chain is a concern (e.g. PPE for builders, normal products required for repairs, installations).
- BOMA wonders: what is landlord duty of care? Who enforces rules? However, they say people are largely self-policing effectively.

Changes in energy use due to COVID

- UBC: building occupancy on campus down 90%, but energy use only dropped 15%. Aquatic centres and ice rink use much less energy now, but core physical plants keep operating. It's a learning opportunity for them to understand energy, carbon, HVAC needs in buildings.

NRCan/EnerGuide perspective (provided following the call)

- All EnerGuide services have continued during the pandemic, including the receipt of EnerGuide files to the Housing Division database, responses (technical and administrative) to inquiries from partners and the delivery network, internal quality assurance, policy work and forward-looking development of tools and services
- Testing centres for new energy advisor candidates, managed nationwide on a contract with Yardstick Assessment Strateges, have been closed since mid-March. The closure has been extended until June 30th, with continual review based on guidance from public health officials
- The implications for EA capacity building are being reviewed by the Housing Division and Office of Energy Efficiency, and alternative options are being explored for exam delivery and proctoring.
- Our input from the EnerGuide delivery network on COVID impacts has been similar to what was shared on the call yesterday. Work in new homes is proceeding with a few adjustments, work in existing homes, which was slow already, has essentially stopped.
- Out of interest, Enbridge in Ontario and Efficiency One in Nova Scotia are exploring remote assessments for existing buildings. At this time, the decision from the building science and programs teams in the Housing Division has been that we don't have the resources to develop protocols for EnerGuide that would allow for remote audits (in new or existing homes, but the issue is in existing homes). This is something that could be pursued for EnerGuide, but there won't be a near-term solution

Other: For Information

- BCCA site = https://www.bccassn.com/covid-19/
- BSSB site = https://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards/forms-resources/covid-19

FW: Rollout - Part 3 Step Code Energy Design Report/Checklist Discussion

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: May 20, 2020 5:04:51 PM PDT

Hi Aura,

Please see the response below from Maura of AIBC pertaining to potential additional information that can be collected via BeRT.

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Maura Gatensby <MGatensby@aibc.ca>
Sent: May 19, 2020 4:34 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Lau, Toby' <Toby.Lau@bchydro.com>; Norm Connolly (nconnolly@richmond.ca) <nconnolly@richmond.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Christian Cianfrone (christian@zebx.org) <christian@zebx.org>; Mak, Lisa <Lisa.Mak@bchydro.com>; Hamer, Gary <Gary.Hamer@bchydro.com>; Stelzer, Bertine <Bertine.Stelzer@bchydro.com>; Harshan Radhakrishnan (hradhakrishnan@egbc.ca) <hradhakrishnan@egbc.ca>; 'Jiang, Tao' <Tao.Jiang@surrey.ca>; Sepehr Foroushani (SForoushani@richmond.ca) <SForoushani@richmond.ca>
Cc: Susan MacDougall <susan@focaleng.com>; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Subject: RE: Rollout - Part 3 Step Code Energy Design Report/Checklist Discussion

Hello Scott,

To your 4 points:

- We support collection of data in so far as it demonstrates compliance with a regulation or bylaw.
- We support post occupancy data collection likewise insofar as it demonstrates compliance with a regulation or bylaw, existing or enacted in the future.
- Drawings and reports as submitted for permit application are copyright and made available for use by the AHJ for one purpose only, code compliance, we do not support any of these documents being made available to anyone else for any other purpose. They are copyright materials that cannot by copied or published without the agreement of the creator. This is intellectual property belonging to the creators, that the AHJ has only the limited right to view and retain for purposes of determining code compliance. We do not support drawings or reports added to this or any database. This material is highly sensitive, highly confidential and contains proprietary information.
- We do not consider anything in these checklists /reports to be sensitive, however would defer to the position of UDI and BOMA, as they are more representative of owner's interests.

All the best,

MAURA GATENSBY Architect AIBC CP
Lead Practice Advisor and Regulatory Liaison

Architectural Institute of British Columbia

Suite 100 – 440 Cambie Street
Vancouver, British Columbia V6B 2N5

Direct line: 604.305.2699 e. mgatensby@aibc.ca
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From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: May 19, 2020 3:57 PM
To: 'Lau, Toby' <Toby.Lau@bchydro.com>; Norm Connolly (nconnolly@richmond.ca) <nconnolly@richmond.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Christian Cianfrone (christian@zebx.org) <christian@zebx.org>; Mak, Lisa <Lisa.Mak@bchydro.com>; Hamer, Gary <Gary.Hamer@bchydro.com>; Stelzer, Bertine <Bertine.Stelzer@bchydro.com>; Maura Gatensby <MGatensby@aibc.ca>; Harshan Radhakrishnan (hradhakrishnan@egbc.ca) <hradhakrishnan@egbc.ca>; 'Jiang, Tao' <Tao.Jiang@surrey.ca>; Sepehr Foroushani (SForoushani@richmond.ca) <SForoushani@richmond.ca>
Cc: Susan MacDougall <susan@focaleng.com>; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Subject: RE: Rollout - Part 3 Step Code Energy Design Report/Checklist Discussion

Hi All,

As we near the release of the Part 3 Design Report, I would like to thank all of you for taking time out of your busy schedules to provide your input and support thus far with the development of this tool.
As you all know, we are looking to collect the data outlined in the Part 3 Design Report from local governments to help inform future energy efficiency measures and policy decisions. The voluntary submission of this information will continue until the BeRT tool is fully operational.
In anticipation of tomorrow's meeting, should there be some time at the end of the meeting, we were hoping to have a quick discussion with regards to the BeRT tool and some of the data which we would like to collect in addition to the inputs/outputs as currently outlined in the Part 3 Design Tool, such as post occupancy data.

With the development of the initial tool prototype and user testing in March, the project team is starting to look into data management – collection, usage and storage as well as privacy impact assessment as we plan the next phase of the tool development.

Once again, we are seeking your input and feedback as we develop this tool to standardize the process for demonstrating, gathering and storing data pertaining to energy efficiency for Part 3 buildings. Additionally, the project team is exploring ideas on the BeRT's long-term intention to be a central repository of building information (in addition to energy) from permit submission to post-occupancy.

We would like to discuss the following:

- Any supplemental information that would be useful to collect (e.g., energy modelling documents, architectural, mechanical, electrical drawings etc.)?
- What other types of data would be useful to collect in addition to energy requirements (e.g., post-occupancy performance data, etc.)?
- What type of information constitutes intellectual property or what information would your members be reluctant to disclose privately or publicly?
- Would the information requested in the City of Vancouver's current checklists, or the Part 3 Energy Design Report be considered sensitive?

I look forward to discussing with you further.

Cheers,

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

-----Original Appointment-----
From: Lau, Toby <Toby.Lau@bchydro.com>
Sent: May 1, 2020 1:47 PM
To: Lau, Toby; Norm Connolly (nconnolly@richmond.ca); May, Zachary OHCS:EX; Andersson, Dale OHCS:EX; Williams, Scott B OHCS:EX; Christian Cianfrone (christian@zebx.org); Mak, Lisa; Hamer, Gary; Stelzer, Bertine; Maura Gatensby ; Harshan Radhakrishnan (hradhakrishnan@egbc.ca); 'Jiang, Tao'; Sepehr Foroushani (SForoushani@richmond.ca)
Cc: Susan MacDougall; Mohareb, Adrian ENV:EX; Enright, Patrick
Subject: Rollout - Part 3 Step Code Energy Design Report/Checklist Discussion
When: May 20, 2020 2:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Webex Meeting

Hi everyone,

To allow more time to get more info for the call, Norm and I are suggesting to reschedule the meeting to next Wednesday May 20 starting at 2 pm. Hope the new meeting would work for everyone.

Toby

Hi,

Further to our meeting last week, Christian, Norm and I had a discussion this morning and we would like to suggest we reconvene on the 13th. The preliminary agenda is as follow:

- Demo of the latest version of the Checklist and Design Report spreadsheet;
- New web page for the Part 3 Energy Design Report;
- Roll-out of the Part 3 Checklist/Energy Design Report next steps - discussion;
- …

I hope that proposed meeting time would work for you. If you have any other agenda item(s) which you would like to raise, please let us Norm and I know.

The Webex link to the meeting is below:

JOIN WEBEX MEETING
s.15

Thanks,

Toby

P.S. Harshan, please forward the meeting invite to the working group members that you indicated in our last call.

_____

Toby Lau, M.Sc., P.Eng. | Codes & Standards Principal
Advanced DSM Strategies
Conservation and Energy Management

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RE: Pre-meeting Call: UDI Webinar

From: May, Zachary OHCS:EX
To: Yvonne Lo <ylo@udi.org>, Pander, Sean <sean.pander@vancouver.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, nconnolly@richmond.ca
Cc: Michaela Neuberger <michaela@zebx.org>, Christian Cianfrone (christian@zebx.org) <christian@zebx.org>
Sent: May 21, 2020 9:20:35 AM PDT

That works for me.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Yvonne Lo <ylo@udi.org>
Sent: May 21, 2020 9:20 AM
To: Pander, Sean <sean.pander@vancouver.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; nconnolly@richmond.ca
Cc: Michaela Neuberger <michaela@zebx.org>; Christian Cianfrone (christian@zebx.org) <christian@zebx.org>
Subject: Pre-meeting Call: UDI Webinar

Hi Sean, Patrick, Zachary and Norm,

Would you have time for a pre-meeting call on **May 26th from 3:30pm to 4pm**?

Thanks so much,
Yvonne

Urban Development Institute
ylo@udi.org *Direct:* 604.661.3038 *Cellular:* 604.789.0898
udi.bc.ca

RE: UDI Webinar - Headshot & Bio

From: May, Zachary OHCS:EX
To: Yvonne Lo <ylo@udi.org>
Sent: May 21, 2020 9:46:28 AM PDT

Zachary May is the Director of Strategic Policy for the Province of British Columbia, with the Building and Safety Standards Branch. He is a member of the national standing committee on Energy Efficiency with the National Research Council of Canada. In BC, Zachary is the Chair of the BC Energy Step Code Council and leads the team that is tasked with implementing a provincial code for alterations to existing buildings.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Yvonne Lo <ylo@udi.org>
Sent: May 21, 2020 9:22 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: UDI Webinar - Headshot & Bio

Hi Zachary, could you please kindly confirm? Thanks so much!

From: Yvonne Lo
Sent: Monday, May 18, 2020 1:59 PM
To: Zachary.May@gov.bc.ca
Subject: UDI Webinar - Headshot & Bio

Hi Zachary,

How are you? Hope you & your family are doing well and staying healthy!

It's been a while since we last worked together, I was wondering if I may still use the attached headshot, and bio below.

Please kindly advise.

Thanks so much,
Yvonne

From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: Monday, August 28, 2017 2:08 PM
To: Yvonne Lo
Subject: RE: UDI breakfast September 28

Zachary May is the Acting Director of Policy and Codes Development with the Building and Safety Standards Branch. He is a member of the national standing committee for housing and small buildings (Part 9) with the National Research Council and participates in a number of provincial construction-related committees. In his role with the Building and Safety Standards Branch he leads a technical team responsible for developing and maintaining the BC Building Code, including the recently adopted Energy Step Code.

Zachary D. May, MBA
A/Director, Policy and Codes Development

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Yvonne Lo [mailto:ylo@udi.org]
Sent: August 28, 2017 2:04 PM
To: May, Zachary OHCS:EX
Subject: RE: UDI breakfast September 28

Dear Zachary,

Thanks, that's great to know.

May I have your headshot and short-form bio for our event promotion page?

Kind regards,
Yvonne

From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: Sunday, August 27, 2017 8:09 PM
To: Yvonne Lo <ylo@udi.org>
Subject: RE: UDI breakfast September 28

Hi Yvonne,

15-20 minutes is fine for me.

Best,
Zachary D. May, MBA
A/Director, Policy and Codes Development

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Yvonne Lo [mailto:ylo@udi.org]
Sent: August 25, 2017 3:02 PM
To: May, Zachary OHCS:EX
Subject: RE: UDI breakfast September 28

Dear Zachary,

Happy Friday!

For your presentation, how long do you think you would need? Would 15-20 mins be sufficient?

I am working on the schedule now, so it would be great to have your feedback as I can allocate the correct amount of time.

Have a relaxing weekend,
Yvonne

From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: Friday, August 18, 2017 3:48 PM
To: Yvonne Lo <ylo@udi.org>
Subject: RE: UDI breakfast September 28

Hi Yvonne,

Is the event on September 25th, or 28th? I'm available on either date, but thought it was the 25th.

Zachary D. May, MBA

A/Director, Policy and Codes Development

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Yvonne Lo [mailto:ylo@udi.org]
Sent: August 18, 2017 3:41 PM
To: May, Zachary OHCS:EX; 'McEwen,Brendan'
Subject: RE: UDI breakfast September 28

Thanks so much Zachary for connecting me with Brendan.

Hi Brendan, looking forward to hearing from you.

Have a wonderful weekend,
Yvonne
Manager, Professional Development & Programming
Urban Development Institute
Suite 200 - 602 West Hastings Street
Vancouver, BC V6B 1P2

Direct 604.661.3038
Mobile 604.789.0898
Fax 604.689.8691

www.udi.bc.ca | facebook.com/udibc | twitter.com/udibc

From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: Friday, August 18, 2017 3:34 PM
To: Yvonne Lo <ylo@udi.org>; 'McEwen,Brendan' <bmcewen@richmond.ca>
Subject: UDI breakfast September 25

Hi Brendan,

Yvonne Lo is scheduling a UDI breakfast where Sean Pander and I will give some updates on CoV and Provincial work (Step Code/Building Code). Dave Ramslie was the third but needs to back out. I suggested to Yvonne that you might be a good alternate to speak to the consultations underway in Richmond. Let Yvonne know if that works for you.

Best,
Zachary D. May, MBA
A/Director, Policy and Codes Development

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Pre-meeting Call: UDI Webinar

From: Connolly,Norm <NConnolly@richmond.ca>
To: Yvonne Lo <ylo@udi.org>, Pander, Sean <sean.pander@vancouver.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Michaela Neuberger <michaela@zebx.org>, Christian Cianfrone (christian@zebx.org) <christian@zebx.org>
Sent: May 21, 2020 9:57:16 AM PDT

Hi Yvonne,

I do have meeting conflict at that time (3:30 – 4:30 pm on Tuesday), but I could reach out to the organizer to see if we can adjust the meeting to earlier that afternoon.

-Norm

Norm Connolly | Sustainability Manager, MCIP, RPP
Engineering Department | City of Richmond
6911 No. 3 Road, Richmond BC V6Y 2C1
T|604.247.4676 **C**|604.319.5373
E|nconnolly@richmond.ca

From: Yvonne Lo [mailto:ylo@udi.org]
Sent: Thursday, 21 May 2020 09:20
To: Pander, Sean; Enright, Patrick; Zachary.May@gov.bc.ca; Connolly,Norm
Cc: Michaela Neuberger; Christian Cianfrone (christian@zebx.org)
Subject: Pre-meeting Call: UDI Webinar

Hi Sean, Patrick, Zachary and Norm,

Would you have time for a pre-meeting call on **May 26th from 3:30pm to 4pm**?

Thanks so much,
Yvonne

Urban Development Institute
ylo@udi.org *Direct:* 604.661.3038 *Cellular:* 604.789.0898
udi.bc.ca

Pre-meeting Notes - UDI Webinar (JUN 11)

From:	Yvonne Lo <ylo@udi.org>
To:	Christian Cianfrone (christian@zebx.org) <christian@zebx.org>, Connolly,Norm <NConnolly@richmond.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Pander, Sean <sean.pander@vancouver.ca>
Cc:	Michaela Neuberger <michaela@zebx.org>, Enright, Patrick <Patrick.Enright@vancouver.ca>
Sent:	May 26, 2020 12:52:33 PM PDT
Attachments:	UDI Webinar_GB Regulatory Update_Draft (MNYL edits).docx

Dear Panel,

In preparation for our pre-meeting this afternoon (3:30pm), please find attached the draft outline from Michaela.

Norm, thanks again for changing your other meeting to accommodate this call.

Much appreciated and talk soon,
Yvonne

Urban Development Institute
ylo@udi.org *Direct:* 604.661.3038 *Cellular:* 604.789.0898
udi.bc.ca

UDI Breakfast Webinar: Green Building Regulatory Update

Confirmed Date: **Thursday - June 11, 2020**

Time: 9:30 – 10:30/45 am

TIME	ACTIVITY	DURATION	LEAD
9:15	Dry Run	15	
9:30	UDI Introduction Thank Educational Partner	2	Anne McMullin
9:32	Sponsor Remark Moderator Introduction	2-3	BC Hydro
9:35	ZEBx Introduction Audience polling Panel Introduction	5-7	Christian Cianfrone
9:45	Presentation #1 –	7-10	
9:55	Presentation #2 –	7-10	
10:05	Presentation #3 –	7-10	
10:15	Q&A w/moderator	15-20	All
10:30 ~ 10:45	Webinar concludes		Christian Cianfrone

Event duration: 60 – 75 minutes

Moderator: Christian Cianfrone, ZEBx

Educational support: BC Hydro, New Construction Program

Suggested Panel (5 – 7 minutes presentation time):

- Province: Zachary May, Director of Strategic Policy, BSSB
- City of Vancouver: Sean Pander, Green Building Manager
- City of Richmond: Norm Connolly, Sustainability Manager

Content:

BC Hydro (2-3 minutes)

- Why is BC Hydro supporting this session?
- Outline resources, incentives available to support developers achieve high performance new construction (and potentially existing buildings)

ZEBx Introduction (5 minutes)

- What is ZEBx?

- ZEBx & UDI collaboration (GDS)
- ZEBx programming and offers to support developers (Design Charrettes, Pattern Language course, NZER workshops, Decarb Lunch series)
- Introduction to today's session & speakers

CoV Regulatory Update (10 minutes)

- Climate Emergency Response: Big Move 4 for zero emissions space and water heating new and existing buildings

- Climate Emergency Requirements for New Housing 3-Storeys and Under (Council approved on April 29, 2020):

    - VBBL has been amended requiring all residential space or water heating systems to be zero-GHG-emitting, effective January 2022.
    - A 2 tonne carbon pollution cap has been introduced for new single family and duplex dwellings 325m2+ to lower emissions form the largest new homes, effective January 2021.
- Reminder of upcoming VBBL changes effective Jun 2021 (eg Step 3, GHGI 6 for MURBs 7 storey+).

- Other Updates

Comment: Sean would like to incorporate an easy to use participant live input tool (e.g. Zoom polling) to gather feedback on some pending ideas (embodied carbon in RZ, zero carbon heating and hot water in RZ and appropriate TEDI, logic structure for GHG reg for existing buildings, etc). He could see the presentation including up to 5 short briefs with a couple having one or two audience feedback questions.

BC Energy Step Code Regulatory Update (5 minutes)

- Number of BC municipalities adopted ESC vs have started consultation on ESC: focus on adoption in the Lower Mainland; (This resource would be good way to summarize information but needs to be updated; two examples to mention are the recent Step 5 adoption by West Vancouver and that Prince George started consultation on implementation in February 2020.)

- Overview for which building types ESC metrics have been developed & adopted and which are still outstanding (e.g. public buildings; hospitals)

- Overview of LGs who have approved a lower step for Part 3 buildings with a Low Carbon District Energy System connection

- Resources available: Summary slide with guides available on ESC website, focus on large building resources such as the Guide to Low Thermal Energy Demand for Large Buildings

City of Richmond Energy Step Code Implementation for Part 3 buildings (7 minutes)

- Development / Building Permit processes: What are the major changes for developers in their touch points with LGs? Provide examples for City of Richmon d and highlight commonalities in processes / documents for Part 3 buildings that need to be provided, such as energy modeling results, airtightness testing etc

- Airtightness Testing: BC Energy Step Code requirements for airtightness testing for Part 3 buildings: outline requirements & procedure on a high-level

- Other Updates?

BC Alterations to Existing Building Code (3 – 5 minutes)

- Development of an Alterations to Existing Building Code (AEB Code) policy framework has started in 2019.

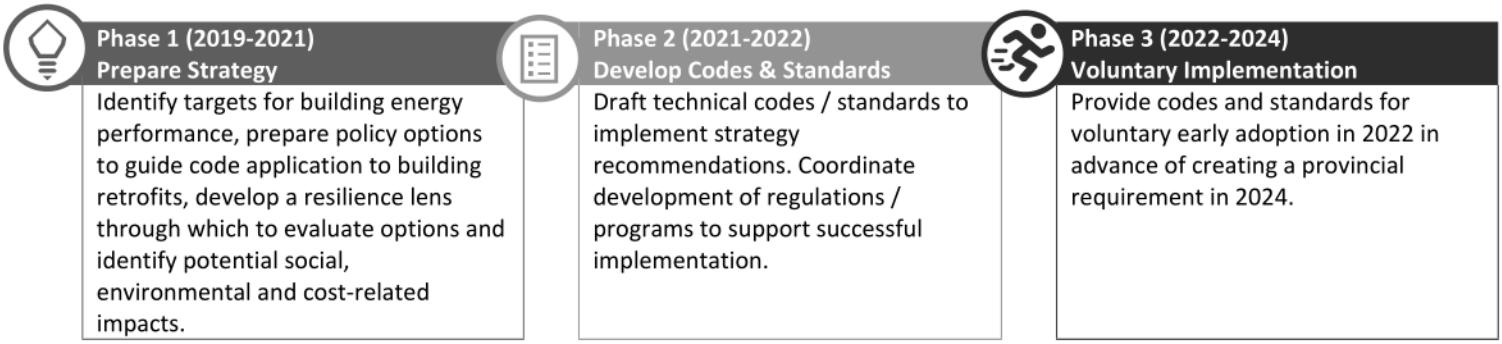
- Project Goal: To provide clear requirements for existing buildings that will enable GHG reductions and increase life safety and resilience for British Columbians.

- Stakeholder feedback: started in 2019 and will continue through the fall of 2020.

- AEB Code to consider seismic and climate risks.

- It is anticipated that the AEB Code will be implemented in 2024.

Project Timeline



Page 056 of 402 to/à Page 060 of 402

Withheld pursuant to/removed as

s.16

Doodle poll: June ESCC meeting

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bdeeks@rdcfinehomes.com <'bdeeks@rdcfinehomes.com'>, bea.bains@fortisbc.com <'bea.bains@fortisbc.com'>, catherine.ernst@boabc.org <'catherine.ernst@boabc.org'>, christian@zebx.org <'christian@zebx.org'>, christine.gillis@canada.ca <'christine.gillis@canada.ca'>, christopher.frye@canada.ca <'christopher.frye@canada.ca'>, christopher.mclellan@canada.ca <'christopher.mclellan@canada.ca'>, Dang, Tommy OHCS:EX <Tommy.Dang@gov.bc.ca>, gary.hamer@bchydro.com <'gary.hamer@bchydro.com'>, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, Guido.Wimmers@unbc.ca <'Guido.Wimmers@unbc.ca'>, hradhakrishnan@egbc.ca <'hradhakrishnan@egbc.ca'>, J.Madden@ubc.ca <'J.Madden@ubc.ca'>, jfisher@udi.org <'jfisher@udi.org'>, jjung@asttbc.org <'jjung@asttbc.org'>, joe.iconhomes@shaw.ca <'joe.iconhomes@shaw.ca'>, kelly@hkrbuilders.com <'kelly@hkrbuilders.com'>, Lisa.Mak@bchydro.com <'Lisa.Mak@bchydro.com'>, mark@havan.ca <'mark@havan.ca'>, Maxwell.Sykes@surrey.ca <'Maxwell.Sykes@surrey.ca'>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>, mchorobik@communityenergy.bc.ca <'mchorobik@communityenergy.bc.ca'>, MGatensby@aibc.ca <'MGatensby@aibc.ca'>, mlohmann@communityenergy.bc.ca <'mlohmann@communityenergy.bc.ca'>, mmcwilliam3@bcit.ca <'mmcwilliam3@bcit.ca'>, msohi@boabc.org <'msohi@boabc.org'>, muneesh@boma.bc.ca <'muneesh@boma.bc.ca'>, NConnolly@richmond.ca <'NConnolly@richmond.ca'>, nheap@richmond.ca <'nheap@richmond.ca'>, patrick.enright@vancouver.ca <'patrick.enright@vancouver.ca'>, ralph.wells@ubc.ca <'ralph.wells@ubc.ca'>, robyn.wark@bchydro.com <'robyn.wark@bchydro.com'>, Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>, sean.pander@vancouver.ca <'sean.pander@vancouver.ca'>, SHorsburgh@rdn.bc.ca <'SHorsburgh@rdn.bc.ca'>, toby.lau@bchydro.com <'toby.lau@bchydro.com'>, Todd.cumiskey@icba.ca <'Todd.cumiskey@icba.ca'>, vanessa@chbabc.org <'vanessa@chbabc.org'>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>, warrenp@bccassn.com <'warrenp@bccassn.com'>, wileung@bchousing.org <'wileung@bchousing.org'>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, msohi@boabc.org, catherine.ernst@boabc.org, sean.pander@vancouver.ca, NConnolly@richmond.ca, Maxwell.Sykes@surrey.ca, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, jjung@asttbc.org, MGatensby@aibc.ca, warrenp@bccassn.com, muneesh@boma.bc.ca, bdeeks@rdcfinehomes.com, joe.iconhomes@shaw.ca, kelly@hkrbuilders.com, hradhakrishnan@egbc.ca, mark@havan.ca, Todd.cumiskey@icba.ca, jfisher@udi.org, christian@zebx.org, Guido.Wimmers@unbc.ca, robyn.wark@bchydro.com, bea.bains@fortisbc.com, christine.gillis@canada.ca, wileung@bchousing.org, toby.lau@bchydro.com, nheap@richmond.ca, mmcwilliam3@bcit.ca, mchorobik@communityenergy.bc.ca, lsampliner@portmoody.ca, Lisa.Mak@bchydro.com

Sent: May 29, 2020 11:53:36 AM PDT

Hello, Energy Step Code Council members:

It is time again for a regular meeting. We're aiming for the third week of June. Unlike our February meeting, this will be held virtually for obvious reasons.

Please indicate your availability via this Doodle poll.

We expect the meeting to be of typical length, with an hour break for lunch. Once we settle on a date, we will have an agenda to circulate.

We look forward to it.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418

Email: hugo.wong@gov.bc.ca

UDI webinar June 11: revised outline

From:	Michaela Neuberger <michaela@zebx.org>
To:	Pander, Sean <sean.pander@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Norm Connolly <nconnolly@richmond.ca>
Cc:	Yvonne Lo <ylo@udi.org>, Stelzer, Bertine <bertine.stelzer@bchydro.com>, Christian Cianfrone <christian@zebx.org>, Patrick Enright <patrick.enright@vancouver.ca>
Sent:	June 1, 2020 2:44:35 PM PDT
Attachments:	UDI Webinar_GB Regulatory Update_Outline V1.docx

Hi Sean, Zac and Norm,

Please find attached a suggested revised outline for the UDI webinar on June 11 based on our conversation last week. Comments:

- Suggested order of content:
  - City of Vancouver: New Construction (Part 9 / Part 3)
  - Province: New Construction (Part 9 & Part 3)
  - City of Richmond: New Construction Implementation (Part 3)
  - Existing Buildings (CoV, Province)
- We could also segment the content further and have all Part 9 new construction first, followed by Part 3 and then existing buildings. The reason I haven't done, is because I wasn't sure that the Provincial update lends itself to being divided this way and because Norm's presentation is going to focus on Part 3. But I'm open to your preferences.
- We suggest to have a brief Q&A section after each presenter/ topic area if questions come up in the chat. This would extend the allotted time for each speaker and reduce the Q & A time at the end.
- The details for each presentation are suggested talking points / examples. Please communicate the priorities that you think are important.
- I would be happy to compile the slide deck centrally, if you prefer. If we go with the suggested order, it might be easier to have the slide deck pre-arranged in advance since we will be going back and forth between the speakers. If this is your preference, please send me your slides by noon on June 10.
- If you would like to include polling questions in your section, please send the questions and answer options to Yvonne and myself by June 9 so that Yvonne has enough time to set up the polling. Christian and I will finalize the polling questions for the introduction and end.

Feel free to make modifications to the attached outline, respond via email, or give me a call to discuss (cell 604.499.3744).

Thank you,

Michaela

UDI Breakfast Webinar: Green Building Regulatory Update

Confirmed Date: **Thursday - June 11, 2020**

Time: 9:30 – 10:30/45 am
Event duration: 60 – 75 minutes

Moderator: Christian Cianfrone, ZEBx
Educational support: BC Hydro, New Construction Program

Panel (~10 minutes presentation time):

- City of Vancouver: Sean Pander, Green Building Manager
- Province: Zachary May, Director of Strategic Policy, BSSB
- City of Richmond: Norm Connolly, Sustainability Manager

Session Overview

TIME	ACTIVITY	DURATION	LEAD
9:15	Dry Run	15	
9:30	UDI Introduction Thank Educational Partner	2	Anne McMullin
9:32	Sponsor Remark Moderator Introduction	2-3	BC Hydro, Bertine Stelzer
9:35	ZEBx Introduction Audience polling Panel Introduction	5-7	Christian Cianfrone
9:45	**Presentation #1 – New Construction, City of Vancouver**	8	Sean Pander
9:58	**Presentation #2 – New Construction, Province**	8	Zac May
10:06	**Presentation #3 – New Construction, City of Richmond**	7	Norm Connolly
10:13	**Presentation #4 – Existing Buildings**	7	Sean, Zac
10:20	Q&A w/moderator	10-20	All
10:30 ~ 10:40	Webinar concludes		Christian Cianfrone

Session Agenda

Time	Agenda	Who / Notes
9:15	**Test technology** - Set up and test Zoom meeting, share screen	Speakers to join at this time
9:30	**Intro:** UDI Thank educational partner	Anne McMullin to welcome participants, thank educational partner and introduce Bertine
9:32	**Educational Partner Remarks** ● Why is BC Hydro supporting this session? ● Outline resources, incentives available to support developers achieve high performance new construction (and potentially existing buildings)	Bertine Stelzer Introduce Christian Cianfrone
9:35	**ZEBx Introduction** ● What is ZEBx? ● ZEBx & UDI collaboration (GDS) ● ZEBx programming and offers to support developers (Design Charrettes, Near Zero program) ● Session context: despite COVID, provincial and local governments are going ahead with implementing green building policies and requirements as planned; no redirection happening ● Incentives available to support developers to build high performance buildings e.g. Density bonusing: New Westminster, CoV ● Number of PH projects in Vancouver → show voluntary leadership ● Audience polling (if relevant) ● Panel Introduction Launch first poll: Have you been involved in more than one Passive House or Step 3+ project?	Christian Cianfrone Set session context; Show momentum, build confidence Yvonne to launch poll Introduce Sean, Zac and Norm
9:45	**City of Vancouver Green Building Update (New Construction)** **Part 9** Climate Emergency Requirements for New Housing 3-Storeys and Under (Council approved on April 29, 2020): ● VBBL has been amended requiring all residential space or water heating systems to be zero-GHG-emitting, effective January 2022. ● A 2 tonne carbon pollution cap has been introduced for new single family and duplex dwellings 325m2+ to	Sean Pander *Please note these are just suggested discussion points / examples.* Yvonne to launch poll Christian to monitor chat / Q&A

	lower emissions form the largest new homes, effective January 2021. • Moving closer into alignment with the BC Energy Step Code for residential buildings 4-6 storeys, effective January 1, 2021. **Part 3** Reminder of upcoming VBBL changes effective Jun 2021 (eg Step 3, GHGI 6 for MURBs 7 storey+). Draft Rezoning Policy Update (future looking) • Zero emissions heating & hot water • Embodied Carbon reductions • Climate Resilience 2050 ready • Formal consultation to take place <u>Launch second poll:</u> Does the CoV want to collect feedback on the future policy changes that are being considered (e.g. embodied carbon in rezoning, zero carbon heating & hot water and appropriate TEDI)? **Audience Q & A**	*Please let us know in advance if you would like to ask polling questions.* Christian to ask Sean audience questions
9:58	**Provincial Energy Step Code Update (New Construction)** • Number of BC municipalities adopted ESC vs have started consultation on ESC: focus on adoption in the Lower Mainland; • Overview for which building types ESC metrics have been developed & adopted and which are still outstanding (e.g. public buildings; hospitals) • 2022 BC Building Code: lower steps of the BC Energy Step Code will no longer be optional as the minimum energy-efficiency requirements for all buildings will increase by approximately 20%--or what is currently Step 3 for Part 9 residential buildings (Steps 4 and 5 for Part 9 residential buildings will remain optional) and Step 2/3 for Part 3 buildings. • Additional improvements anticipated in 2027 (approximately 20% to Step 4/Part 9 residential) and again in 2032 to achieve net-zero energy-ready as a minimum standard at that time. **Audience Q & A**	Zachary May Christian to monitor chat / Q&A (This <u>resource</u> might be good way to summarize ESC adoption information but needs to be updated; two examples to mention are the recent Step 5 adoption by West Vancouver and that Prince George started consultation on implementation in February 2020.) *Please note these are just suggested discussion points / examples.* Christian to ask Zac audience questions
10:06	**Local Government Energy Step Code Implementation for Part 3 buildings** • Update how local governments are implementing the Step Cod, not just City of Richmond but Lower Mainland focus.	Norm Connolly Christian to monitor chat / Q&A

	• Development / Building Permit processes: What are the major changes for developers in their touch points with LGs? Provide examples for City of Richmond and highlight commonalities in processes / documents for Part 3 buildings that need to be provided, such as energy modeling results, airtightness testing etc • Overview of LGs who have adopted a two-tiered (Step down) Step Code approach for Part 3 buildings with a Low Carbon District Energy System connection; relaxations for Low Carbon energy systems; **Audience Q & A**	*Please note these are just suggested discussion points / examples.*
10:13	**City of Vancouver Green Building Update (Existing Buildings)** • Climate Emergency Big Move #4: Zero Emissions space heating and hot water for replacements by 2025 (target date) • Announce that research, policy development, and consultation ongoing for existing buildings and that plan is to bring report to Council by end of 2020	Sean Pander Christian to monitor chat / Q&A *Please note these are just suggested discussion points / examples.*
10:16	**BC Alterations to Existing Building Code** • Development of an Alterations to Existing Building Code (AEB Code) policy framework has started in 2019. • Project Goal: To provide clear requirements for existing buildings that will enable GHG reductions and increase life safety and resilience for British Columbians. • Stakeholder feedback: started in 2019 and will continue through the fall of 2020. • AEB Code to consider seismic and climate risks. • It is anticipated that the AEB Code will be implemented in 2024. **Audience Q & A**	Zac May Christian to monitor chat / Q&A *Please note these are just suggested discussion points / examples.* Christian to ask Zac audience questions
10:20	**Panel Q & A** **Final Poll** Did the presentations and discussion today improve your understanding of provincial and local government regulatory changes related to green buildings?	Christian to moderate Yvonne to launch poll
10:40	**Thanks & Close out**	Christian to thank everyone and close out

Econ Reco correspondence

From: May, Zachary OHCS:EX
To: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>, Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: June 5, 2020 4:29:09 PM PDT
Attachments: 2020-05-28 COVID economic recovery_MAH.pdf

Jessica and Andrew,

I have been assigned a response for Minister's Signature. I am recommending we provide a response thanking them for their input and commit to staff following up in the future (can we put a timeline on this?). I'm sure the Minister would like to say something of substance, but without any direction on recovery planning we risk getting ahead of things.

Please let me know if you think we should begin work on a more detailed response to the policy requests, but given the focus on transition I don't believe we can draft a meaningful response to the recovery proposals.

Hope you both have a great weekend.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

May 29, 2020

Honourable Selina Robinson, MLA
Minister of Municipal Affairs and Housing
Room 310, Parliament Buildings
Victoria, BC V8V 1X4
Sent by email: MAH.minister@gov.bc.ca

Dear Minister,

The real estate sector is a critical pillar of the British Columbian economy. During these unprecedented times of social and economic disruption, it is ever-more important that the housing sector work closely with government to mitigate the myriad challenges people and businesses are facing, while laying the groundwork for economic recovery.

As organizations that represent key professions in the BC real estate sector, we have partnered to review existing measures and identify support gaps and urgently needed actions to assist in COVID-19 economic recovery.

As a result, we have developed the following recommendations, designed to further the government's efforts to:

- prevent bankruptcies and insolvencies that result in job loss, lost government revenue and greater demand for taxpayer-backed government assistance,
- allow British Columbians to keep their homes through tough times and remain in their communities,
- help more British Columbians find and afford safe, appropriate housing to either rent or own, and
- support the broader economic recovery of BC.

The following represents our first set of recommendations for immediate implementation while government continues to manage the first stages of the pandemic and the reopening plan. In the next few months, we will provide long-term recovery recommendations for Phases 3 and 4 of BC's Restart Plan.

Support for property owners, tenants and buyers

The BC economy lost nearly 400,000 jobs in March and April and a recent survey by the Canadian Federation of Independent Business reports that 32 per cent of businesses are not sure they will be able to reopen. These harms are being felt by property owners, tenants and builders, many of whom are struggling. While we appreciate the Canada Emergency Commercial Rent Assistance for commercial owners and tenants and the BC Temporary Rental Supplement program for residential landlords and tenants, additional economic relief is necessary to ease the level of financial disruption and economic hardship currently being experienced.

Support for homebuyers helps British Columbians access the most appropriate housing for their needs while supporting jobs in a wide variety of industries across the province. A 2019 report by The Canadian Real Estate Association estimates that, between 2016 and 2018, the sale and purchase of homes on the Multiple Listing Service® generated 50,000 direct and indirect jobs in BC. Further, as first-time buyers enter the housing market, the units they vacate become available to new tenants, adding much-needed supply to the rental market.

Additional measures that support safe practices will benefit professionals and consumers by ensuring consumers are protected, increasing access to information and reducing costs. Our recommendations will help bridge the gap while recovery is underway with only temporary impacts to provincial and municipal revenues.

We recommend the Provincial Government:

- Support the Union of BC Municipalities' recommendation to expand the Property Tax Deferral Program to all residential taxpayers; this should include purpose-built rental housing and residential development lands. Doing so will help property owners manage their expenses, including builders seeking to make more housing options available to British Columbians.
- Reduce or eliminate cost and access barriers for appraisers to Land Title and Survey Authority and BC Assessment data until restrictions are lifted to allow the mechanisms of finance for commercial and residential real estate to serve the needs of public during this time. Physical and social distancing guidelines restrict on-site property accessibility and require appraisers to collect and verify additional data, resulting in potential increased risks, costs and delays for consumers.
- Introduce a program in partnership with the Federal Government to fund residential and commercial landlords that have accrued rent deficits as a result of COVID-19. This program would help mitigate the impacts of rental deficits faced by landlords and tenants by working to prevent insolvencies and foreclosures.

Encourage housing supply and property development

The COVID-19 pandemic has exacerbated the growing mismatch between housing demand and residential construction. Many construction projects have slowed down and new developments have not launched, which will increase the strain on our housing supply. BC Stats predicts the province's population will increase by over 1.3 million people by 2041, and the British Columbia Real Estate Association expects housing sales to increase in 2021. All levels of government have the opportunity to encourage more homes available for rent or purchase – allowing more British Columbians access to affordable, appropriate housing.

We recommend the Provincial Government:

- Strongly encourage local governments to fast-track development applications by adopting ideas from the Development Approvals Process Review.
- Support local governments so development cost charges (DCCs) can be paid when building permits are issued rather than at the subdivision stage. This would ease the crisis for builders working on subdivision projects who want to move forward with projects but are paying their DCCs early in the process.
- Extend the 12-month grandfathering period for DCCs by an additional six months. Currently, when DCC rates increase, developments that are already underway or receive building permits within 12 months are exempt from the increase.

Recommendations to other BC ministries and organizations

In addition to these recommendations for your ministry, we have also sent the following to other ministries and agencies.

Attorney General and Minister of Finance:

- Invest in public education campaigns focused on how to detect and avoid red flags in the mortgage process. Emergency measures related to the pandemic have placed many British Columbians under increased financial pressure, which can in turn increase their risk of being a target for mortgage fraud. Campaigns should be directed at prospective buyers who are most likely to be targeted by fraudsters, including people experiencing increased financial pressure, first-time buyers and newcomers to Canada.

Office of the Superintendent of Real Estate:

- Permanently extend the timelines set out in Policy Statements 5 and 6 (pursuant to the *Real Estate Development Marketing Act*) to allow for an early marketing period for new developments of 12 months and a 15-month period to obtain a building permit

and satisfactory financing commitment before buyers can unilaterally terminate their pre-sale contracts.

Recommendations to the federal and local governments

We ask the BC Government to encourage the federal and local governments to implement the following actions to assist in BC's economic recovery. We have sent the following recommendations to the federal and local governments:

Federal Government:

- Permanently provide renovation tax credits for all property owners, retroactive from May 1, 2020. This is important for renovation projects underway that are at risk of being cancelled as well as to incent new projects – especially to help all property owners voluntarily retrofit existing buildings to improve energy efficiency and reduce greenhouse gas emissions.
- Exempt existing mortgage holders from the mortgage stress test at the time of renewal when switching lenders.
- Consult with the real estate sector if considering any amendment to regulatory mortgage underwriting guidelines, product restrictions or other relevant matters that could impact existing or perspective homeowners and those who serve them.

Local governments:

- Some municipalities are seeking to prioritize the housing market's recovery by fast-tracking development projects, and we encourage all local governments to do so. Some measures that could be considered include:
    - relaxing other defined deadlines in municipal bylaws, such as deferring timelines of development and building permit applications from May until the beginning of Phase 3 of BC's Restart Plan,
    - amending policies that require physical meetings, such as public hearings, with municipal representatives and members of the general public, by allowing virtual access to meetings,
    - waiving public hearings for projects that fit existing design guidelines, Official Community Plan designations and other existing policies, pursuant to *Local Government Act*, and
    - adopting other measures described in the Development Approvals Process Review.

We are committed to working with your government to develop and implement efficient business solutions during this time of crisis. We are happy to discuss any of the above recommendations in more detail and lend sector expertise, data or analysis as needed. Please email Trevor Hargreaves, Vice President of Government Relations at the BC Real Estate Association for follow up (thargreaves@bcrea.bc.ca or 1-236-333-4572).

Yours sincerely,

Christina Bhalla
Executive Director
British Columbia Association of the Appraisal Institute of Canada
christina@appraisal.bc.ca

Darlene Hyde
Chief Executive Officer
British Columbia Real Estate Association
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Damian Stathonikos
President
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Neil Moody
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LandlordBC
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Randal Slavens
President and Board Chair
Mortgage and Title Insurance Industry Association of Canada
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Jason Kiselbach
Chair
NAIOP
jason.kiselbach@cbre.com

Anne McMullin
President & CEO
Urban Development Institute
AMcMullin@udi.org

Copies:
Honourable Harry Bains, Minister of Labour (harry.bains@leg.bc.ca)
Honourable George Chow, Minister of State for Trade (george.chow@leg.bc.ca)
Honourable Michelle Mungall, Minister of Jobs, Economic Development and Competitiveness (JEDC.minister@gov.bc.ca)
John Martin, MLA – Chilliwack (john.martin.mla@gov.bc.ca)
Coralee Oakes, MLA – Cariboo North (coralee.oakes.mla@leg.bc.ca)
Todd Stone, MLA – Kamloops-South Thompson (todd.stone.mla@gov.bc.ca)
Jordan Sturdy, MLA – West Vancouver-Sea to Sky (jordan.sturdy@leg.bc.ca)
Trevor Hughes, Deputy Minister of Labour (LBR.Deputy@gov.bc.ca)
Kaye Krishna, Deputy Minister of Municipal Affairs and Housing (mah.deputyminister@gov.bc.ca)
Fazil Mihlar, Deputy Minister of Jobs, Economic Development and Competitiveness (DM.JTT@gov.bc.ca)
Danine Leduc, Assistant Deputy Minister of Labour (Danine.ledug@gov.bc.ca)
Gregory Steves, Assistant Deputy Minister of Municipal Affairs and Housing (Gregory.steves@gov.bc.ca)
Monica Jang, Director, Executive Operations, Economic Development and Competitiveness (Monica.Jang@gov.bc.ca)
Teresa Liu, Ministry of Jobs, Economic Development and Competitiveness (Teresa.Liu@gov.bc.ca)

Doug Page, Ministry of Municipal Affairs and Housing
(doug.page@gov.bc.ca)

RE: [EXT] Re: UDI webinar June 11: revised outline

From: Connolly,Norm <NConnolly@richmond.ca>
To: Michaela Neuberger <michaela@zebx.org>, Pander, Sean <sean.pander@vancouver.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Christian Cianfrone <christian@zebx.org>
Sent: June 8, 2020 8:05:58 AM PDT

Morning all,

I guess I was going by the original outline and what I remembered from our call.

I am setting up my short presentation to cover off what local governments (focusing on Metro Vancouver) are doing with respect to supporting the Step Code transition for Part 9 and Part 3 new construction, and some of the regulatory and policy levers that LG's are using to drive low carbon energy systems (Step Code relaxations) as well and incent the top levels of the Step Code / Passive house. I wasn't going to steal any thunder from Sean's presentation, so am focusing on muni's outside CoV. I do make the point within my presentation that the provincial and federal Code timelines to NZER means that we all meet at the same place eventually.

I had planned for 7-9 slides, but can adjust as needed. My deck is only partially completed at this point ☺

-Norm

Norm Connolly | Sustainability Manager, MCIP, RPP
Engineering Department | City of Richmond
6911 No. 3 Road, Richmond BC V6Y 2C1
T|604.247.4676 **C**|604.319.5373
E| nconnolly@richmond.ca

From: Michaela Neuberger [mailto:michaela@zebx.org]
Sent: Friday, 5 June 2020 11:02
To: Pander, Sean
Cc: May, Zachary OHCS:EX; Connolly,Norm; Christian Cianfrone
Subject: Re: [EXT] Re: UDI webinar June 11: revised outline

Thanks Sean, for your response. I suggested not to divide it up by building type but rather only by new construction vs existing buildings since I thought that the Provincial Update is applicable to both building types and Norm will only speak to P3. I'm open to change it around. Another consideration is that if we go back and forth a lot between speakers, having a centralized slide deck would be much better, which requires a little more time before hand. Anyways, let me know your final decision.

Thanks,
Michaela

On Fri, Jun 5, 2020 at 10:53 AM Pander, Sean <sean.pander@vancouver.ca> wrote:

> Michaela – I thought we had decided to do by building type if you could figure way to facilitate between speakers. That said, given where we are wrt timeline and that I will just barely have time to put some slides together before Thursday, I think we go with your structure and order. I'll outline my draft speaking points for Zach, Norm and Christian Monday and see if I should add, omit or emphaisize something given what they want to cover.
>
> **Sean Pander | Green Building Manager**
> Planning, Urban Design & Sustainability | City of Vancouver
> City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
> t: 604.871.6542
> **sean.pander@vancouver.ca**
>
> **From:** Michaela Neuberger [mailto:michaela@zebx.org]
> **Sent:** Friday, June 5, 2020 10:42 AM
> **To:** Pander, Sean; May, Zachary OHCS:EX; Norm Connolly
> **Cc:** Yvonne Lo; Stelzer, Bertine; Christian Cianfrone; Enright, Patrick

Subject: [EXT] Re: UDI webinar June 11: revised outline

City of Vancouver security warning: Do not click on links or open attachments unless you were expecting the email and know the content is safe.

Dear All,

I am following up on my email below. I haven't heard back from anyone except for Bertine and wanted to check-in to ask whether I can support with anything to finalise preparations for the June 11 webinar.

In particular, it would be great to know whether you are ok to go with the suggested order of content, individual Q&A after each section, and if you will share your own screen or want me to compile the slide deck centrally.

Thank you,
Michaela

On Mon, Jun 1, 2020 at 2:44 PM Michaela Neuberger <michaela@zebx.org> wrote:

> Hi Sean, Zac and Norm,
>
> Please find attached a suggested revised outline for the UDI webinar on June 11 based on our conversation last week. Comments:
>
> - Suggested order of content:
> - City of Vancouver: New Construction (Part 9 / Part 3)
> - Province: New Construction (Part 9 & Part 3)
> - City of Richmond: New Construction Implementation (Part 3)
> - Existing Buildings (CoV, Province)
> - We could also segment the content further and have all Part 9 new construction first, followed by Part 3 and then existing buildings. The reason I haven't done, is because I wasn't sure that the Provincial update lends itself to being divided this way and because Norm's presentation is going to focus on Part 3. But I'm open to your preferences.
> - We suggest to have a brief Q&A section after each presenter/ topic area if questions come up in the chat. This would extend the allotted time for each speaker and reduce the Q & A time at the end.
> - The details for each presentation are suggested talking points / examples. Please communicate the priorities that you think are important.
> - I would be happy to compile the slide deck centrally, if you prefer. If we go with the suggested order, it might be easier to have the slide deck pre-arranged in advance since we will be going back and forth between the speakers. If this is your preference, please send me your slides by noon on June 10.
> - If you would like to include polling questions in your section, please send the questions and answer options to Yvonne and myself by June 9 so that Yvonne has enough time to set up the polling. Christian and I will finalize the polling questions for the introduction and end.
>
> Feel free to make modifications to the attached outline, respond via email, or give me a call to discuss (cell 604.499.3744).
>
> Thank you,
>
> Michaela

--
Michaela Neuberger | Director of Operations

Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

--

Michaela Neuberger | Director of Operations
Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

FW: Invite to Vancouver's Climate Emergency - Building decarbonization advisory committee

From: May, Zachary OHCS:EX
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: June 8, 2020 9:56:24 AM PDT

FYI

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pander, Sean <sean.pander@vancouver.ca>
Sent: June 8, 2020 9:55 AM
To: Christine Gustafson <Christine@harbourgreene.ca>; Conor Reynolds <Conor.Reynolds@metrovancouver.org>; davidh@landlordbc.ca; dstathonikos@boma.bc.ca; Faught, Brady <Brady.Faught@vancouver.ca>; Gary Milligan <s.22 >; jfisher@udi.org; JOwen@surrey.ca; Karen Tam Wu <KarenTW@pembina.org>; Kim Barbero <kbarbero@mcabc.org>; Leigha Worth <lworth@bcpiac.com>; mark@havan.ca; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; prussell@richmond.ca; Rebecca (Sustainabiliteens) <s.22 >; Robyn Wark <Robyn.Wark@bchydro.com>; Sherry Yano <sYano@davidsuzuki.org>; tony@choa.bc.ca; White, Phil <Phil.White@vancouver.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Christian Cianfrone (christian@zebx.org) <christian@zebx.org>
Cc: Lang, Micah <Micah.Lang@vancouver.ca>; Scott Castro, Brenda <brenda.scott@vancouver.ca>; Faught, Brady <Brady.Faught@vancouver.ca>; Jimenez, Jaclyn <jaclyn.jimenez@vancouver.ca>
Subject: Invite to Vancouver's Climate Emergency - Building decarbonization advisory committee

Respected Colleagues,

I am Vancouver's Green Building Manager. Our team leads the City's efforts to decarbonize buildings in Vancouver. I am writing this morning to invite you to join Vancouver's Climate Emergency Big Move 4 External Advisory Committee (BM4EAC for short) for Zero Emissions Buildings.

Big Move 4 of Vancouver's Climate Emergency Response (2019) directed staff to begin developing plans to **ensure all** new and **replacement heating and hotwater equipment is zero emissions by 2025** and to reduce greenhouse gas emissions in Vancouver by 50% by 2030. While this work is meant to shape how the City continues to roll-out its Zero Emissions Building Plan (2016), the emphasis of the new planning work is focused on how to get deep emission reductions from existing buildings.

Meeting these objectives will be effectively impossible for the City to achieve on its own; our success will require alignment in thinking and action from a broad range of partners and will need to carefully weigh the tradeoffs that meaningful action will entail. While we have numerous research initiatives and technical experts involved in shaping this work, the BM4EA's role will be to challenge and inform staff thinking on our strategic direction, to maximize this alignment, and to help us balance the tradeoffs.

At a minimum, BM4EAC involvement will include participating in 2-3 meetings over the next 5 months to share your ideas, concerns, and to identify areas for further research and consultation. The outcome will be incorporated as part of our recommendations to Council in November on Vancouver's Climate Emergency Action Plan and a detailed Zero Emission Buildings Retrofit Plan. As part of these meetings, additional opportunities will likely arise to participate in this work further but these will be optional and specific to individual committee members.

I will follow-up this email with an e-poll to check availability for the first Committee meeting on either morning of Jun 22 or afternoon of Jun 18. If you'd like more information on the Committee's role, expectations for participation, or feel there maybe another representative from your organization that would be better suited to participate, please contact me directly to discuss.

At this first meeting, we will present and discuss the main elements of the draft Plan including:

- New buildings actions and importance
- Clear Retrofit Signals and Flexible Requirements
- Supporting Voluntary Leaders
- Building Capacity
- Removing Barriers
- Access to renewable energy
- Equity
- Follow-up actions

I hope you will be able to support us as your voice and the people it represents is critical in this important work.

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver

City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
t: 604.871.6542
sean.pander@vancouver.ca

RE: Econ Reco correspondence

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Sent: June 8, 2020 10:15:12 AM PDT

Agreed. In the meantime I will review and suggest any questions.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE

Executive Director, Building and Safety Standards Branch

Email: Andrew.PapeSalmon@gov.bc.ca

Cell: 250-812-1933

On Jun 8, 2020 9:45 AM, "May, Zachary OHCS:EX" <Zachary.May@gov.bc.ca> wrote:

Hi Andrew,

Any further thoughts on this? JEDC will likely want to coordinate (or lead) if we move ahead with a listening session, since they are leading the construction transition table that includes UDI and CHBA-BC. I believe Landlord BC, BOMA, and UDI are represented at the MURB table that Housing Policy is leading, so many (not all) of these stakeholders are included in active listening tables.

My recommendation:
I will assign this for response with a thank-you and commitment to incorporate this input into our recovery planning, and staff will follow up if they have any questions. If we are able to get a mandate to move forward with recovery planning and engagement with stakeholders, we can follow up with these stakeholders to organize a meeting. I think we risk stakeholder fatigue if we continue to set up meetings with no ability to commit to any action.

Please confirm if you're ok with this course of action, or if you would like more detailed commitments in the response. It will be coming to both of you in eapps in the next couple days.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Sent: June 5, 2020 5:05 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: RE: Econ Reco correspondence

I wonder if it would be worth sending some holding messaging as you've recommended Zac, and checking in with Cim about the sector tables to see if these perspectives are represented there and if so, how this input fits in with those conversations. Entirely appreciating the value of a listening session, we will want to make sure we're aligned with any transition listening that may be underway, and concurrently, making sure that we're not getting ahead of any thinking that may be coming on recovery.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 5, 2020 4:29 PM
To: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>

Subject: Econ Reco correspondence

Jessica and Andrew,

I have been assigned a response for Minister's Signature. I am recommending we provide a response thanking them for their input and commit to staff following up in the future (can we put a timeline on this?). I'm sure the Minister would like to say something of substance, but without any direction on recovery planning we risk getting ahead of things.

Please let me know if you think we should begin work on a more detailed response to the policy requests, but given the focus on transition I don't believe we can draft a meaningful response to the recovery proposals.

Hope you both have a great weekend.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Econ Reco correspondence

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Sent: June 8, 2020 10:42:09 AM PDT

Sounds good. Thanks Andrew.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: June 8, 2020 10:15 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
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To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>

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Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: delays in construction

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 8, 2020 12:39:01 PM PDT

If we are discussing the language in the MO which describes grandfathering of 'in-flight' construction to prior code requirements, I question whether we could achieve the desired outcome by repealing and revising the order because the issue is the local authority exercising power it already has.

The current order's language describes as acceptable "work stoppages considered reasonable in the building industry" which may be sufficiently broad to include a global pandemic of this nature. As well, the limitations periods order already grants statutory decision makers the latitude to "waive, suspend or extend a mandatory time period relating to the exercise of that power," i.e. extend the expiry date of a building permit.

Short of imposing a building bylaw on an inflexible local authority (which has its own considerable implications), our best avenue is diplomacy.

T

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: June 8, 2020 11:54 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: RE: delays in construction

Hi Zac,

We are talking about the adoption order language that says this code applies to permits on or after a certain date and not to a building under a previous permit unless there was an unreasonable delay in the construction? Note the language is not actually in the code- it is on the adopting order for the code… you may wish to slightly adjust the wording to reflect.

I was not aware that LG's have bylaws on this. I think this is a matter left to LG discretion and your monitor approach is likely sufficient- are there examples of this becoming a problem or is it just speculation at this point? I don't think we could influence their bylaws in any way. The only thing I could think of would be to repeal that language and replace it, but I don't know what we would replace it with, or how or even if it would make a difference. It really needs to be assessed on a project by project basis.

Jun'ichi Jensen
Team Lead, Codes and Standards
Building and Safety Standards
Province of BC
250 858 1325
or 778 974-3910

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 8, 2020 11:24 AM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: delays in construction

Hi Juni and Tiffany,

I am responding to a letter from UDI, which includes a request for action to clarify the unusual delays language in Division A of the BCBC. Some LGs have defined a reasonable delay in bylaw, I think Jeff mentioned 6-months as an example. This is causing concern with developers. Do the two of you have any thoughts on whether we need to take action, or is the monitor and coordinate steps I mention below enough?

Zachary, thanks for the information regarding delays in work and the *BC Building Code* (*BCBC*) which informs local governments that there are limits to how long Building Permits can last if delays occur in construction. There is a concern that several local governments have established time limits due to this provincial regulation. As I said in our phone call on April 23, the Province may need to extend these time periods during the COVID-19 pandemic. Would the Province's emergency powers allow you to extend the time limits on municipal Building Permits? The *BCBC* measure was put in place to ensure new buildings comply with the latest version of it. However, it does not appear that there will be another update for a while.

- We do note anticipate any change to the regular adoption of the model National Building Code on a roughly 5-year cycle as a result of COVID-19
- The province is working closely with local governments to ensure that impacts to construction are minimized. The language in the Building Code that relates to delays in construction did not consider a pandemic and are intended to apply to unusual delays on a project, not across the sector.
- We will be reinforcing this message with building officials and may consider further actions if this becomes a widespread issue.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: delays in construction

From: May, Zachary OHCS:EX
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: June 8, 2020 1:44:38 PM PDT

Thanks both. This is very helpful.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: June 8, 2020 12:39 PM
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To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
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- We do note anticipate any change to the regular adoption of the model National Building Code on a roughly 5-year cycle as a result of COVID-19
- The province is working closely with local governments to ensure that impacts to construction are minimized. The language in the Building Code that relates to delays in construction did not consider a pandemic and are intended to apply to unusual delays on a project, not across the sector.
- We will be reinforcing this message with building officials and may consider further actions if this becomes a widespread issue.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

REMINDER: Doodle Poll: Invite to Vancouver's Climate Emergency - Building decarbonization advisory committee

From: Jimenez, Jaclyn <jaclyn.jimenez@vancouver.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, White, Phil <Phil.White@vancouver.ca>, Robyn Wark <Robyn.Wark@bchydro.com>, Rebecca (Sustainabiliteens) <s.22 >, prussell@richmond.ca, Leigha Worth (lworth@bcpiac.com) <lworth@bcpiac.com>, Kim Barbero (kbarbero@mcabc.org) <kbarbero@mcabc.org>
Cc: Pander, Sean <sean.pander@vancouver.ca>
Sent: June 9, 2020 5:29:55 PM PDT

Forwarding a reminder…

From: Jimenez, Jaclyn
Sent: Monday, June 8, 2020 10:38 AM
To: Pander, Sean; Christine Gustafson; Conor Reynolds; davidh@landlordbc.ca; dstathonikos@boma.bc.ca; Faught, Brady; Gary Milligan; jfisher@udi.org; JOwen@surrey.ca; Karen Tam Wu; Kim Barbero; Leigha Worth ; mark@havan.ca; Nathaniel.gosman@gov.bc.ca; prussell@richmond.ca; Rebecca (Sustainabiliteens); Robyn Wark; Sherry Yano; tony@choa.bc.ca; White, Phil; Zachary.May@gov.bc.ca; Christian Cianfrone (christian@zebx.org)
Cc: Lang, Micah; Scott Castro, Brenda; Faught, Brady
Subject: Doodle Poll: Invite to Vancouver's Climate Emergency - Building decarbonization advisory committee

https://doodle.com/poll/h5qfekgpb8877wgz

Options are:
Thursday, June 18 @ 1:30 pm
Monday, June 22 @ 9:30 am

Thank you,

Jaclyn Jimenez | **Administrative Assistant**
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
jaclyn.jimenez@vancouver.ca | 604.873.7748

This email is being sent from the unceded territory of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh)

From: Pander, Sean
Sent: Monday, June 8, 2020 9:55 AM
To: Christine Gustafson; Conor Reynolds; davidh@landlordbc.ca; dstathonikos@boma.bc.ca; Faught, Brady; Gary Milligan; jfisher@udi.org; JOwen@surrey.ca; Karen Tam Wu; Kim Barbero; Leigha Worth ; mark@havan.ca; Nathaniel.gosman@gov.bc.ca; prussell@richmond.ca; Rebecca (Sustainabiliteens); Robyn Wark; Sherry Yano; tony@choa.bc.ca; White, Phil; Zachary.May@gov.bc.ca; Christian Cianfrone (christian@zebx.org)
Cc: Lang, Micah; Scott Castro, Brenda; Faught, Brady; Jimenez, Jaclyn
Subject: Invite to Vancouver's Climate Emergency - Building decarbonization advisory committee

Respected Colleagues,

I am Vancouver's Green Building Manager. Our team leads the City's efforts to decarbonize buildings in Vancouver. I am writing this morning to invite you to join Vancouver's Climate Emergency Big Move 4 External Advisory Committee (BM4EAC for short) for Zero Emissions Buildings.

Big Move 4 of Vancouver's Climate Emergency Response (2019) directed staff to begin developing plans to **ensure all** new and **replacement heating and hotwater equipment is zero emissions by 2025** and to reduce greenhouse gas emissions in Vancouver by 50% by 2030. While this work is meant to shape how the City continues to roll-out its Zero Emissions Building Plan (2016), the emphasis of the new planning work is focused on how to get deep emission reductions from existing buildings.

Meeting these objectives will be effectively impossible for the City to achieve on its own; our success will require alignment in thinking and action from a broad range of partners and will need to carefully weigh the tradeoffs that meaningful action will entail. While we have numerous research initiatives and technical experts involved in shaping this work, the BM4EA's role will be to challenge and inform staff thinking on our strategic direction, to maximize this alignment, and to help us balance the tradeoffs.

At a minimum, BM4EAC involvement will include participating in 2-3 meetings over the next 5 months to share your ideas, concerns, and to identify areas for further research and consultation. The outcome will be incorporated as part of our recommendations to Council in November on Vancouver's Climate Emergency Action Plan and a detailed Zero Emission Buildings Retrofit Plan. As part of these meetings, additional opportunities will likely arise to participate in this work further but these will be optional and specific to individual committee members.

I will follow-up this email with an e-poll to check availability for the first Committee meeting on either morning of Jun 22 or afternoon of Jun 18. If you'd like more information on the Committee's role, expectations for participation, or feel there maybe another representative from your organization that would be better suited to participate, please contact me directly to discuss.

At this first meeting, we will present and discuss the main elements of the draft Plan including:

- New buildings actions and importance
- Clear Retrofit Signals and Flexible Requirements
- Supporting Voluntary Leaders
- Building Capacity
- Removing Barriers
- Access to renewable energy
- Equity
- Follow-up actions

I hope you will be able to support us as your voice and the people it represents is critical in this important work.

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver
City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
t: 604.871.6542
sean.pander@vancouver.ca

RE: UDI Webinar Tomorrow Morning

From: Connolly,Norm <NConnolly@richmond.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Christian Cianfrone <christian@zebx.org>, Sean Pander <sean.pander@vancouver.ca>
Cc: Yvonne Lo <ylo@udi.org>, Michaela Neuberger <michaela@zebx.org>
Sent: June 10, 2020 8:44:56 AM PDT

Likewise for me! Thanks, Christian.

Just working on a few new slides now, and contemplating the rest of the draft deck. Hope to have it sorted by mid-day.

-Norm

Norm Connolly | Sustainability Manager, MCIP, RPP
Engineering Department | City of Richmond
6911 No. 3 Road, Richmond BC V6Y 2C1
T|604.247.4676 **C**|604.319.5373
E| nconnolly@richmond.ca

From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: Wednesday, 10 June 2020 08:37
To: Christian Cianfrone; Sean Pander; Connolly,Norm
Cc: Yvonne Lo; Michaela Neuberger
Subject: RE: UDI Webinar Tomorrow Morning

Sounds great. I'll have my slides to you today. Thanks Christian.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Christian Cianfrone <christian@zebx.org>
Sent: June 10, 2020 8:35 AM
To: Sean Pander <sean.pander@vancouver.ca>; Norm Connolly <nconnolly@richmond.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Yvonne Lo <ylo@udi.org>; Michaela Neuberger <michaela@zebx.org>
Subject: UDI Webinar Tomorrow Morning

Hi Gents,

Just doing a final check in here. If you get me slides by end of business day, I'll rearrange them by topic and run them from my computer and aim to moderate the session more as a "chat".

If you're scrambling to get them done and won't have them ready until late tonight or early tomorrow morning, then we'll resort to just running the session as a traditional panel - with each of you presenting your full piece from your own computer, followed up by Q&A.

Remember to sign in at 9:15 as per your invite so we can work out final logistics and test your screen sharing before the event starts at 9:30.

Talk to you all in the morning.

Christian

Update on BC Housing Research.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE

Executive Director, Building and Safety Standards Branch

Email: Andrew.PapeSalmon@gov.bc.ca

Cell: 250-812-1933

From: BC Housing <donotreply@subscriptions.bchousing.org>
Sent: June 10, 2020 10:00 AM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: Housing Research & Innovation eNewsletter Summer 2020

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Feature Story and Videos

Celebrating grant success stories

The Building Excellence Research & Education Grants program has awarded $2.98 million in funding to support 89 projects since it was established in 2015. Grant recipients include industry and consumer organizations, education providers, and researchers. New videos showcasing grant success stories are now available on our website <https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=83612f8a94&e=0d711d2712>.

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=f2a753ab03&e=0d711d2712>

<https://bchousing.us20.list-

manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=000cb64fda&e=0d711d2712>

Research Highlights

At your fingertips: Housing Research & Education Highlights

One of BC Housing's most popular resources, its Housing Research & Education Highlights, has been updated. The latest edition of our interactive flip book features more than 60 projects currently underway or recently completed.

<https://bchousing.us20.list-
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<https://bchousing.us20.list-
manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=5a9e3cb283&e=0d711d2712>

Reports and Webinar

Delivering affordable housing: the challenges and capacity needs for smaller communities

Many smaller communities throughout British Columbia recognize their need for more affordable housing. But implementing policies to develop such plans is challenging. BC Housing has developed a series of reports and resources to address these concerns and is also presenting a webinar on the topic on June 23 that is drawing considerable interest.

<https://bchousing.us20.list-
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manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=0a61bac959&e=0d711d2712>

Resources

COVID-19 resources and related research available online

When COVID-19 began to appear in our province, BC Housing acted quickly to make resources available to its various stakeholders. These include updates for the residential construction industry <https://bchousing.us20.list-
manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=d556b19b55&e=0d711d2712> as well as the housing sector <https://bchousing.us20.list-
manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=1c33554a49&e=0d711d2712>. We are committed to supporting you throughout this evolving crisis and the transition to recovery.

<https://bchousing.us20.list-
manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=4ddc9bfbc9&e=0d711d2712>

<https://bchousing.us20.list-
manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=0eacc9c159&e=0d711d2712>

Report and Videos

The role of community housing in creating resilient neighbourhoods

The Community Housing for Resilient Communities project tells the story of community organizing and housing innovation in Canada to create a more socially inclusive society. The theme of community equity building is weaved through nine individual stories from across Quebec and British Columbia, highlighting how they are incrementally acting to increase local control of urban land development through the development of housing as community-owned assets.

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=2ce6a9ede2&e=0d711d2712>

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=cfa8dc078a&e=0d711d2712>

Guides

New guide promotes best practices for industry, energy efficiency, & incentive rebate program for insulation retrofits

BC Housing has updated its Best Practice Guide for Air Sealing and Insulation Retrofits for Single Family Homes <https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=966212541d&e=0d711d2712>. The 2020 edition consolidates best practices for air sealing and insulation retrofits such as building enclosure weatherization. Unlike other contractor-focused weatherization training guides, it includes specific information for B.C.'s unique climate, construction practices, and building code requirements.

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=89deaeaceb&e=0d711d2712>

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=c9723abdfc&e=0d711d2712>

Builder Insight

Managing Environmental Risks During a Renovation Project

Renovating and repairing a home or residential building can be a big undertaking. Before work begins, owners, contractors, and tradespeople should familiarize themselves with a variety of health hazards that can be exposed during renovations. To help you plan, BC Housing has developed Managing Environmental Risks During a Renovation Project <https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=fd1f370787&e=0d711d2712>. The Builder Insight bulletin and video <https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=785e829ece&e=0d711d2712> outline simple precautions to take before work begins to help reduce risks.

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=d5cd410bfb&e=0d711d2712>

Event Highlights

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=c944d890cd&e=0d711d2712>

June 23, 2020

Building Knowledge and Capacity for Affordable Housing in BC Small Communities Webinar

Hear the results from an engaging workshop series that aims to identify the affordable housing issues and capacity needs of small communities in B.C. Learn about proven strategies in building affordable housing, and how to co-develop specific tools that will translate to more homes on the ground.

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=54b804a26b&e=0d711d2712>

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=2e064463f8&e=0d711d2712>

June 11 and 25, 2020

Elevating Wood Construction in 2020

Wood WORKS! BC, with support from BC Housing, is pleased to offer a new online workshop series, Elevating Wood Construction in 2020. Expert presenters will share their knowledge and experience to help you achieve greater proficiency and ingenuity with wood in design and building.

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=a1760bd953&e=0d711d2712>

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=13ea1a98d7&e=0d711d2712>

July, 2020

UDI: Multi-Family Housing Design & Post-COVID-19 Considerations

This two-part webinar series will explore redesigning and reimagining developments and housing projects in the post-COVID world. More information will be available on these webinars soon. Check the UDI website <https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=45ec5393e3&e=0d711d2712>for updates.

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=586e3f2163&e=0d711d2712>

Sign up and share our newsletter

You can subscribe to receive our quarterly Housing Research & Innovation newsletter for the latest updates about leading-edge research, advances in building science, education and training, and a range of topics of interest to the housing sector. We encourage you to share this newsletter with colleagues to help advance housing knowledge. Together we're supporting a strong housing sector in British Columbia.

<https://bchousing.us20.list-manage.com/track/click?u=cd3284271dba10f7a32fbd6f2&id=de2cd934be&e=0d711d2712>

About BC Housing Research Centre

BC Housing's Research Centre works in collaboration with housing sector partners to foster excellence in residential construction and find innovative solutions for affordable housing in British Columbia. Sharing leading-edge research, advances in building science, and new technologies encourages best practice.

The Research Centre identifies and bridges research gaps to address homelessness, housing affordability, social housing challenges and the needs of distinct populations. Mobilizing knowledge and research expertise helps improve the quality of housing and leads to innovation and adoption of new construction techniques, Building Code changes, and enhanced education and training programs.

BC Housing | Suite 1701 - 4555 Kingsway, Burnaby, British Columbia V5H 4V8 | 604-439-4135 | research@bchousing.org

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RE: UDI Webinar Tomorrow Morning

From: Connolly,Norm <NConnolly@richmond.ca>
To: Christian Cianfrone <christian@zebx.org>, Sean Pander <sean.pander@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Yvonne Lo <ylo@udi.org>, Michaela Neuberger <michaela@zebx.org>
Sent: June 10, 2020 3:56:36 PM PDT
Attachments: UDI Presentation - Green Building Regulatory Update (Norm).pptx

Hi Christian and team,

I've attached my PPT deck for tomorrow's UDI session.

I'm approaching this from a local government perspective in terms of the Step Code transition (Code direction), as well as the LCES regulatory tool that a number of local governments are using (or planning to use) to help meet their community GHG emission reduction targets.

It *looks* like a lot of slides, but I will be able to run through them quickly.

Thanks!

-Norm

Norm Connolly | Sustainability Manager, MCIP, RPP
Engineering Department | City of Richmond
6911 No. 3 Road, Richmond BC V6Y 2C1
T|604.247.4676 **C**|604.319.5373
E| nconnolly@richmond.ca

From: Christian Cianfrone [mailto:christian@zebx.org]
Sent: Wednesday, 10 June 2020 08:35
To: Sean Pander; Connolly,Norm; Zachary OHCS:EX May
Cc: Yvonne Lo; Michaela Neuberger
Subject: UDI Webinar Tomorrow Morning

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Talk to you all in the morning.

Christian

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

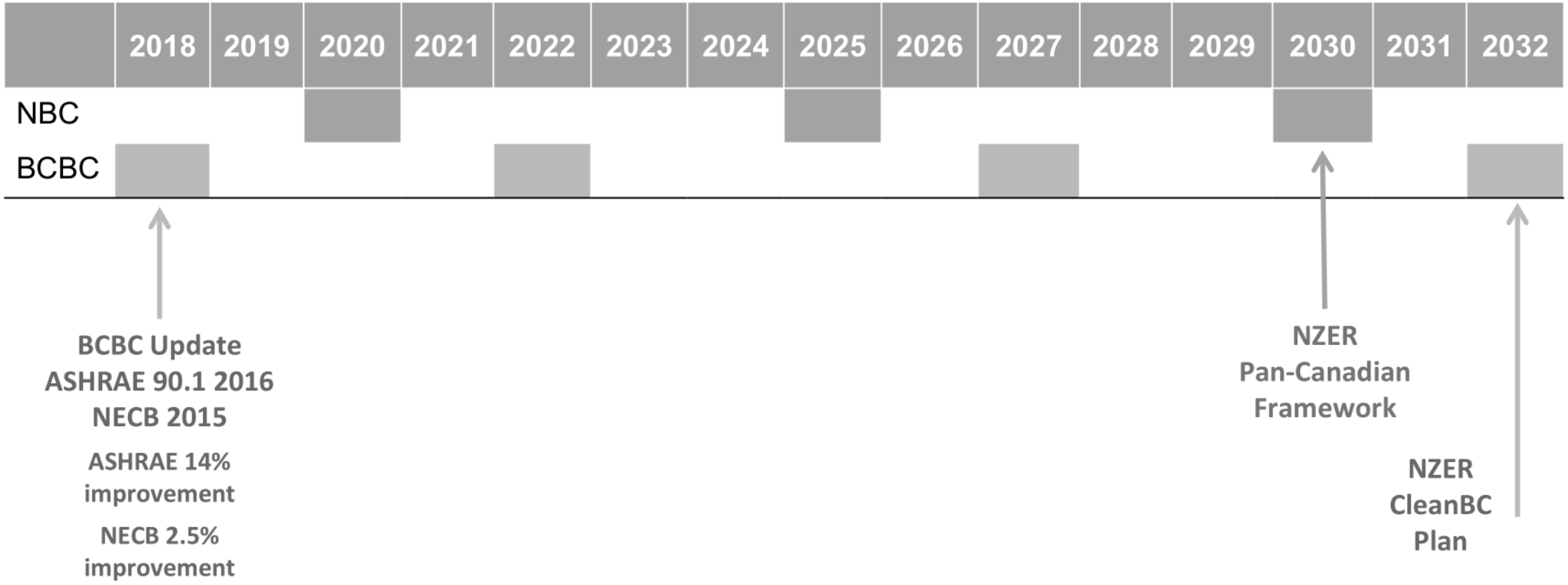
Green Building Regulatory Update

June 11, 2020

UDI Pacific (Virtual) Breakfast

Norm Connolly
Sustainability Manager
City of Richmond

National and Provincial Code Direction



Path to Net Zero Energy Ready (NZER) Construction

Net Zero | BC Energy Step Code

DEFINITION

Net-zero energy buildings produce as much clean energy as they consume. They are up to 80 percent more energy efficient than a typical new building, and use on-site (or near-site) renewable energy systems to produce the remaining energy they need, and

A net-zero energy ready building is one that has been designed and built to a level of performance such that it could, with the addition of solar panels or other renewable energy technologies, achieve net-zero energy performance.

We all meet at the same place (in Code) by 2032!

Timeline for Energy Efficiency Regulatory Requirements in the BC Building Code

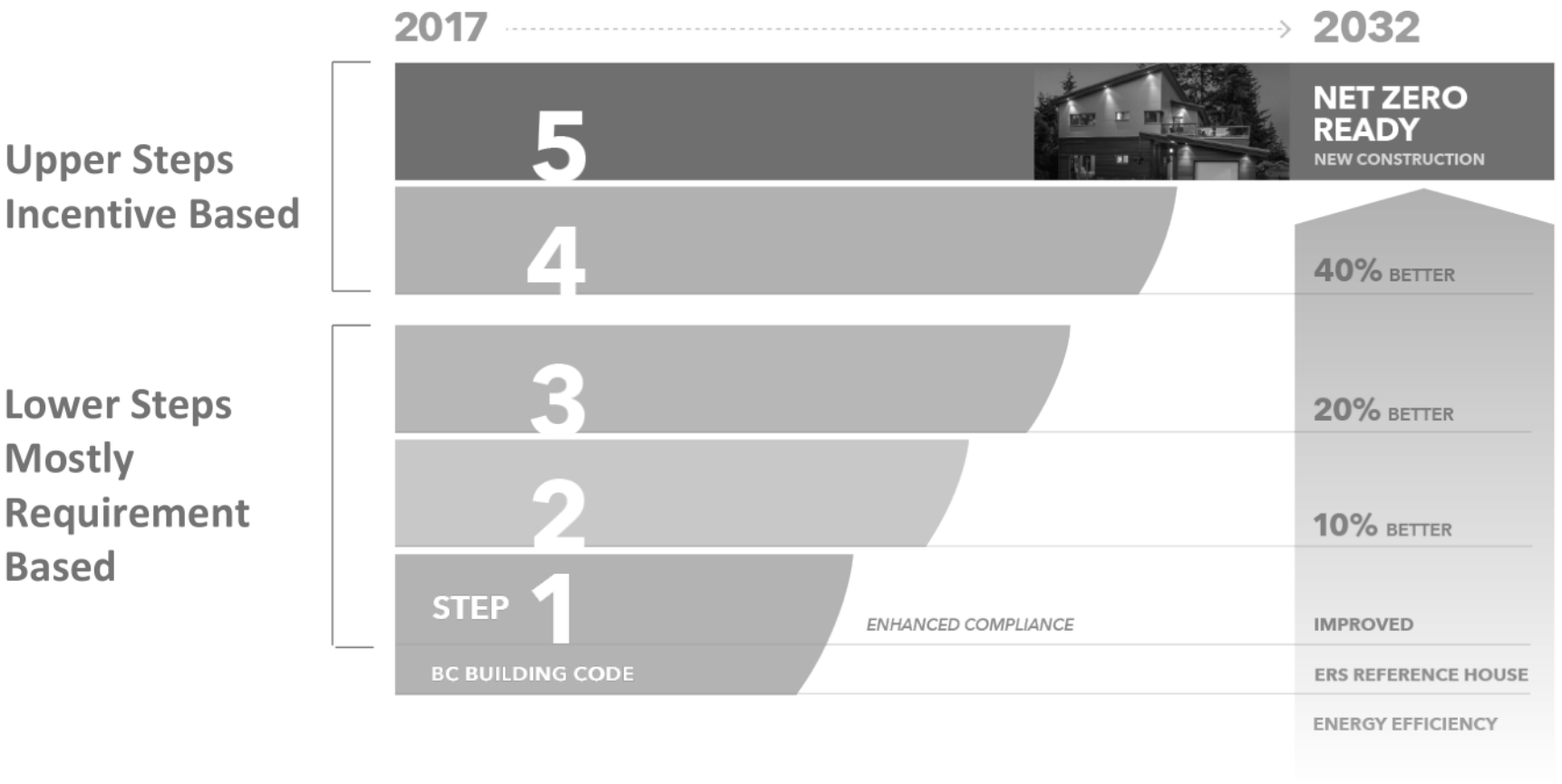
Here's what the province's CleanBC plan will mean for new-construction requirements.

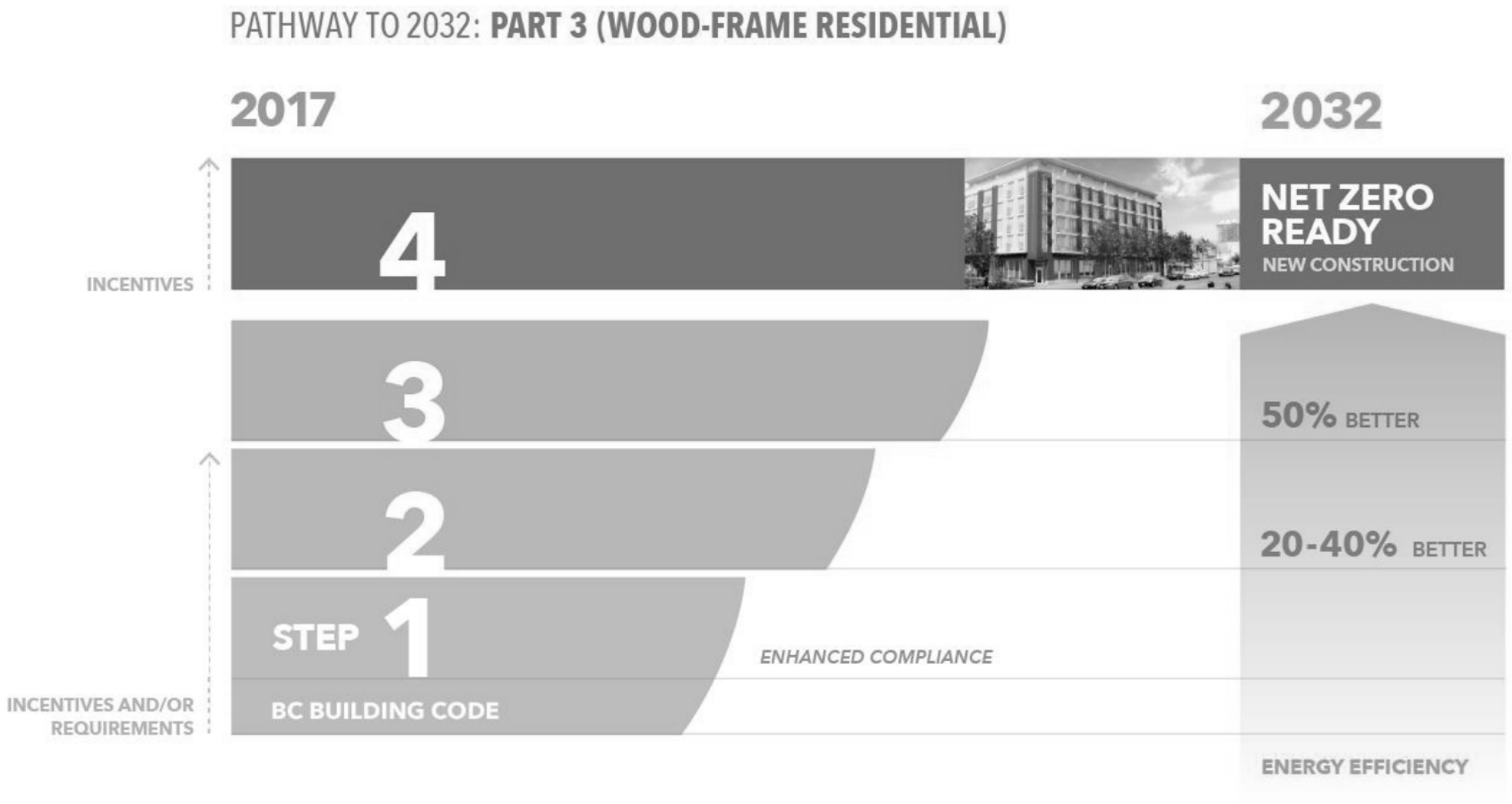
	PART 9 BUILDINGS	PART 3 BUILDINGS	NET-ZERO ENERGY-READY UP TO:
2032	STEP 5	STEP 4	80%
2027*	STEP 4	STEP 3	40%
2022*	STEP 3	STEP 2	20%

*NEW TARGET DEADLINES

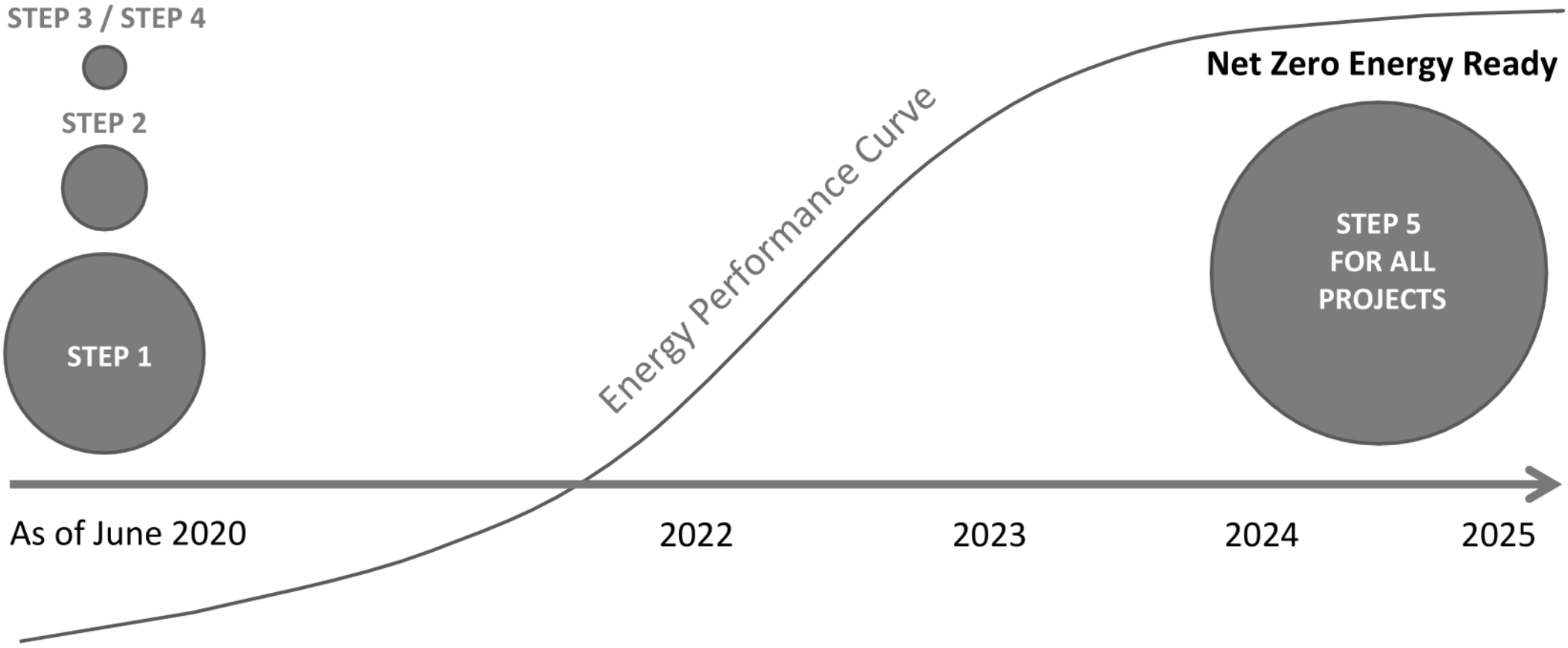
Energy-efficiency improvement above 2018 BC Building Code requirements

Part 9 | Performance Path Levers




PATHWAY TO 2032: PART 3 (WOOD-FRAME RESIDENTIAL)
2017
2032
INCENTIVES
4
NET ZERO READY
NEW CONSTRUCTION
3
50% BETTER
2
20-40% BETTER
STEP 1
ENHANCED COMPLIANCE
INCENTIVES AND/OR REQUIREMENTS
BC BUILDING CODE
ENERGY EFFICIENCY

Richmond's Step Code direction | Part 9 Residential

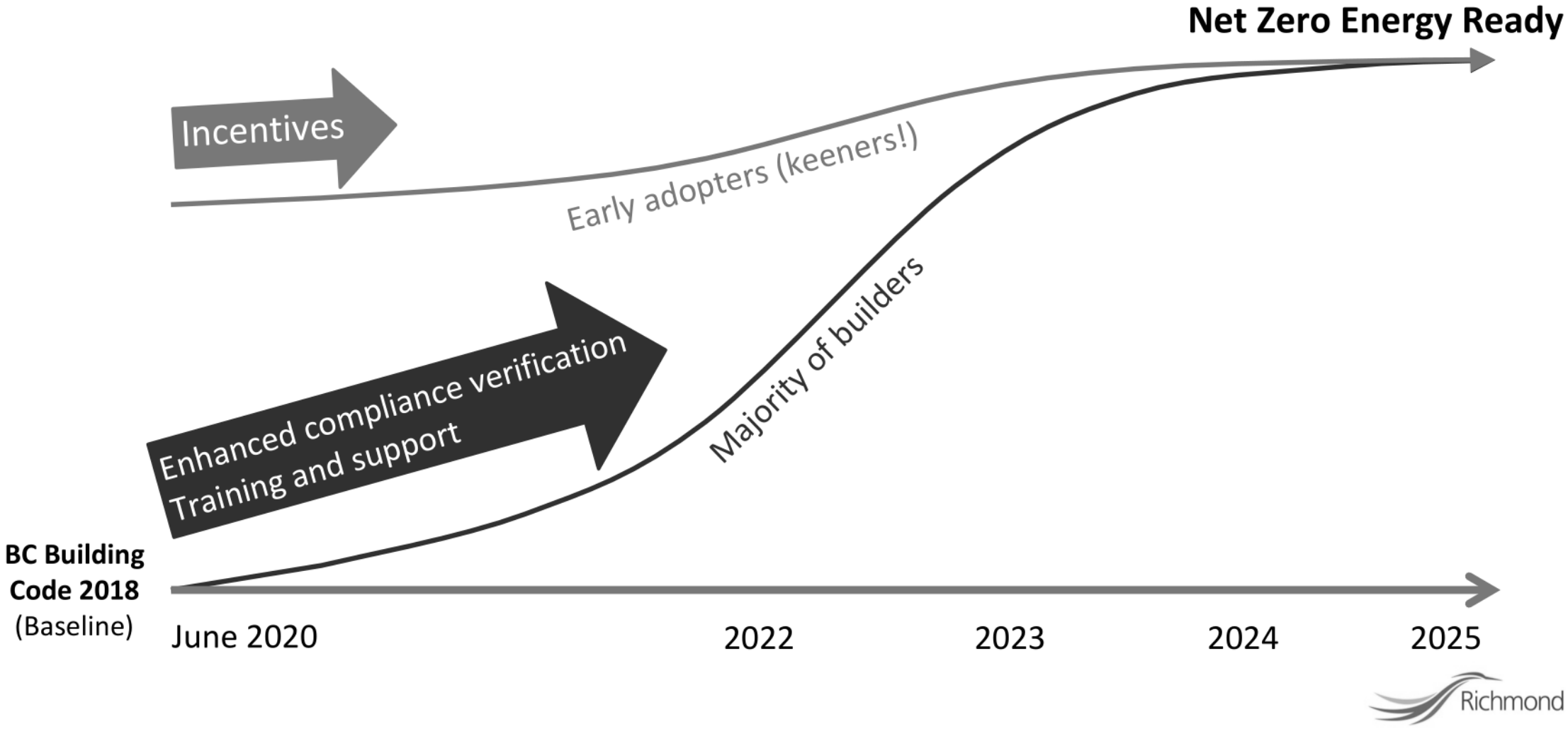


BC Building Code 2018
(Baseline)

Annual Part 9 housing starts: 627 units (2015-2019)

Richmond

Richmond's direction | All Step Code buildings



Responding to the Climate Emergency

As of June 2020, **1,500** jurisdictions in **30** countries have declared a climate emergency.

In BC, **26** local authorities have declared a climate emergency through their Councils.



Responding to the Climate Emergency

Policy and Program Approach:
Integrate energy efficiency and emissions intensity in assessing building performance.



Part 3 Building Metrics



Thermal Energy Demand Intensity (TEDI)



Total Energy Use Intensity (TEUI)



Air leakage rate, in L/(s.m2) @75 Pa
Pressure Differential

GHGI Targets



Greenhouse Gas Intensity (GHGI)

- ✓ Visible progress toward municipal and provincial carbon reduction targets
- ✓ Helps reduce number of buildings requiring costly retrofits to meet future targets

Solution: Incent building-scale or district-scale Low-Carbon Energy Systems (LCES)

Low Carbon Energy Systems | Two Option Approach

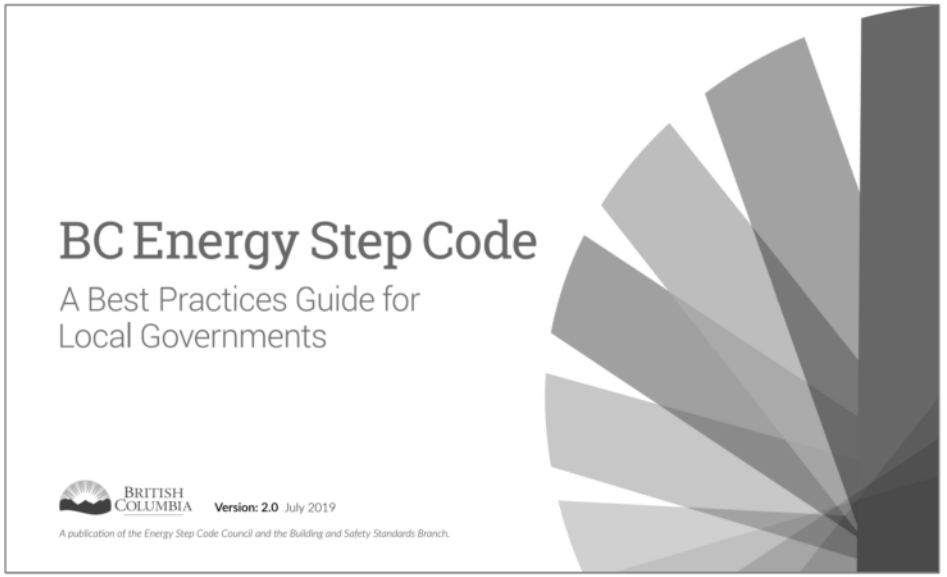
- A two-option Energy Step Code framework offers builders choice, while encouraging lower emission development:

  Option A: **Step X**

  [or]

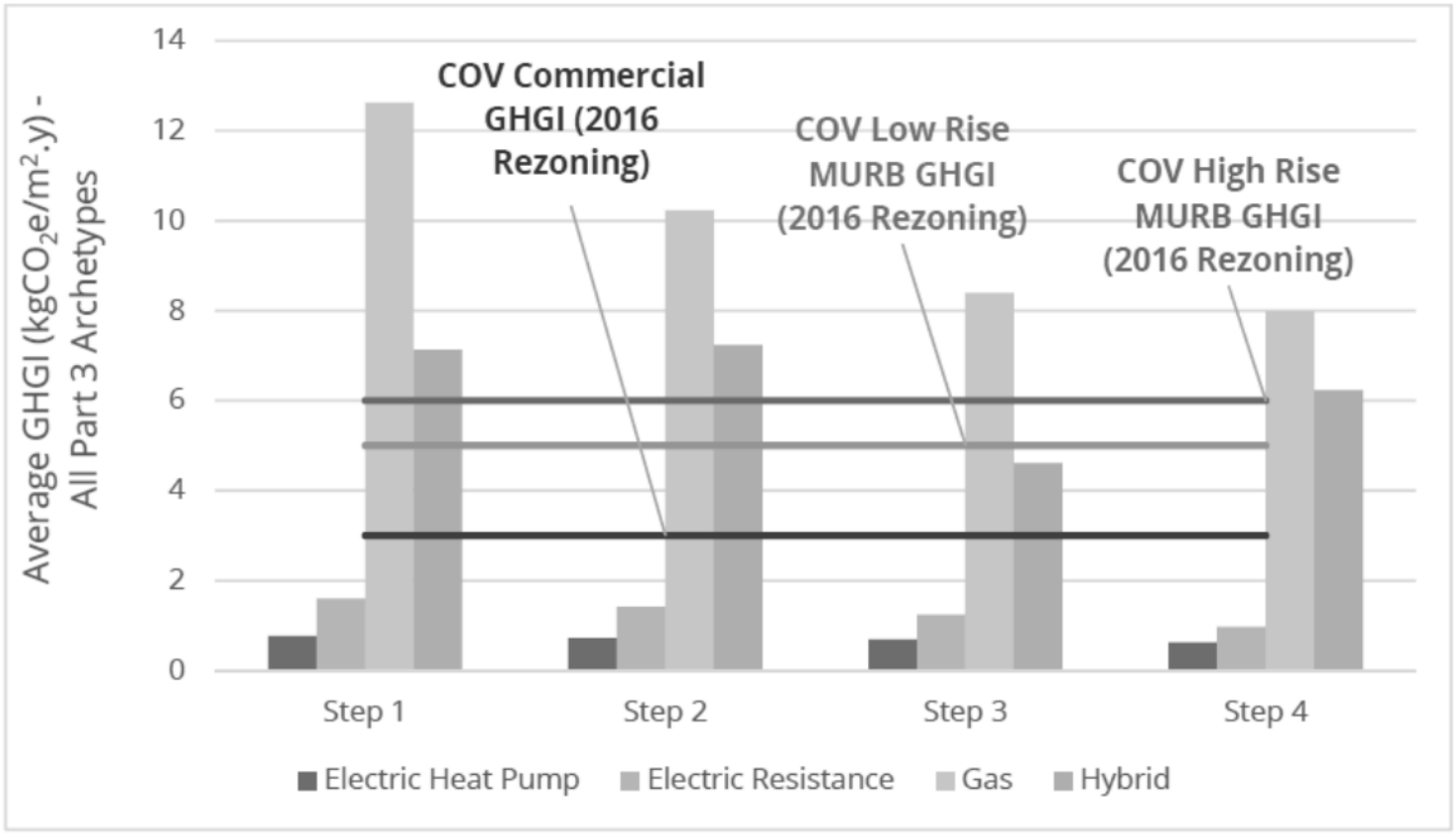
  Option B: **Step (X – n) with a LCES**

- This two-option approach is already used for **Part 3** construction in **Richmond, Burnaby, Surrey, Vancouver, New Westminster, Port Moody and UBC.**
- Included in the *Best Practices Guide for Local Governments v.2*



"Offering industry a relaxation clause that will also reach climate objectives"

LCES Analysis | All Part 3 Archetypes



Low Carbon Energy Systems provide lower GHG intensities, even at high thermal loads.

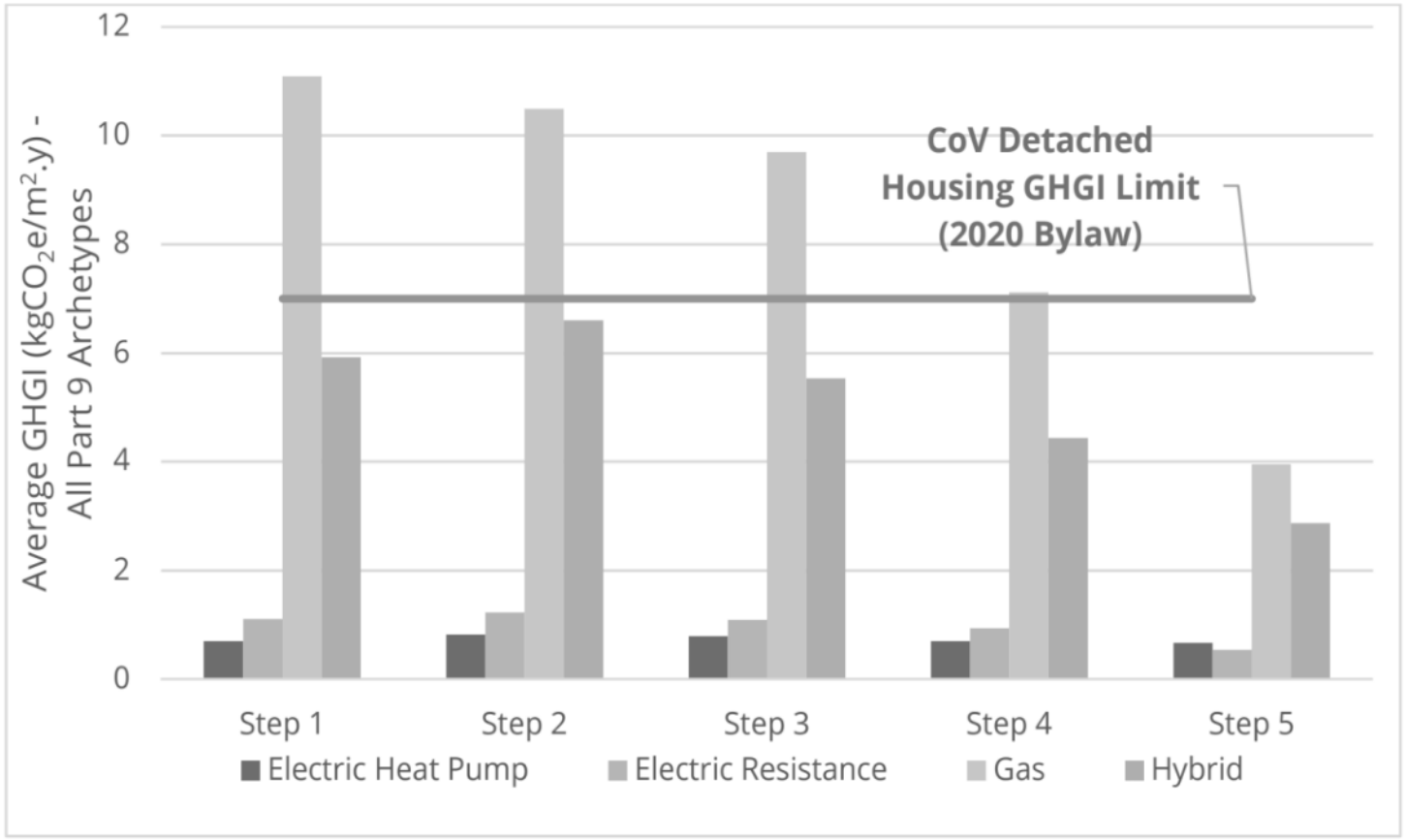
Graph Source: Integral Group. June 2019. *Implications of BC Energy Step Code on GHG Emissions*

Low Carbon Energy Systems | Definition for Part 3

- **LCES**: A professionally operated or maintained on-site energy system supplying a minimum of 70-75% of the building's annual heating, cooling, and domestic hot water demand.

  Examples include, electrical air source heat pump or variable refrigerant flow, geo-exchange, in-building sewer heat recovery, biomass, solar, or other system approved by the City.
- **Step Code relaxation** applies to buildings implementing an on-site Low-Carbon Energy System, or connecting to a district energy system (for buildings within a DE service area).

LCES Analysis | Part 9 Ground-Oriented Residential



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Low GHG
Part 9 Energy Step Code

Considerations for a Consistent Approach

Local Government Workshop
City of Richmond
January 21 2020
Facilitator: McEwen Climate

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Vancouver uses a **performance metric** for Part 9 residential buildings:

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  [i.e.: a 300 m^2 building = 900 kg = 0.9 tonnes GHG per year]

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Proposed Two-Option Step Code Framework (requirements and timing)

City of Richmond staff consider framework "C" as closest to our current OCP schedule

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Richmond

Thank You!

QUESTIONS?

Norm Connolly
Sustainability Manager
City of Richmond
nconnolly@richomnd.ca

RE: UDI Webinar Tomorrow Morning

From: May, Zachary OHCS:EX
To: Connolly,Norm <NConnolly@richmond.ca>, Christian Cianfrone <christian@zebx.org>, Sean Pander <sean.pander@vancouver.ca>
Cc: Yvonne Lo <ylo@udi.org>, Michaela Neuberger <michaela@zebx.org>
Sent: June 10, 2020 4:03:59 PM PDT
Attachments: UDI June 2020 - BSSB.pptx

Here are my slides.

Feel free to cut the intro slides if we want to focus on the plans for 2022.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Connolly,Norm <NConnolly@richmond.ca>
Sent: June 10, 2020 3:57 PM
To: 'Christian Cianfrone' <christian@zebx.org>; Sean Pander <sean.pander@vancouver.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Yvonne Lo <ylo@udi.org>; Michaela Neuberger <michaela@zebx.org>
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Norm Connolly | Sustainability Manager, MCIP, RPP
Engineering Department | City of Richmond
6911 No. 3 Road, Richmond BC V6Y 2C1
T|604.247.4676 **C**|604.319.5373
E| nconnolly@richmond.ca

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ENERGY STEPCODE

BUILDING BEYOND THE STANDARD

UDI – June 11, 2020

Zachary May
Chair, Energy Step Code Council
Director, Strategic Policy
Province of BC

Provincial Policy Context

December 2018





CleanBC – Better Buildings



Energy Efficiency
Climate Resilience
Seismic Resilience

British Columbia's commitment for future Building Codes

New Buildings
2022 – 20% improvement
2027 – 40% improvement
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Code for existing buildings in 2024

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*NEW TARGET DEADLINES

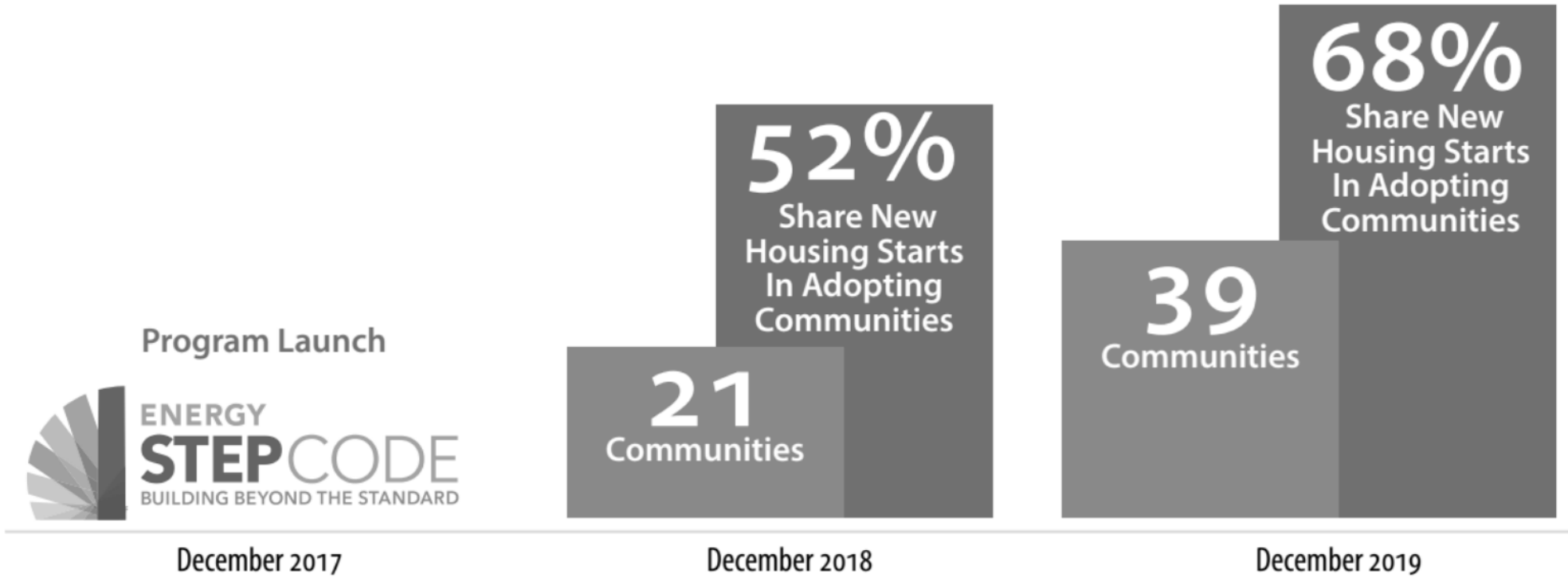
Energy-efficiency improvement above 2018 BC Building Code requirements

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

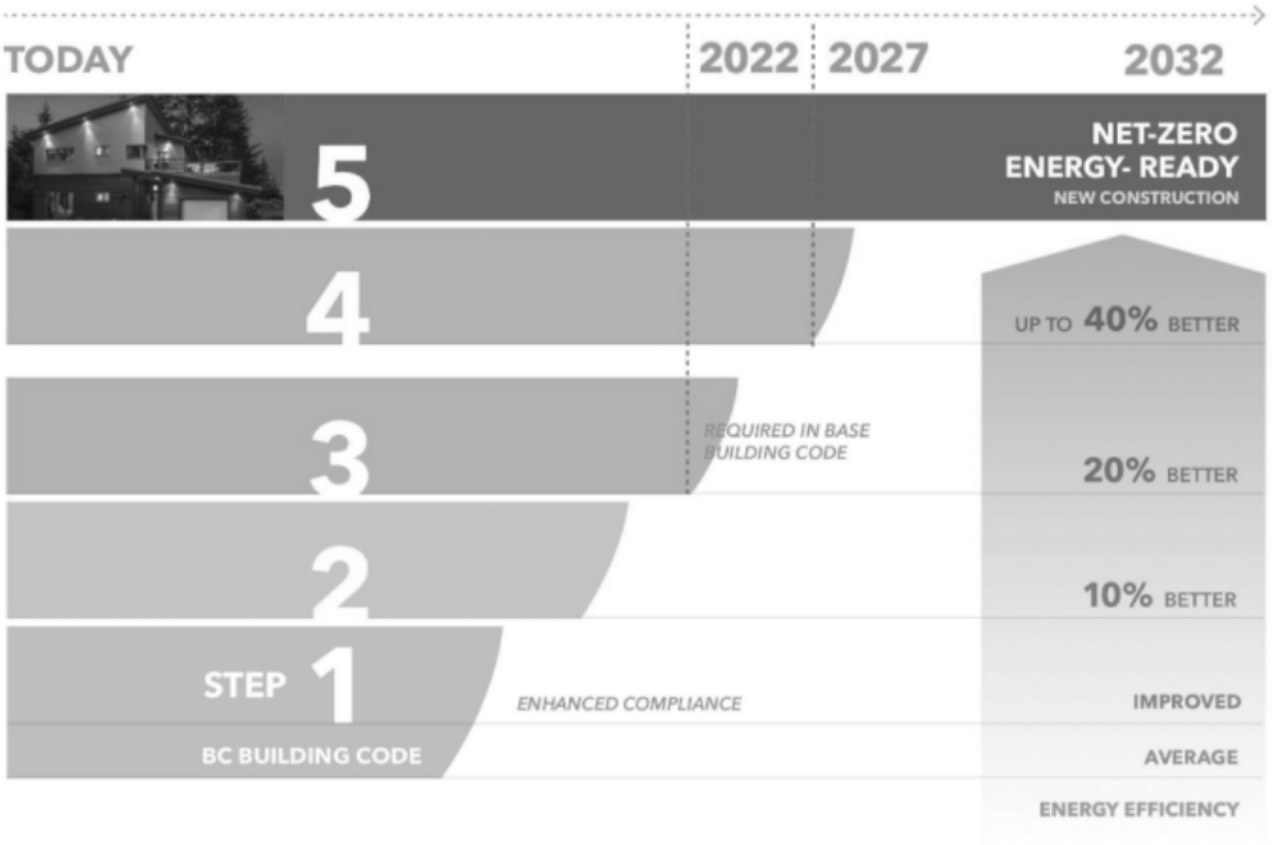


Roadmap to Net Zero Energy Ready

BC Energy Step Code Expansion since 2017



New Construction – Part 9



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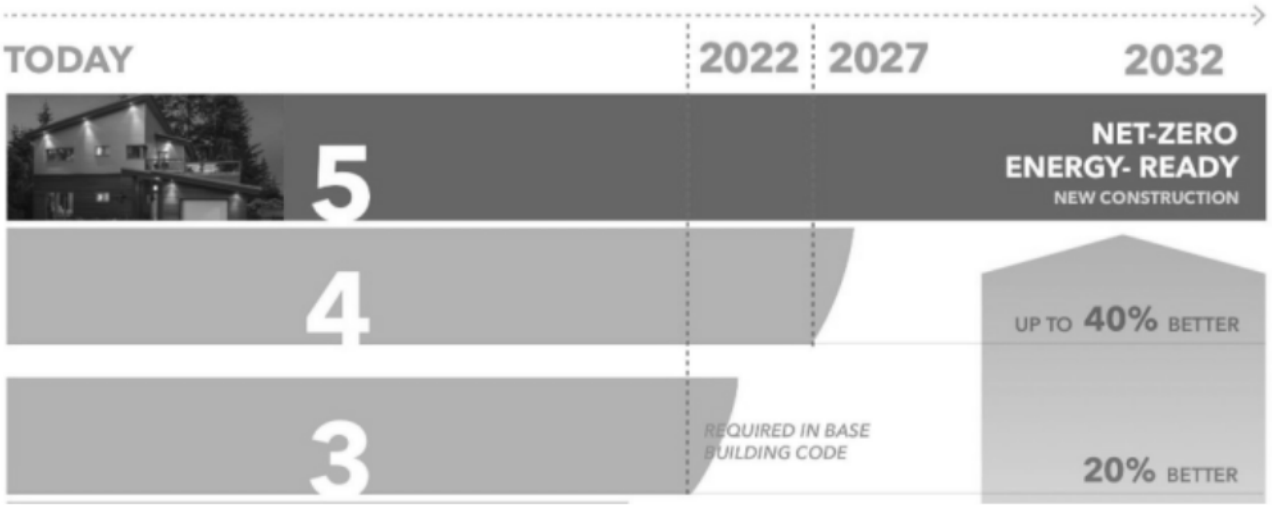

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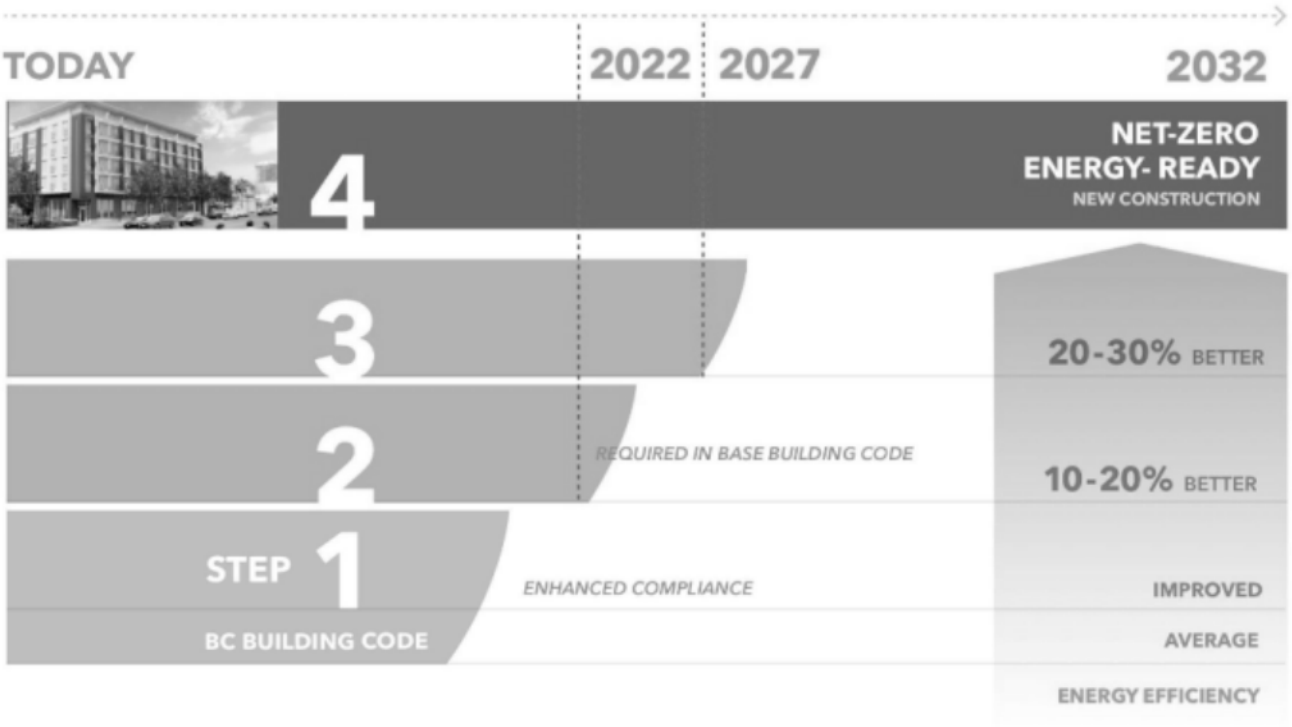

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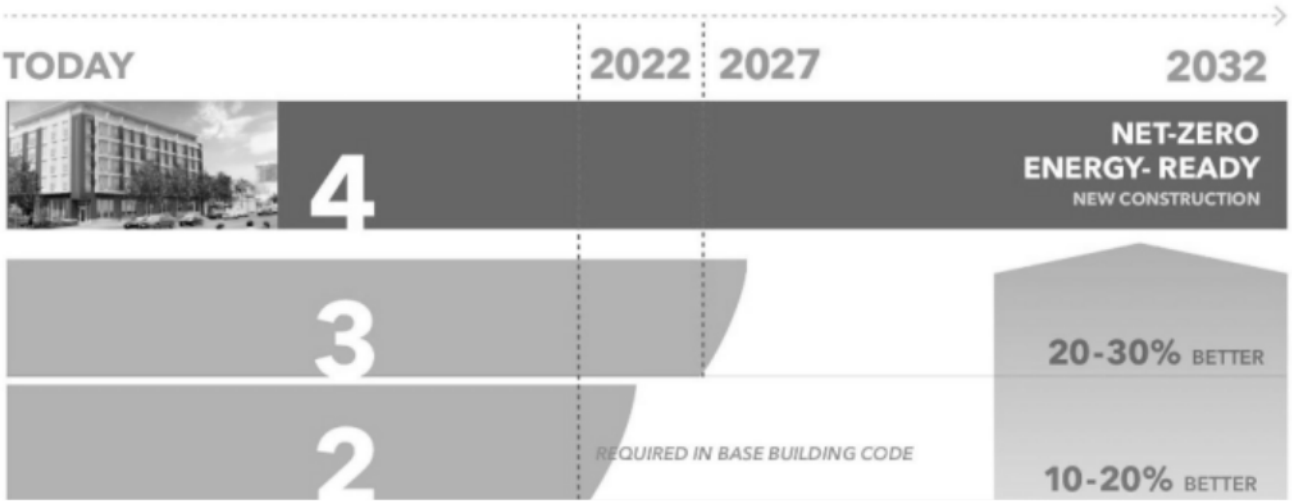

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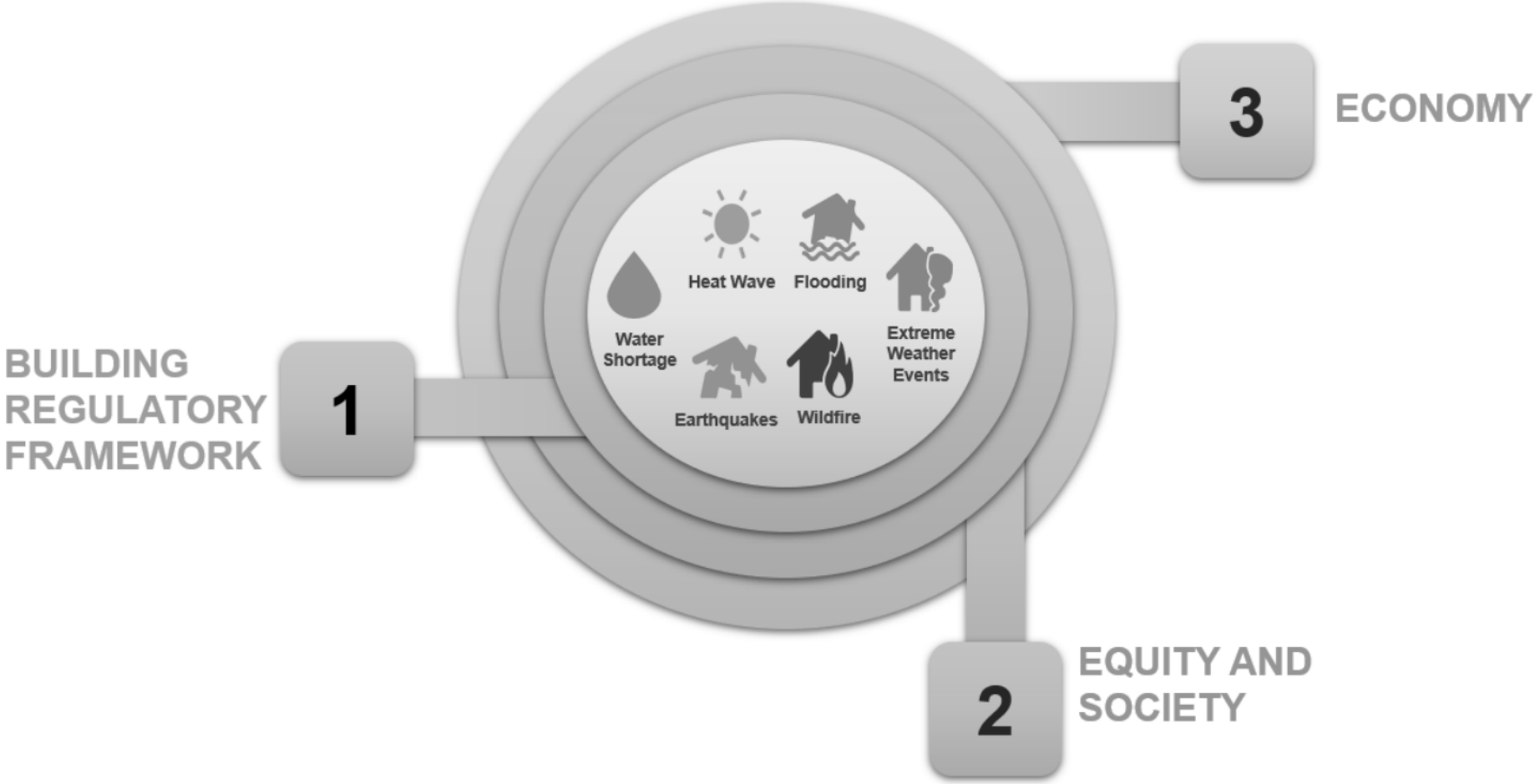
Existing Buildings



Existing Buildings



RE: UDI Webinar Tomorrow Morning

From: Christian Cianfrone <christian@zebx.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Connolly,Norm <NConnolly@richmond.ca>, Pander, Sean <sean.pander@vancouver.ca>
Sent: June 10, 2020 5:03:17 PM PDT

You could go deckless... I can tee you up questions. Just don't go shirtless.
On Jun 10, 2020, 4:59 PM -0700, Pander, Sean <sean.pander@vancouver.ca>, wrote:

> I haven't started my deck yet so looks like individual self advanced slides.
>
> **Sean Pander | Green Building Manager**
> Planning, Urban Design & Sustainability | City of Vancouver
>
> City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
>
> t: 604.871.6542
>
> **sean.pander@vancouver.ca**
>
> ---
>
> **From:** May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
> **Sent:** Wednesday, June 10, 2020 4:04 PM
> **To:** Connolly,Norm; 'Christian Cianfrone'; Pander, Sean
> **Cc:** Yvonne Lo; Michaela Neuberger
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Christian

Final UDI Deck and Format!

From: Christian Cianfrone <christian@zebx.org>
To: Norm Connolly <nconnolly@richmond.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sean Pander <sean.pander@vancouver.ca>
Sent: June 10, 2020 9:24:43 PM PDT
Attachments: Consolidated June 11 UDI Webinar.pptx

Gents,

Here is the final consolidated deck for me, Zach and Norm (Sean has no slides). I've rearranged your slides to fit into the format below. I'll treat it like a "fireside chat" and just ask each of you to talk about each topic briefly - I will follow up with any relevant Q&A that might arise on that topic in that moment rather than waiting until the end.

- I ask Zach, Norm, Sean about the **Policy Context** for each of you (in that order) and then relay any follow up questions from me or a good one from the audience chat.
- I ask you each (same order) to give an update on **Part 9 - both recapping what is already here and what is coming** - follow up with any good Q's.
- I ask the same thing for **Part 3** (same order) - follow up with any good Q's.
- I ask Zach and Sean to give the audience a bit of an update of where we're heading for **existing buildings**
- I then moderate additional Q&A from the audience if there's time.

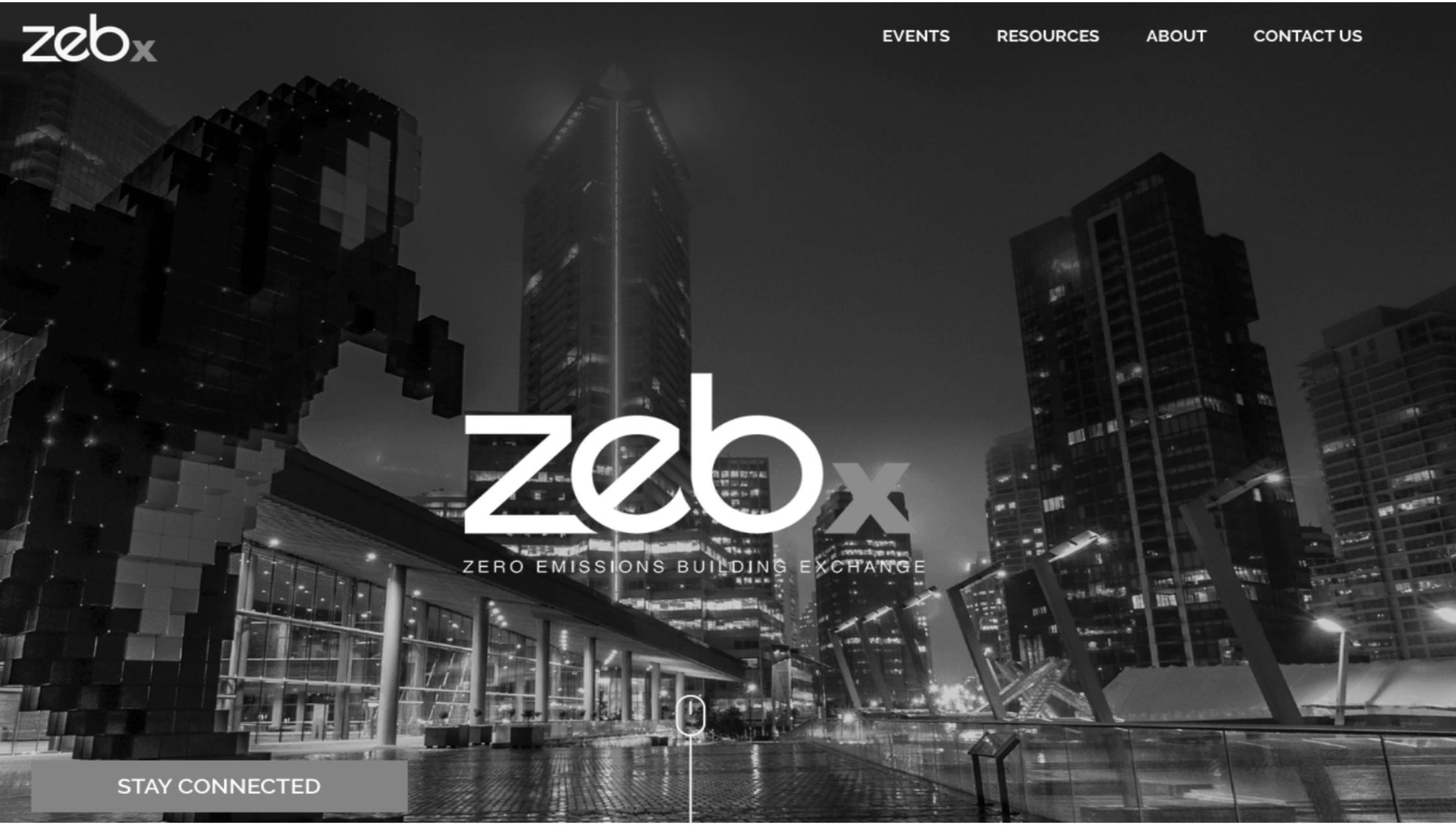
Hopefully this works for you. We can make any last minute adjustments at 9:15am. I trust last minute planning is well within all of your comfort levels so I'm feeling pretty good about tomorrow morning.

Cheers,
Christian



Zero Emissions Building Exchange

Christian Cianfrone, P.Eng.
christian@zebx.org
zebx.org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RESOURCES
ABOUT
CONTACT US
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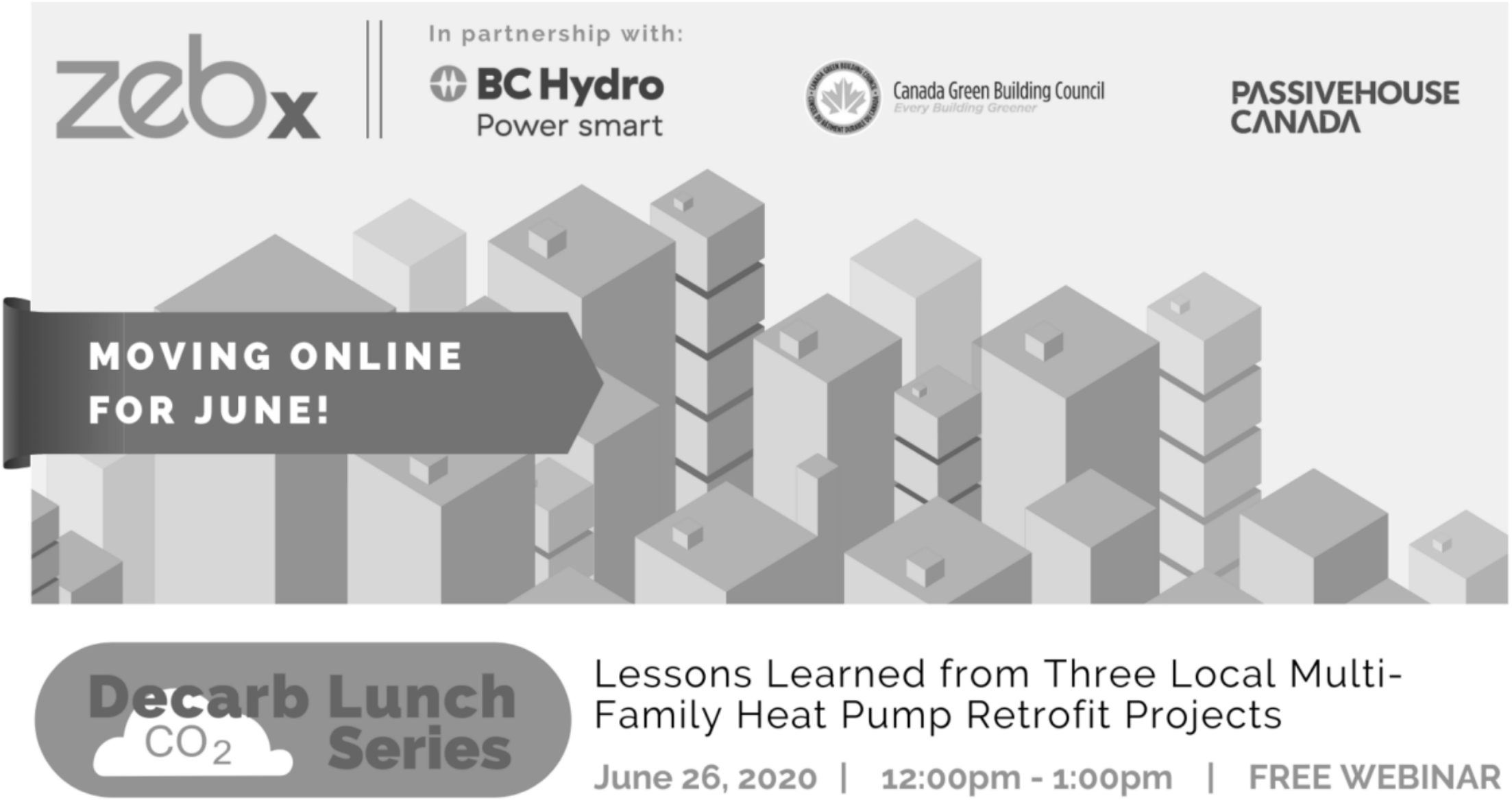
ZERO EMISSIONS BUILDING EXCHANGE
STAY CONNECTED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MOVING ONLINE
FOR JUNE!
Decarb Lunch
CO_2
Series
Lessons Learned from Three Local Multi-Family Heat Pump Retrofit Projects
June 26, 2020 | 12:00pm - 1:00pm | FREE WEBINAR



Pattern Language from Passive House

How to design + build high-performance buildings at the lowest possible cost.

DATES

Session 1: May 19, 21, 26, 28

Session 2: June 2, 9, 16, 23

Summer and Fall 2020 dates coming soon!

zebx

RDH BUILDING SCIENCE

Forestry Innovation Investment


WELCOME TO
ZEBx HIGH PERFORMANCE BRUSSELS TOUR
08 April 2019 - 10 April 2019
3 DAYS




Ministry of Environment


The One


Astro Tower


MT200



Audience Poll

Christian Cianfrone, P.Eng.
christian@zebx.org
zebx.org

ENERGY STEPCODE

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ENERGY STEPCODE
BUILDING BEYOND THE STANDARD



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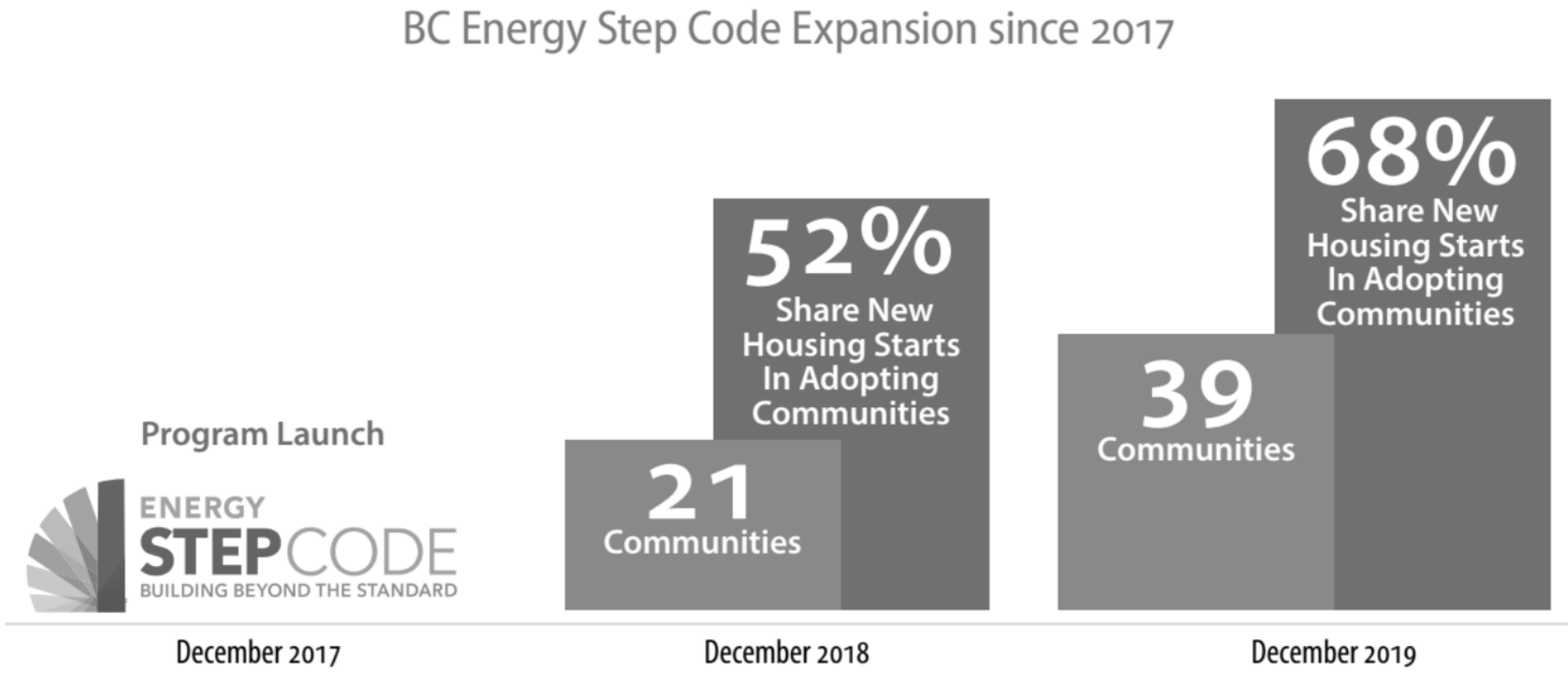


ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

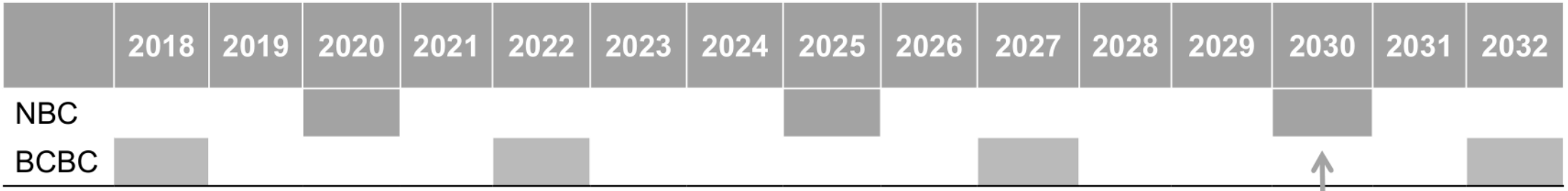
Green Building Regulatory Update

June 11, 2020

UDI Pacific (Virtual) Breakfast

Norm Connolly
Sustainability Manager
City of Richmond

National and Provincial Code Direction



BCBC Update
ASHRAE 90.1 2016
NECB 2015

ASHRAE 14% improvement

NECB 2.5% improvement

NZER Pan-Canadian Framework

NZER CleanBC Plan

Path to Net Zero Energy Ready (NZER) Construction

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Responding to the Climate Emergency

As of June 2020, **1,500** jurisdictions in **30** countries have declared a climate emergency.

In BC, **26** local authorities have declared a climate emergency through their Councils.

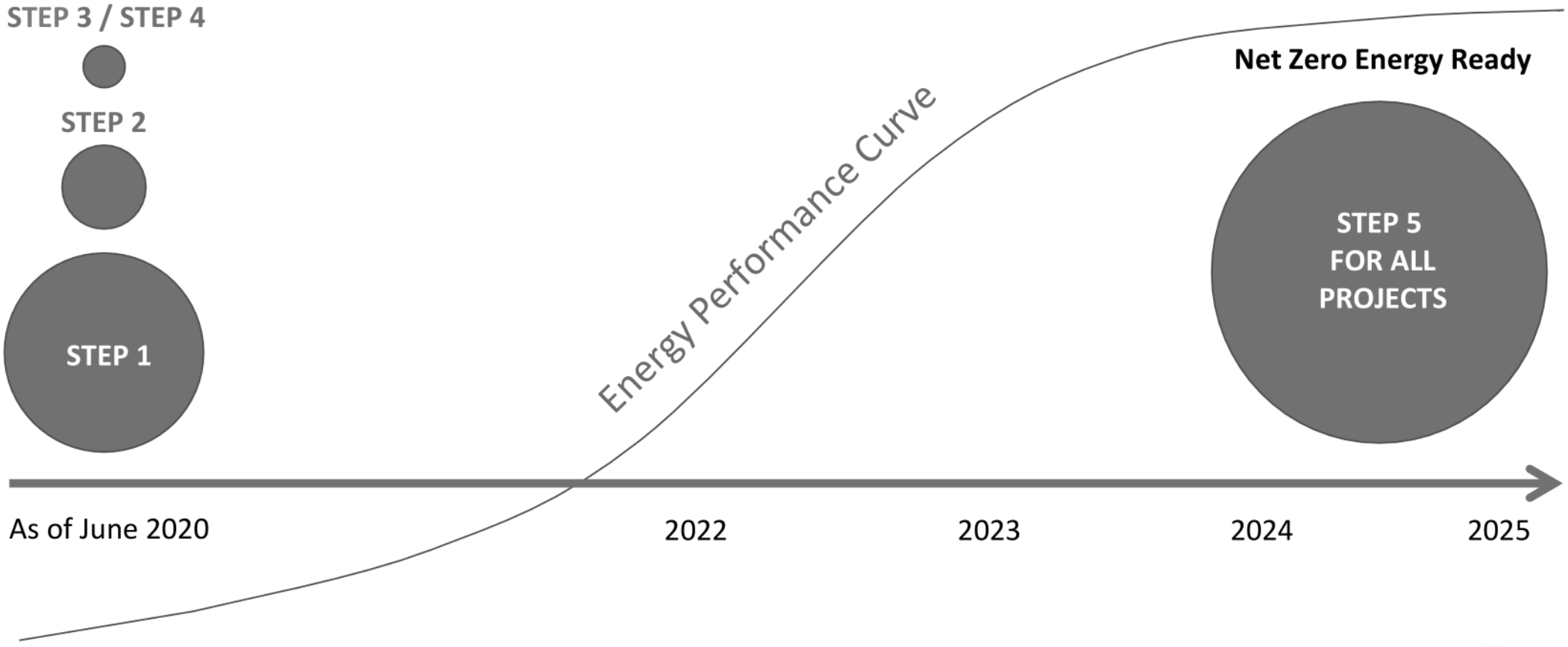


Responding to the Climate Emergency

Policy and Program Approach:
Integrate energy efficiency and emissions intensity in assessing building performance.



Richmond's Step Code direction | Part 9 Residential

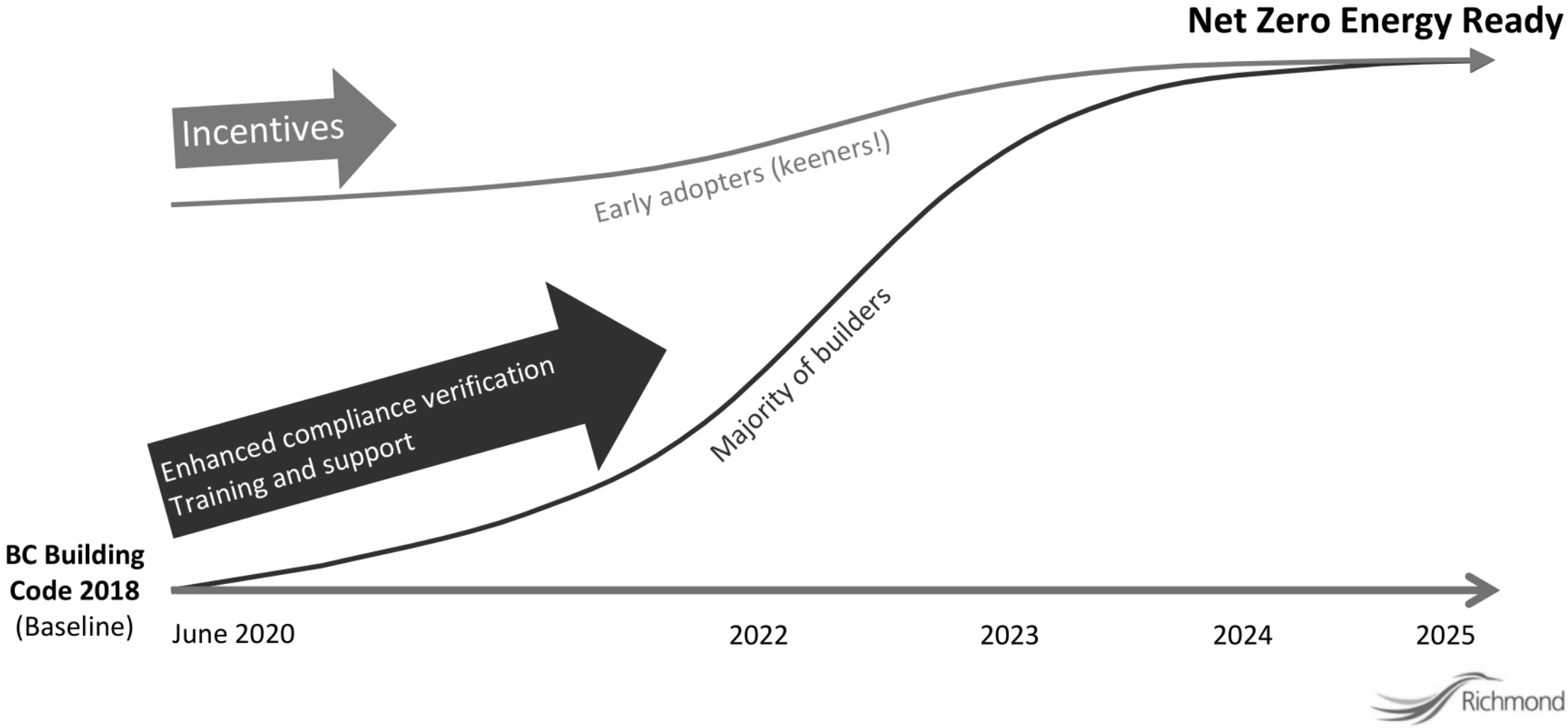


BC Building Code 2018
(Baseline)

Annual Part 9 housing starts: 627 units (2015-2019)

Richmond

Richmond's direction | All Step Code buildings

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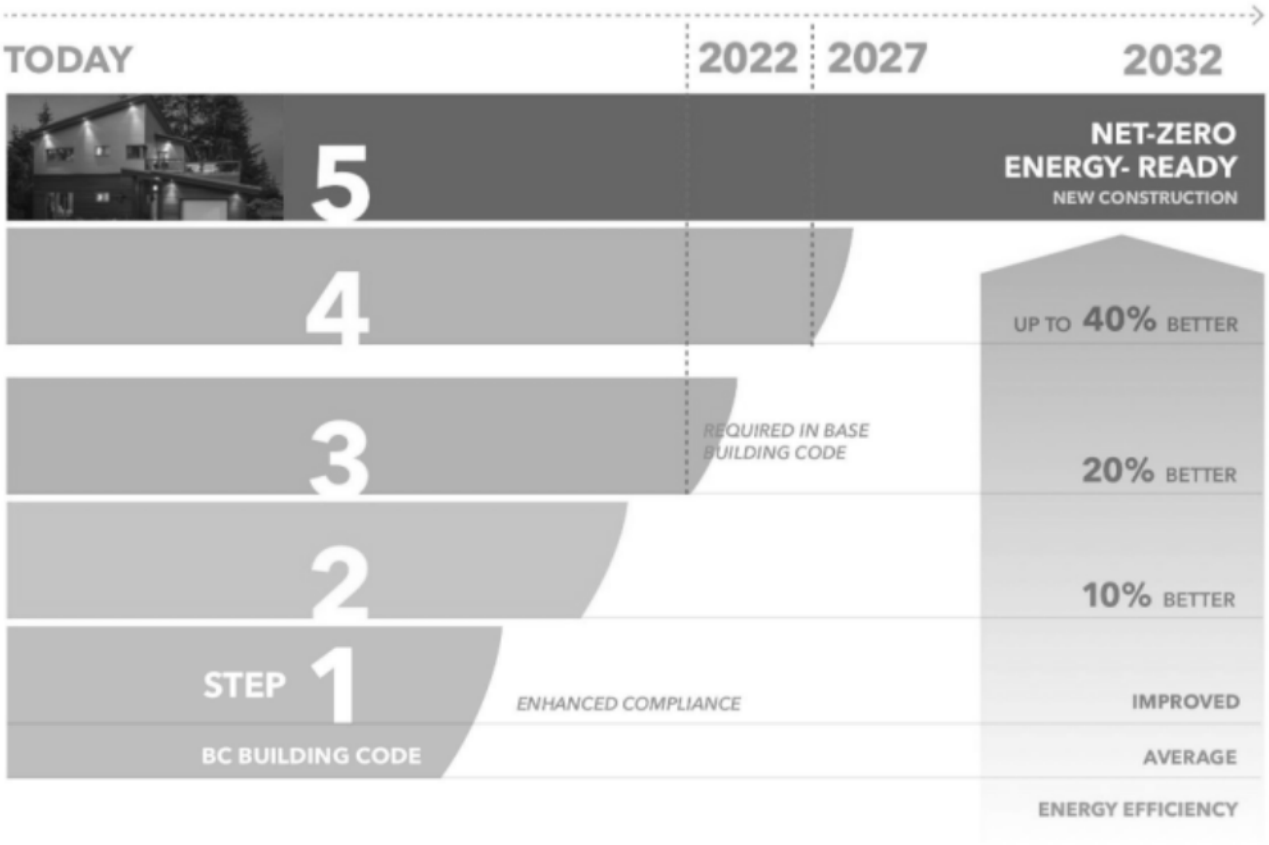
New Construction – Part 9



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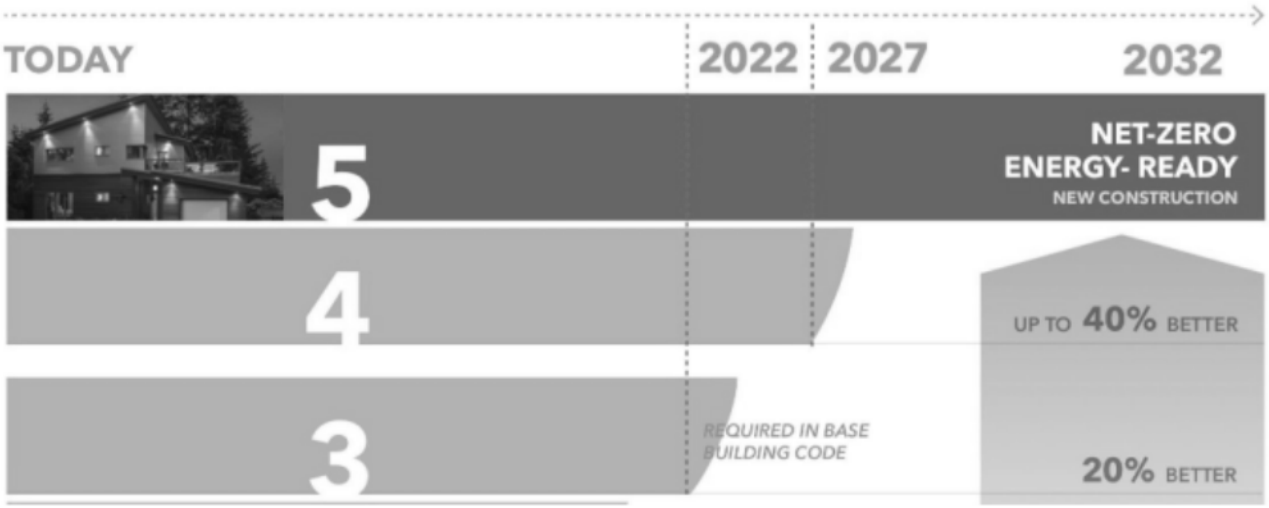

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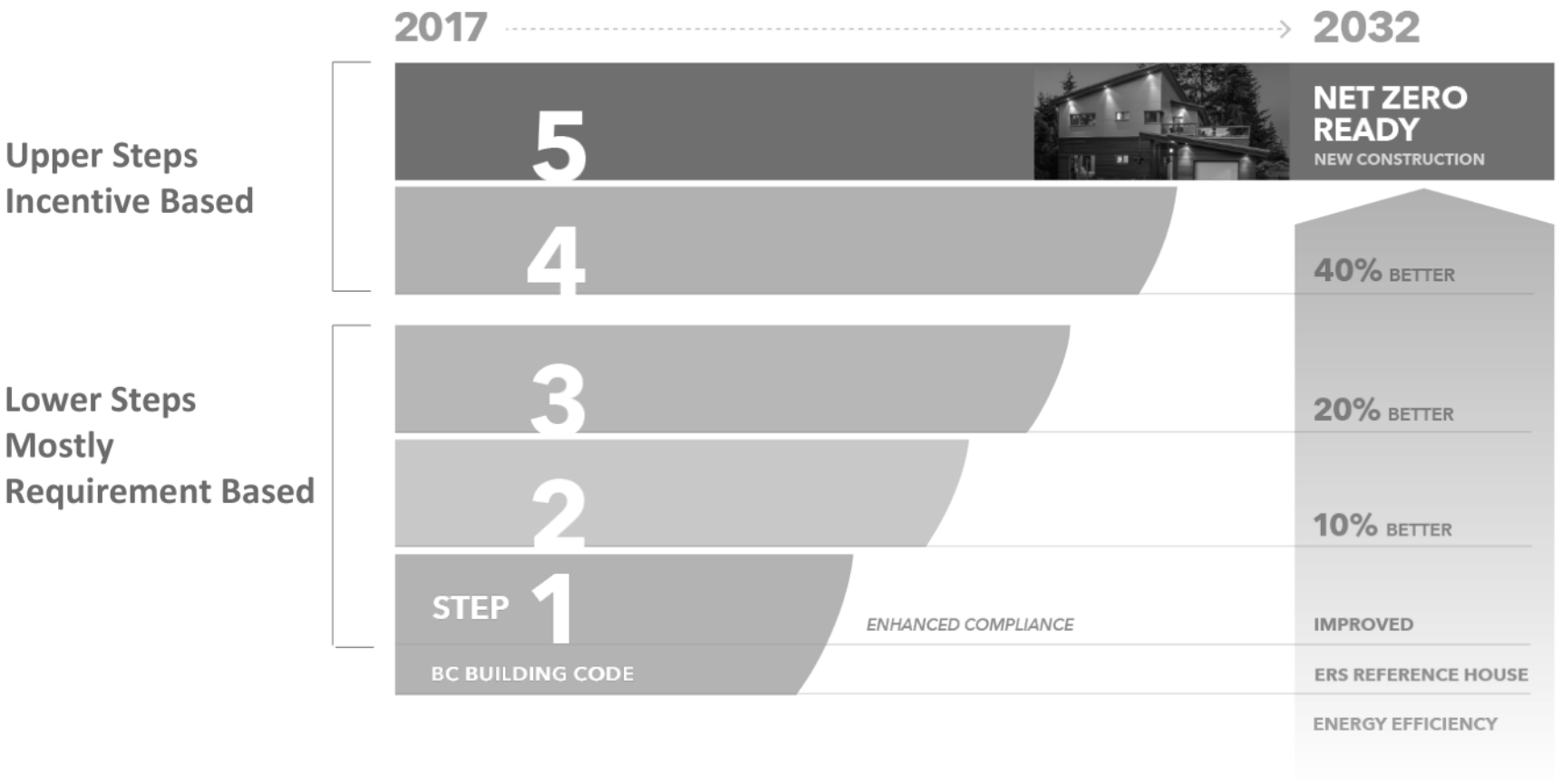
Part 9 | Performance Path Levers



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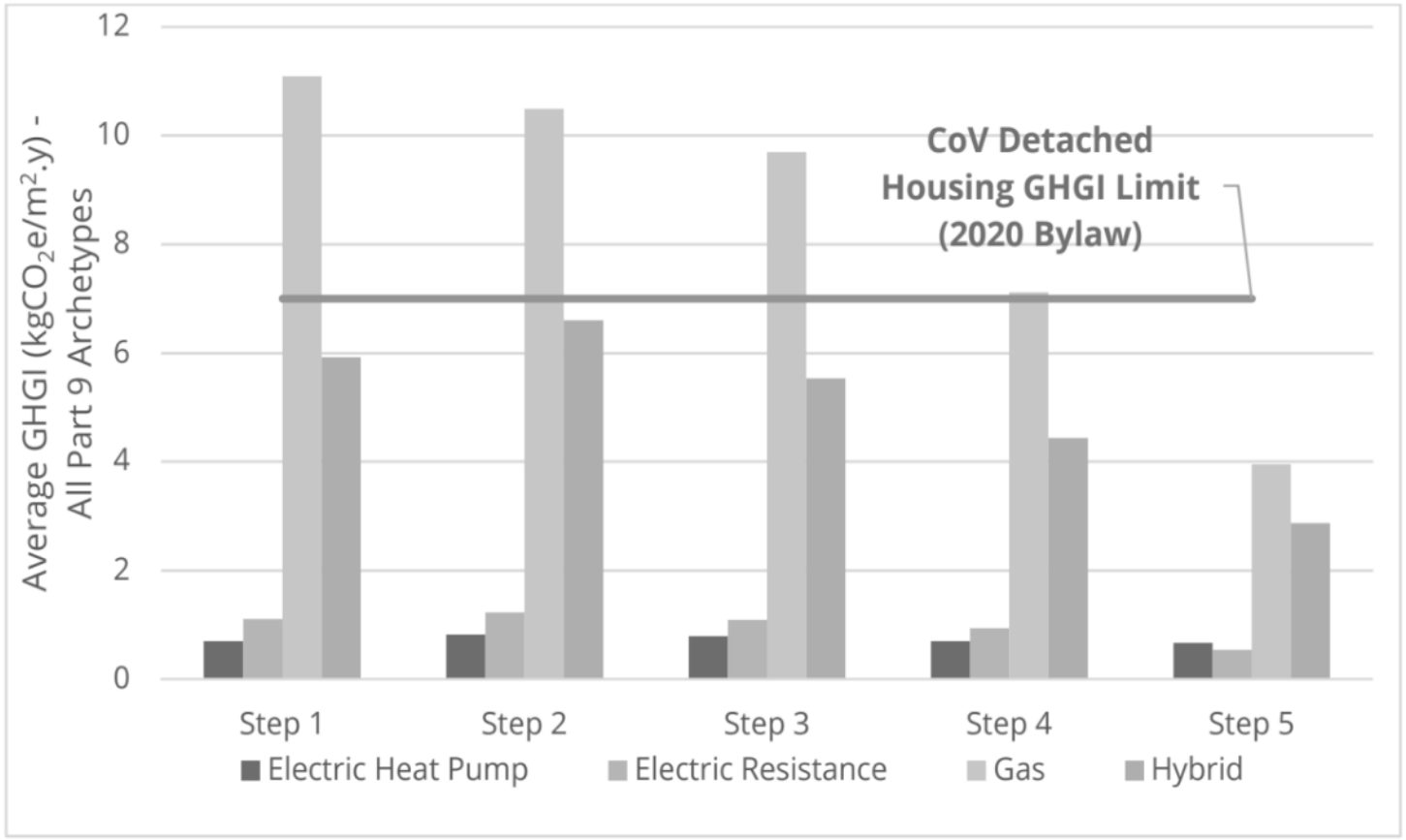

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Part 9 Energy Step Code

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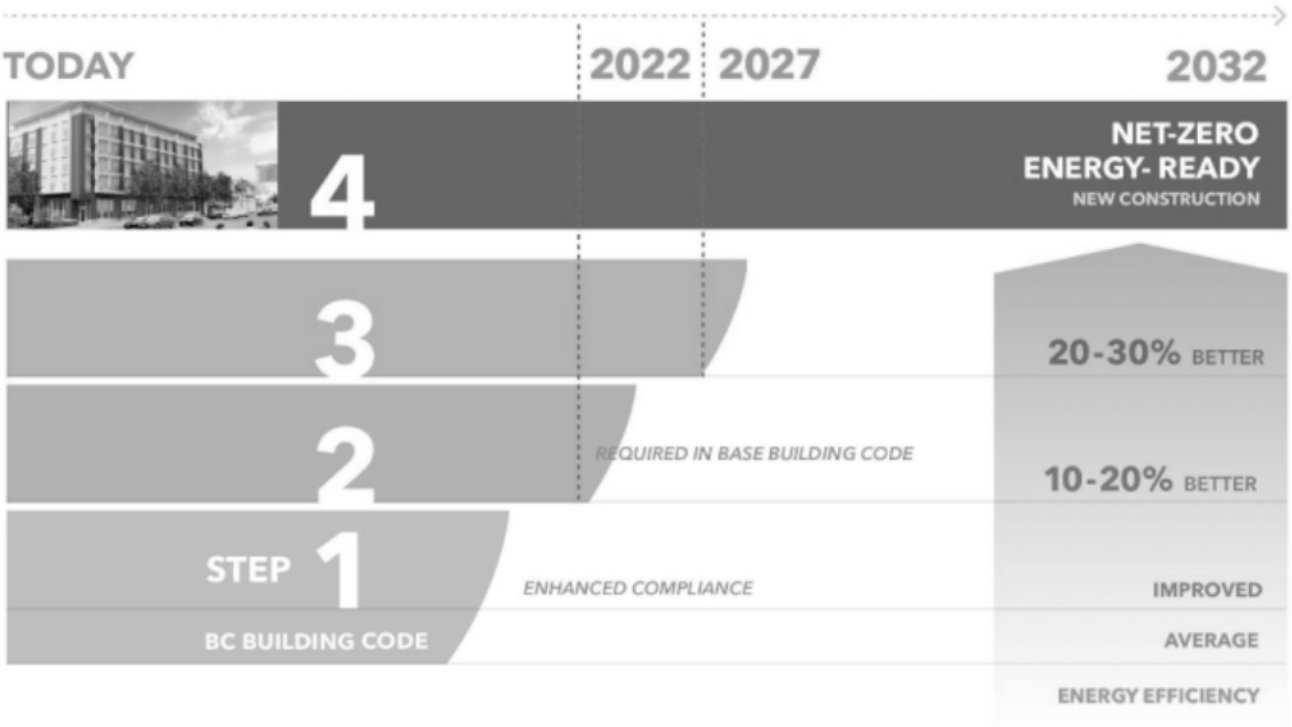

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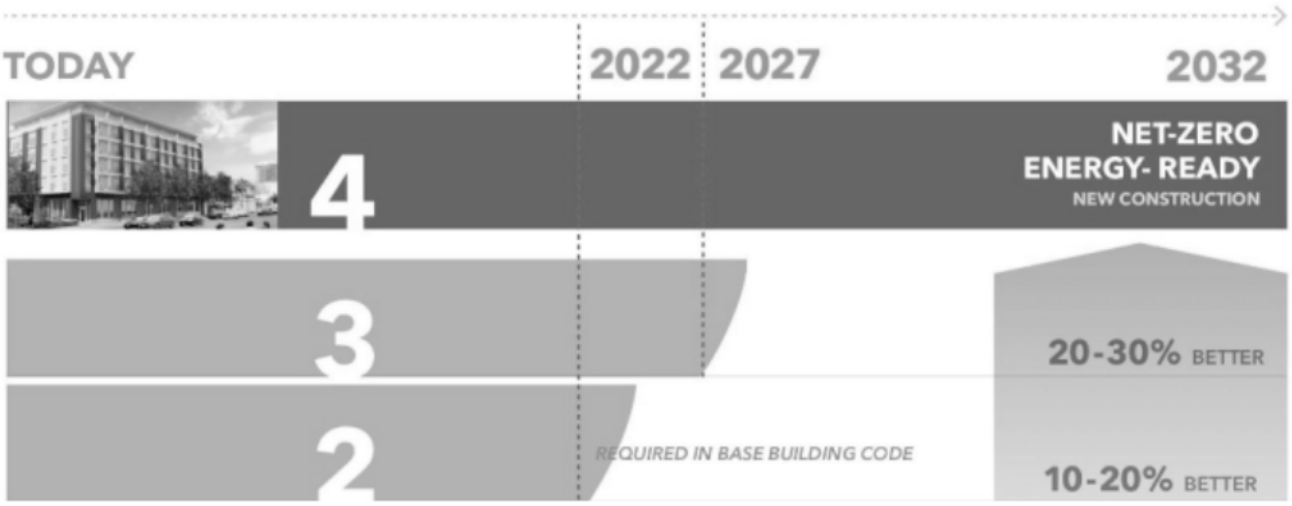

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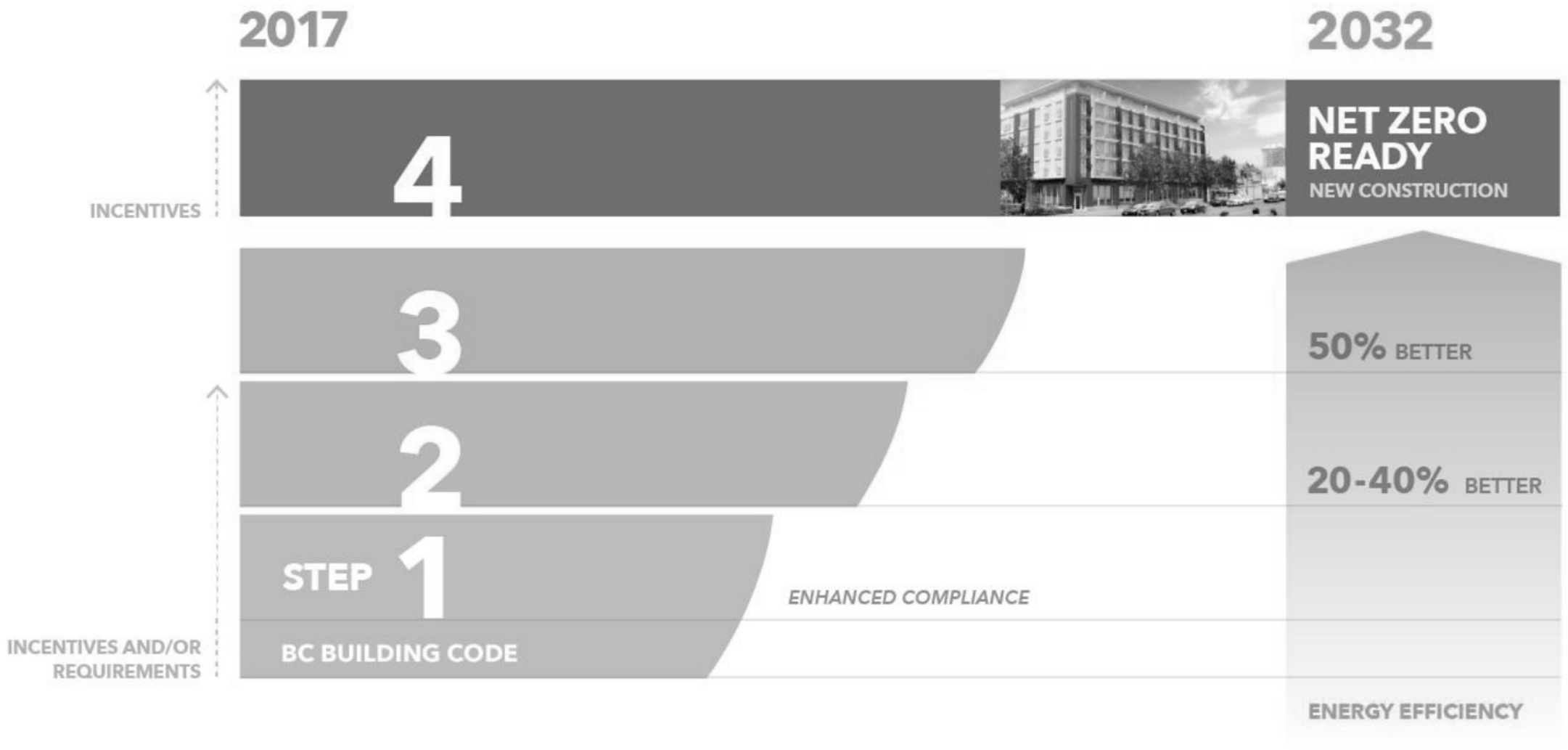
- Seeking recommendation through Energy Step Code Council

PATHWAY TO 2032: **PART 3 (WOOD-FRAME RESIDENTIAL)**



Part 3 Building Metrics



Thermal Energy Demand Intensity (TEDI)



Total Energy Use Intensity (TEUI)



Air leakage rate, in L/(s.m2) @75 Pa Pressure Differential

GHGI Targets



Greenhouse Gas Intensity (GHGI)

- ✓ Visible progress toward municipal and provincial carbon reduction targets
- ✓ Helps reduce number of buildings requiring costly retrofits to meet future targets

Solution: Incent building-scale or district-scale Low-Carbon Energy Systems (LCES)

Low Carbon Energy Systems | Two Option Approach

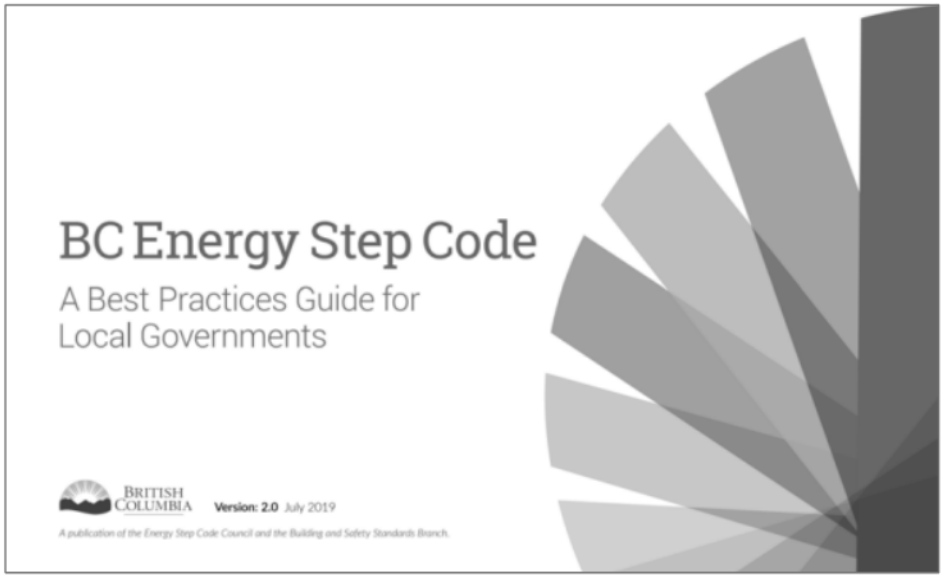
- A two-option Energy Step Code framework offers builders choice, while encouraging lower emission development:

  Option A: **Step X**

  [or]

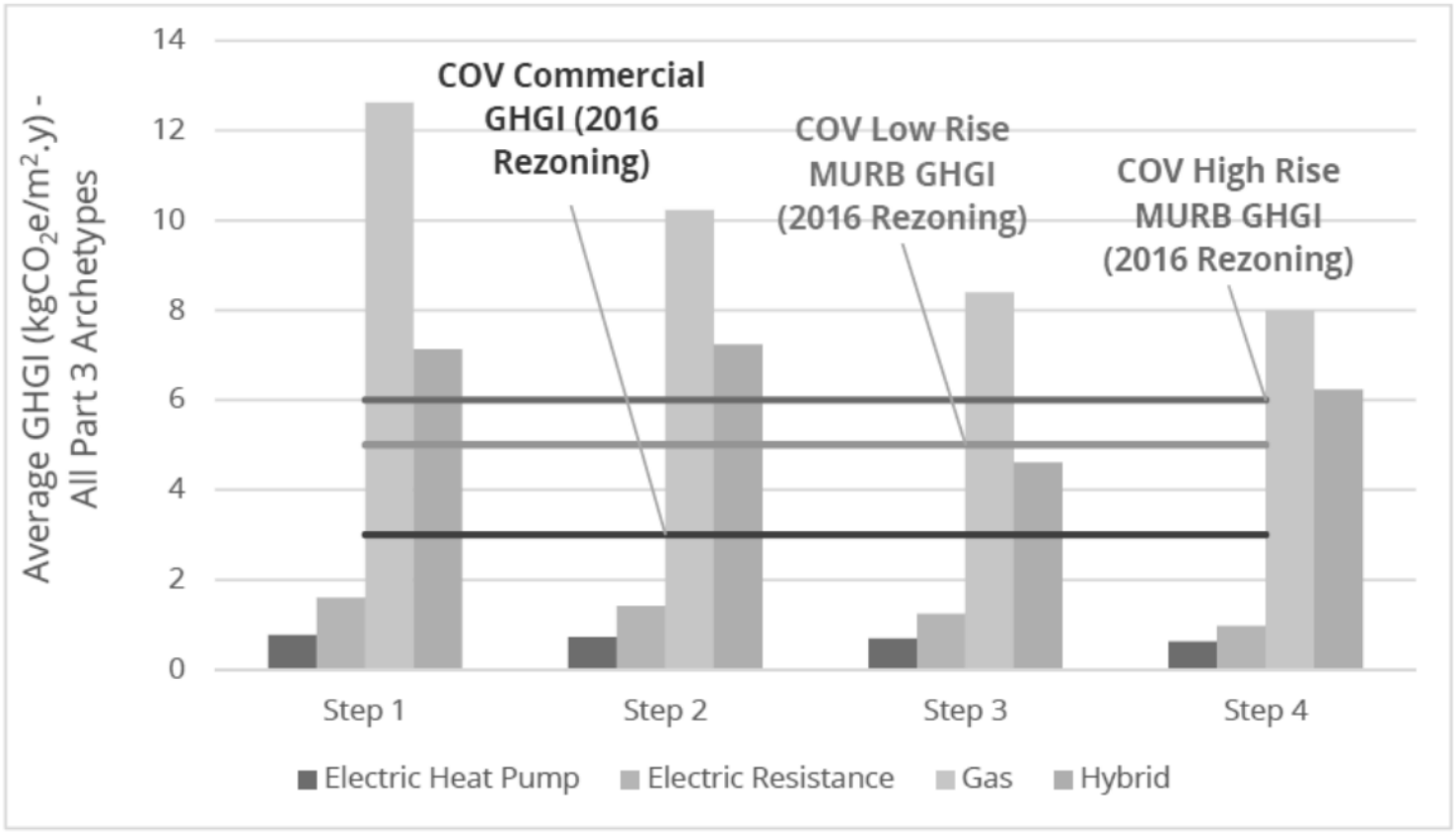
  Option B: **Step (X – n) with a LCES**

- This two-option approach is already used for **Part 3** construction in **Richmond, Burnaby, Surrey, Vancouver, New Westminster, Port Moody and UBC.**
- Included in the *Best Practices Guide for Local Governments v.2*



"Offering industry a relaxation clause that will also reach climate objectives"

LCES Analysis | All Part 3 Archetypes



Low Carbon Energy Systems provide lower GHG intensities, even at high thermal loads.

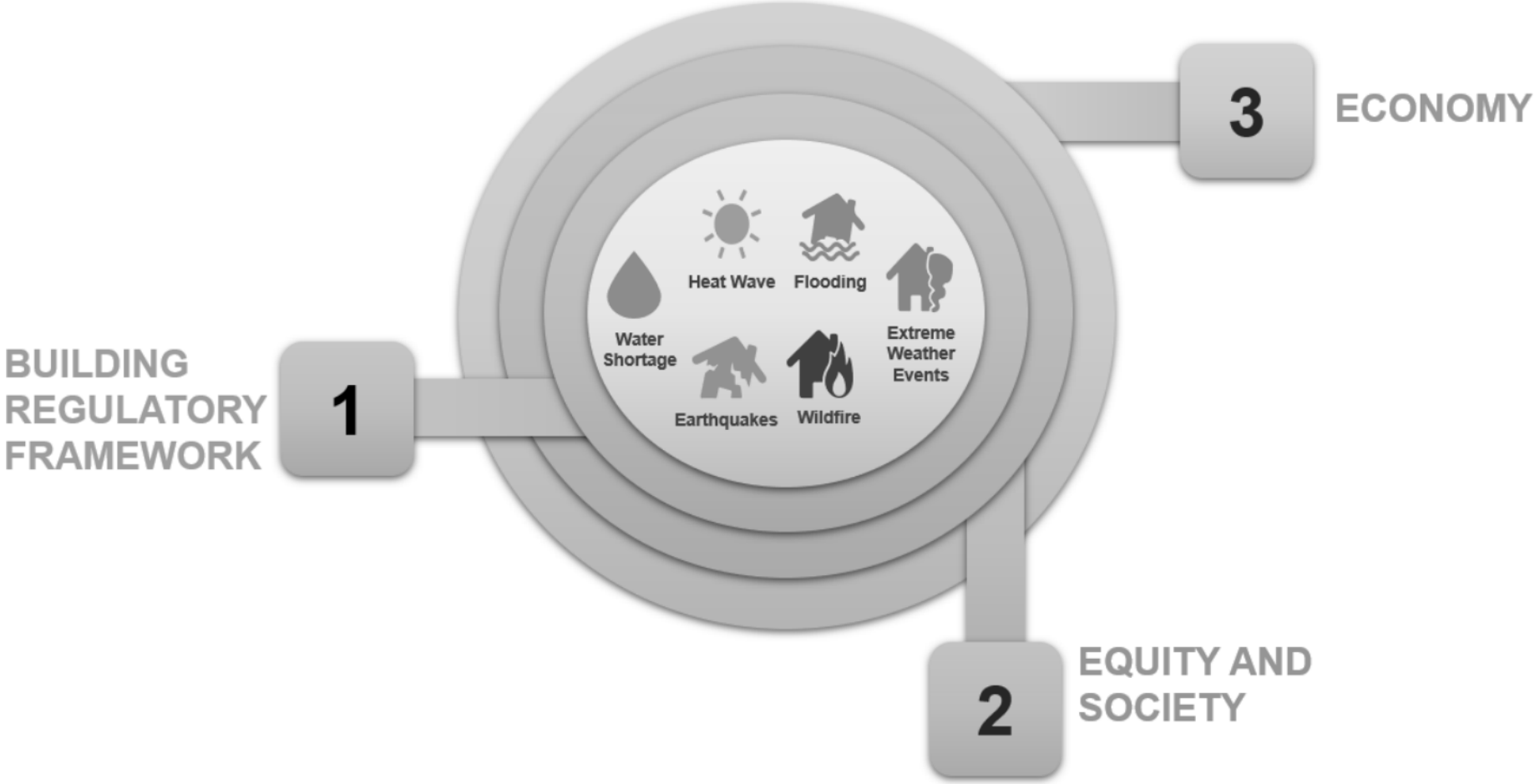
Graph Source: Integral Group. June 2019. *Implications of BC Energy Step Code on GHG Emissions*

Low Carbon Energy Systems | Definition for Part 3

- **LCES**: A professionally operated or maintained on-site energy system supplying a minimum of 70-75% of the building's annual heating, cooling, and domestic hot water demand.

  Examples include, electrical air source heat pump or variable refrigerant flow, geo-exchange, in-building sewer heat recovery, biomass, solar, or other system approved by the City.
- **Step Code relaxation** applies to buildings implementing an on-site Low-Carbon Energy System, or connecting to a district energy system (for buildings within a DE service area).

Existing Buildings



Existing Buildings



checking in

From: May, Zachary OHCS:EX

To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>

Cc: OHCS Building & Safety Standards Branch OHCS:EX <Building.Safety@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>

Sent: June 11, 2020 8:16:00 AM PDT

FYI - I'm on a UDI webinar then Codes Canada meeting until 1pm.

Best,

Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Final UDI Deck and Format!

From: May, Zachary OHCS:EX
To: Connolly,Norm <NConnolly@richmond.ca>, Christian Cianfrone <christian@zebx.org>, Sean Pander <sean.pander@vancouver.ca>
Sent: June 11, 2020 8:20:07 AM PDT

Thanks Christian. Looks great.

See you guys in an hour.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Connolly,Norm <NConnolly@richmond.ca>
Sent: June 11, 2020 7:43 AM
To: Christian Cianfrone <christian@zebx.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sean Pander <sean.pander@vancouver.ca>
Subject: Re: Final UDI Deck and Format!

Hey Christian,

The revised deck looks great, and nicely integrates themes and key points.

I like the flow your suggesting on the topics.

See you all at 9:15 am.

-Norm

From: Christian Cianfrone <christian@zebx.org>
Sent: June 10, 2020 9:24:43 PM
To: Connolly,Norm; Zachary OHCS:EX May; Sean Pander
Subject: Final UDI Deck and Format!

Gents,

Here is the final consolidated deck for me, Zach and Norm (Sean has no slides). I've rearranged your slides to fit into the format below. I'll treat it like a "fireside chat" and just ask each of you to talk about each topic briefly - I will follow up with any relevant Q&A that might arise on that topic in that moment rather than waiting until the end.

* I ask Zach, Norm, Sean about the Policy Context for each of you (in that order) and then relay any follow up questions from me or a good one from the audience chat.
* I ask you each (same order) to give an update on Part 9 - both recapping what is already here and what is coming - follow up with any good Q's.
* I ask the same thing for Part 3 (same order) - follow up with any good Q's.

* I ask Zach and Sean to give the audience a bit of an update of where we're heading for existing buildings
* I then moderate additional Q&A from the audience if there's time.

Hopefully this works for you. We can make any last minute adjustments at 9:15am. I trust last minute planning is well within all of your comfort levels so I'm feeling pretty good about tomorrow morning.

Cheers,
Christian

RE: Thank you from UDI

From: Yvonne Lo <ylo@udi.org>
To: Christian Cianfrone <christian@zebx.org>, Connolly,Norm <NConnolly@richmond.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Pander, Sean <sean.pander@vancouver.ca>
Cc: Michaela Neuberger <michaela@zebx.org>
Sent: June 11, 2020 11:14:37 AM PDT
Attachments: 85460186755 - Q&A Report.csv, 85460186755 - Poll Report.csv

Hi Christian, please find attached the polling and Q&A report.

However, I can't seem to find the chat record.

Also, may I please share your final version of the combined presentation slide on our website?

Thanks so much,
Yvonne

From: Christian Cianfrone [mailto:christian@zebx.org]
Sent: Thursday, June 11, 2020 11:02 AM
To: Connolly,Norm; May, Zachary OHCS:EX; Pander, Sean; Yvonne Lo
Cc: Michaela Neuberger
Subject: Re: Thank you from UDI

Thanks for having us, Yvonne. Can we get a copy of the chat, Q&A logs and poll results?

Thanks!
Christian
On Jun 11, 2020, 10:55 AM -0700, Yvonne Lo <ylo@udi.org>, wrote:

> Dear Christian, Norm, Zachary and Sean,
>
> Thank you so much for being part of our panel. Truly appreciate the time and effort you all put into preparing for this webinar.
>
> We had a total of 115 people signed up, and had 97 unique views. Most of them stayed with us till the very end.
>
> It was a pleasure working with you all. Stay safe & healthy!
>
> Thanks & much appreciated,
> Yvonne
>
> **Urban Development Institute**
> ylo@udi.org *Direct:* 604.661.3038 *Cellular:* 604.789.0898
> udi.bc.ca

Question Report

Report Generated:	2020-06-11 10:56			
Topic	Webinar ID	Actual Start Time	Actual Duration (minutes)	# Question
UDI Webinar: Green Building Regulatory Update	854 6018 6755	2020-06-11 8:55	111	22

Question Details

#	Question	Asker Name	Asker Email	Answer(s)	
1	Can you speak to the ASHRAE 90.1-2010 compliance path and how that fits in with green building standards?	Dana Krechowicz	dana.f.krechowicz@hsbc.ca	The Energy Step Code is based on the National Energy Code for Buildings (NECB), not ASHRAE 90.1. The NECB will continue to increase in importance as we move towards Net Zero Energy Ready construction. Also, it's important to note that ASHRAE 90.1 2016 is the currently referenced minimum, not the 2010 edition.	
2	Question for Zachary May:	Abbas Rangwala	abbas@bcbuildingscience.com		
3	For BCBC 2018 Step Code projects (Part 3), does the whole-building airtightness target for projects using the standard 0.2 L/s/m2 (facade) in the CoV Energy Modelling Guidelines need to use the formula in the CoV Energy Modelling Guidelines, or a fixed target of 2.0 L/s/m2 (similar to VBBL Rezoning and Prescriptive targets)?	Abbas Rangwala	abbas@bcbuildingscience.com	live answered	In Vancouver the formula only applies to projects pursuing airtightness that is better than 0.2L/s/m2 as a strategy for meeting TEDI. An updated Bulletin with more detail on airtightness requirements is in development and we hope to publish this fall.
4	Q: is there a trend for some real estate developers to move away from pursuit of, say, LEED certification, due to cost and process of the certification itself, while still delivering significant green/sustainable features? And more emphasis on following STEP?	Dale Telfer	dale_telfer@hsbc.ca	In the residential market, the focus has shifted to STEP but market demand in the commercial sector keeps LEED alive and relevant.	The Province is working with CaGBC to provide LEED credits for Step Code compliance, which should make it easier for projects interested in LEED and Step Code.
5	Zachary - does the Province have any plans to track/limit embodied carbon?	Michael Guenter	mguenter@concertproperties.con	live answered	This is an increasingly important issue for us, and we're looking at options, but we don't have a specific plan at this point.
6	thanks, great answers	Dale Telfer	dale_telfer@hsbc.ca		
7	Can you give any examples of development firms that are ahead of the curve and good 'champions' of STEP ?	Dale Telfer	dale_telfer@hsbc.ca	live answered	
8	So basically ASHRAE 90.1 is not relevant (because it's much weaker than regulations)?	Dana Krechowicz	dana.f.krechowicz@hsbc.ca	live answered	ASHRAE 90.1 isn't weaker than the NECB, but it's a different approach that doesn't align as well with Canadian policy goals.
9	I missed that, who were the firms mentioned?	Dale Telfer	dale_telfer@hsbc.ca	Hey Dale — I'll ask this on your behalf at the end of the presentation, so we can get the panle to provide examples.	Henson Developments for the 60 storey PH tower and Landa Global/Asia Pacific for the 2 Tower Development on Alberni

10	How has Vancouver considered the construction cost implications of going fully electric and the trickle down effect it will have on housing costs, in terms increasing electrical power supply demand (i.e. pushing smaller sites from PMTs to unit substations), and the on-going costs to maintain electric systems over natural gas systems, and the impact of that on rental and the cost of property management?	Elise Spearing	elise.spearing@mosaichomes.com	
11	perfect, thanks, btw, we have launched a Green Loan initiative and are talking with our clients about how to align their initiatives with our program	Dale Telfer	dale_telfer@hsbc.ca	Dale: On your question of who's designing and buildkng at the top end of the Step Code. There are a number of design teams, builders and developers that have projects already underway or at the design / plan review stage in the region. Reach out to ZEBx and Passive House Canada can provides for examples.
12	Thanks Sean! Got that confirmation from Patrick. Just trying to figure out if this would apply to BCBC Part 3 projects as well? It would seem weird that projects in Kelowna may need to be tested to tighter aritightness targets that CoV.	Abbas Rangwala	abbas@bcbuildingscience.com	
13	Norm, Could you please show you LCES part 3 graph again?	Bill MacKinnon	bmackinnon@bchousing.org	
14	one more Q: when CoV is assessing an application or development for STEP for a project, do they place any emphasis in the actual parent company's track record with Sustainability, on the top level corporate level?	Dale Telfer	dale_telfer@hsbc.ca	
15	...or is everything based on the specific project itself?	Dale Telfer	dale_telfer@hsbc.ca	
16	'@Sean Pander - incentivizing mass timber construction is a fantastic idea. Providing density bump of 10% would really help the industry take advantage of this. Also removing overkill requirements of encapsulation is great idea!	Reid Kaufmann	rkaufmann@bastion.ca	

17	When all buildings switch to electric source energy, do we have enough electricity? Where will the gas go?	Helen Liu	helen@ronwong.ca	
18	What type of incentive tools can the Provinical Gov provide to help the Development industry become early adaptors of Mass Timber and Zero Emissions buildings? Given the incremental cost and risk of committming to Passive House and Mass Timber incentives and support are needed!	Reid Kaufmann	rkaufmann@bastion.ca	
19	also examples in Victoria?	Dale Telfer	dale_telfer@hsbc.ca	
20	Electricity cost is much higer then the gas, will the building owner accturally pay higher energy bill even with more energy efficiency building?	Helen Liu	helen@ronwong.ca	
21	What kind of existing buildings? Just city owned?	John Gilmour	gilmour@magusta.com	
22	Which exisitng building types will the 2024 code apply to? Is taht accross the board or just part 9?	Jeremy Berger	jeremy@porte.ca	Still working on a decision for 2024, but everything is on the table at this point. All buildings are subject to climate and disaster risks.

Poll Report

Report Generated:	2020-06-11 10:56				
Topic	Webinar ID	Actual Start Time	Actual Duration (minutes)		
UDI Webinar: Green Building Regulatory Update	854 6018 6755	2020-06-11 8:55	111		

Poll Details

#	User Name	User Email	Submitted Date/Time		
1	JeremyBerger	jeremy@porte.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
2	PJ	philipj@holborn.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
3	MichaelLiu	Michael.Liu@fortisbc.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•No
4	KariMadsen	kari.madsen@dysarchitecture.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
5	TimPotter	tim@alabasterhomes.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much

6	MichaelGuenter	mguenter@concertproperties.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
7	aymesharma	asharma@franclarchitecture.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
8	CarolineJackson	cjackson@cnv.org	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
9	Siraz	siraz.dalmir@fortisbc.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
10	JimTwining	jtwining@aspac.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
11	MeganPeters	mpeters@franclarchitecture.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much

12	ElizabethTang	etang@cmhc-schl.gc.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
13	GrahamBrewster	gbrewster@wesgroup.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
14	StefanAepli	saepli@franclarchitecture.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
15	KarinHung	khung@bharch.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
16	AllisonMillar	amillar@brookpooni.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
17	LoriKay	lori.kay@deltalanddev.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat

18	JeanieChan	jeanie.chan@stantec.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
19	SandeepSharma	sandeep.sharma@fortisbc.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
20	HelenLiu	helen@ronwong.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
21	SandraBlue	sandyblue@telus.net	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
22	DanGronross	dgronross@morrisonhershfield.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
23	RaymondCho	raymond.cho@smithandandersen.co	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat

24	NeillMcGowan	neillmcgowan@bty.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
25	LeoGlaser	leo.glaser@quadreal.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
26	MannyRiebeling	manny@porte.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•No
27	JustinLew	jlew@aspac.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
28	RandyKnill	s.22	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
29	MonicaMoran	monica.moran@stantec.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much

30	Kevin So, AScT, RRO	kso@travelers.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
31	BillMacKinnon	bmackinnon@bchousing.org	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
32	MaryDe Paoli	mdepaoli@portmoody.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
33	DaneJansen	dane.jansen@dysarchitecture.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
34	JacquelyneFitchell	jacquelyne@e3ecogroup.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
35	AndrewAdams	aadams@pci-group.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•No

36	EliseSpearing	elise.spearing@mosaichomes.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
37	DonMunich	dmunich@travelers.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
38	EmmaConway	emma@e3ecogroup.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat
39	MatthewKerner	matthew@creative.energy	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
40	FreemanLane	flane@aspac.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much
41	AbbasRangwala	abbas@bcbuildingscience.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat

42	ChristineSun	s.22	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat		
43	SailenBlack	sailen.black@vancouver.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – somewhat		
44	JackBolland	jack.bolland@toronto.ca	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•No		
45	JonathanMeads	jmeads@qualico.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•Yes – very much		
46	JohnGilmour	gilmour@magusta.com	2020-06-11 10:46	Did the presentations and discussion today improve your understanding of upcoming provincial and local government regulatory changes related to green buildings?	•No		
47	JeremyBerger	jeremy@porte.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•Commercial / Retail
48	PJ	philipj@holborn.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail

49	InderGrewal	igrewal@aspac.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
50	LauraSampliner	lsampliner@portmoody.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 1	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•Commercial / Retail
51	TimPotter	tim@alabasterhomes.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 4 or Vancouver Higher Buildings Policy	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family
52	MichaelGuenter	mguenter@concertproperties.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
53	aymesharma	asharma@franclarchitecture.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•Institutional / Other
54	AdrianLimantoro	adrian@alabasterhomes.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 4 or Vancouver Higher Buildings Policy	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories)
55	BrandenKotyk	branden.kotyk@victaulic.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
56	DanaKrechowicz	dana.f.krechowicz@hsbc.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•Institutional / Other
57	JimTwining	jtwining@aspac.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 1	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
58	MeganPeters	mpeters@franclarchitecture.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
59	ElizabethTang	etang@cmhc-schl.gc.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•Institutional / Other
60	IanMitchell	ian.mitchell@fortisbc.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•Commercial / Retail

61	GrahamBrewster	gbrewster@wesgroup.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 4 or Vancouver Higher Buildings Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
62	StefanAepli	saepli@franclarchitecture.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 4 or Vancouver Higher Buildings Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
63	KarinHung	khung@bharch.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 1	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
64	AllisonMillar	amillar@brookpooni.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
65	LoriKay	lori.kay@deltalanddev.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
66	JeanieChan	jeanie.chan@stantec.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
67	SandeepSharma	sandeep.sharma@fortisbc.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories);•Commercial / Retail
68	JayJagpal	jay.jagpal@olympicinternational.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
69	RebeccaNguyen	rebecca@citimark.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
70	SandraBlue	sandyblue@telus.net	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 4 or Vancouver Higher Buildings Policy	In which building sector do you work in (can select multiple)?	•Institutional / Other
71	DanGronross	dgronross@morrisonhershfield.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other

72	NeillMcGowan	neillmcgowan@bty.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
73	LeoGlaser	leo.glaser@quadreal.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
74	MannyRiebeling	manny@porte.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories)
75	JustinLew	jlew@aspac.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 1	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
76	BillGill	bgill@ozzelectric.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
77	RandyKnill	s.22	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
78	MonicaMoran	monica.moran@stantec.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 4 or Vancouver Higher Buildings Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
79	LarryRahn	larry.rahn@sbw.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•Commercial / Retail
80	SadiaAfrin	saafrin@bchousing.org	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 4 or Vancouver Higher Buildings Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
81	BillMacKinnon	bmackinnon@bchousing.org	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
82	MagdalenaSzpala	mszpala@bchousing.org	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•High Rise residential (>6 stories)

83	StefanSlot	stefan.slot@townline.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
84	MaryDe Paoli	mdepaoli@portmoody.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 1	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories)
85	DaneJansen	dane.jansen@dysarchitecture.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
86	RobinGlover	Rglover@polyhomes.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
87	JacquelyneFitchell	jacquelyne@e3ecogroup.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories)
88	MarkZaturecky	mzaturecky@ubcproperties.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 1	In which building sector do you work in (can select multiple)?	•Institutional / Other
89	PAULCREIGHTON	Paul.creighton@entuitive.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
90	AndrewAdams	aadams@pci-group.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail
91	EliseSpearing	elise.spearing@mosaichomes.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail
92	RyanDibai	ryan.dibai@fortisbc.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories);•Commercial / Retail
93	EmmaConway	emma@e3ecogroup.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 4 or Vancouver Higher Buildings Policy	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family

94	MatthewKerner	matthew@creative.energy	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 1	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
95	Keith	k.hand@rizealliance.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
96	FreemanLane	flane@aspac.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•High Rise residential (>6 stories)
97	ChristineSun	s.22	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•Commercial / Retail;•Institutional / Other
98	StefanHertel	shertel@wesgroup.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail
99	SailenBlack	sailen.black@vancouver.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•Passive House	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail;•Institutional / Other
100	JonathanMeads	jmeads@qualico.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family;•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
101	JohnGilmour	gilmour@magusta.com	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 1	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories)
102	ErnetteHutchings-Mas	ernette@citimark.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 3 or Vancouver Rezoning Policy	In which building sector do you work in (can select multiple)?	•Single Family / Small Multi-Family
103	ChrisColbeck	Chris.Colbeck@townline.ca	2020-06-11 9:41	Do you have projects with the following performance requirements or targets (can select multiple)?	•BC Step Code - Step 2 or Vancouver Building Bylaw (VBBL) Equivalent	In which building sector do you work in (can select multiple)?	•Midrise residential (4-6 stories);•High Rise residential (>6 stories);•Commercial / Retail

Re: Invite to Vancouver's Climate Emergency - Building decarbonization advisory committee

From:	Executive Director <ED@bcpiac.org>
To:	Pander, Sean <sean.pander@vancouver.ca>, Christine Gustafson <Christine@harbourgreene.ca>, Conor Reynolds <Conor.Reynolds@metrovancouver.org>, davidh@landlordbc.ca, dstathonikos@boma.bc.ca, Faught, Brady <Brady.Faught@vancouver.ca>, Gary Milligan <s.22 >, jfisher@udi.org, JOwen@surrey.ca, Karen Tam Wu <KarenTW@pembina.org>, Kim Barbero <kbarbero@mcabc.org>, Leigha Worth <LWorth@bcpiac.org>, mark@havan.ca, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, prussell@richmond.ca, Rebecca (Sustainabiliteens) <s.22 >, Robyn Wark <Robyn.Wark@bchydro.com>, Sherry Yano <sYano@davidsuzuki.org>, tony@choa.bc.ca, White, Phil <Phil.White@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Christian Cianfrone (christian@zebx.org) <christian@zebx.org>
Cc:	Lang, Micah <Micah.Lang@vancouver.ca>, Scott Castro, Brenda <brenda.scott@vancouver.ca>, Jimenez, Jaclyn <jaclyn.jimenez@vancouver.ca>
Sent:	June 11, 2020 11:44:57 AM PDT
Attachments:	image.png

Hello Sean et al.:

I am afraid that neither Irina nor I can attend on the 22nd (I was awaiting the poll referenced on Monday's email to respond). We are attending BC Hydro's Integrated Resource Planning Technical Advisory Committee meeting at virtually the same time and there are just too many other parties involved for me to ask for a new date and/or time.

However, I would very much like to be involved in this important process as well so if there is a way for me to offer input offline regarding what may be discussed during this first meeting, please let me know and I will do my best to accommodate and contribute.

Best,

Leigha
cell: 778-887-1115
pronouns: she/her/hers

BCPIAC
Public Interest Advocacy Centre

LEIGHA WORTH B.A HON, LL.B
EXECUTIVE DIRECTOR & GENERAL COUNSEL

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From: Pander, Sean <sean.pander@vancouver.ca>
Sent: Monday, June 8, 2020 9:54 AM
To: Christine Gustafson <Christine@harbourgreene.ca>; Conor Reynolds <Conor.Reynolds@metrovancouver.org>; davidh@landlordbc.ca <davidh@landlordbc.ca>; dstathonikos@boma.bc.ca <dstathonikos@boma.bc.ca>; Faught, Brady <Brady.Faught@vancouver.ca>; Gary Milligan <s.22 >; jfisher@udi.org <jfisher@udi.org>; JOwen@surrey.ca <JOwen@surrey.ca>; Karen Tam Wu <KarenTW@pembina.org>; Kim Barbero <kbarbero@mcabc.org>; Leigha Worth <LWorth@bcpiac.org>; mark@havan.ca <mark@havan.ca>; Nathaniel.gosman@gov.bc.ca <Nathaniel.gosman@gov.bc.ca>; prussell@richmond.ca <prussell@richmond.ca>; Rebecca (Sustainabiliteens) <s.22 >; Robyn Wark <Robyn.Wark@bchydro.com>; Sherry Yano <sYano@davidsuzuki.org>; tony@choa.bc.ca <tony@choa.bc.ca>; White, Phil <Phil.White@vancouver.ca>; Zachary.May@gov.bc.ca <Zachary.May@gov.bc.ca>; Christian Cianfrone (christian@zebx.org) <christian@zebx.org>
Cc: Lang, Micah <Micah.Lang@vancouver.ca>; Scott Castro, Brenda <brenda.scott@vancouver.ca>; Faught, Brady <Brady.Faught@vancouver.ca>; Jimenez, Jaclyn <jaclyn.jimenez@vancouver.ca>
Subject: Invite to Vancouver's Climate Emergency - Building decarbonization advisory committee

Respected Colleagues,

I am Vancouver's Green Building Manager. Our team leads the City's efforts to decarbonize buildings in Vancouver. I am writing this morning to invite you to join Vancouver's Climate Emergency Big Move 4 External Advisory Committee (BM4EAC for short) for Zero Emissions Buildings.

Big Move 4 of Vancouver's Climate Emergency Response (2019) directed staff to begin developing plans to **ensure all** new and **replacement heating and hotwater equipment is zero emissions by 2025** and to reduce greenhouse gas emissions in Vancouver by 50% by 2030. While this work is meant to shape how the City continues to roll-out its Zero Emissions Building Plan (2016), the emphasis of the new planning work is focused on how to get deep emission reductions from existing buildings.

Meeting these objectives will be effectively impossible for the City to achieve on its own; our success will require alignment in thinking and action from a broad range of partners and will need to carefully weigh the tradeoffs that meaningful action will entail. While we have numerous research initiatives and technical experts involved in shaping this work, the BM4EA's role will be to challenge and inform staff thinking on our strategic direction, to maximize this alignment, and to help us balance the tradeoffs.

At a minimum, BM4EAC involvement will include participating in 2-3 meetings over the next 5 months to share your ideas, concerns, and to identify areas for further research and consultation. The outcome will be incorporated as part of our recommendations to Council in November on Vancouver's Climate Emergency Action Plan and a detailed Zero Emission Buildings Retrofit Plan. As part of these meetings, additional opportunities will likely arise to participate in this work further but these will be optional and specific to individual committee members.

I will follow-up this email with an e-poll to check availability for the first Committee meeting on either morning of Jun 22 or afternoon of Jun 18. If you'd like more information on the Committee's role, expectations for participation, or feel there maybe another representative from your organization that would be better suited to participate, please contact me directly to discuss.

At this first meeting, we will present and discuss the main elements of the draft Plan including:

- New buildings actions and importance
- Clear Retrofit Signals and Flexible Requirements
- Supporting Voluntary Leaders
- Building Capacity
- Removing Barriers
- Access to renewable energy
- Equity
- Follow-up actions

I hope you will be able to support us as your voice and the people it represents is critical in this important work.

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver
City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
t: 604.871.6542
sean.pander@vancouver.ca

RE: ZEBx Report on Improving ESC for MURBs

From: Wells, Ralph <ralph.wells@ubc.ca>

To: Christian Cianfrone <christian@zebx.org>, Sustainable Communities <sustainablecommunities@bchydro.com>, Corey McBurney <corey@enerquality.ca>, Gary Hamer <gary.hamer@bchydro.com>, Jeff Fisher <jfisher@udi.org>, RKA <kadulski@direct.ca>, Maura Gatensby <mgatensby@aibc.ca>, Mihailo Mihailovic <mihailo.mihailovic@nrc-cnrc.gc.ca>, Mary McWilliam <mmcwilliam3@bcit.ca>, Rick Bortolussi <rick.bortolussi@tlhousingsolutions.ca>, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Alex Hutton <alex.hutton@fraserhealth.ca>, Gill, Aman X OHCS:EX <Aman.X.Gill@gov.bc.ca>, Bea Bains <bea.bains@fortisbc.com>, Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>, Christopher McLellan <christopher.mclellan@canada.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>, Francois Dubrous <francois.dubrous@canada.ca>, Greg Gerke <greg.gerke@townline.ca>, Gregory McCall <gregory.mccall@vancouver.ca>, Gordon Richards <grichards@jensenhughes.com>, Gerry Sawkins <gsadvisor@shaw.ca>, Guido Wimmers <guido.wimmers@unbc.ca>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Jim Comtois <jim.comtois@canada.ca>, Kevin Ramlu <kramlu@tol.ca>, Marek Kapuscinski <mkapuscinski@naimacanada.ca>, Norm Connolly <nconnolly@richmond.ca>, Nick Gazo <ngazo@naimacanada.ca>, Nayel Halim <nhalim@newwestcity.ca>, Nicholas Heap <nheap@richmond.ca>, Patrick Enright <patrick.enright@vancouver.ca>, Rob Baker <rbaker@tol.ca>, Rick Bortolussi <rick.bortolussi@townline.ca>, Saleh Lavaee <saleh.lavaee@fortisbc.com>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Sepehr Foroushani <sforoushani@richmond.ca>, Susan MacDougall <susan@focaleng.com>, Tao Jiang <tao.jiang@surrey.ca>, Lau, Toby <toby.lau@bchydro.com>, Wilma Leung <wileung@bchousing.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Hutton, Alex [PHSA] <alex.hutton@phsa.ca>, Lisa Mak <lisa.mak@bchydro.com>, Koepfgen, Pete <pete.koepfgen@fortisbc.com>

Sent: June 12, 2020 11:21:00 AM PDT

Attachments: image001.png

Thanks Christian,

And here is a link to the UBC study on future climate thermal comfort in multifamily buildings:
https://planning.ubc.ca/sites/default/files/2020-05/REPORT_UBC_Climate%20Resilient%20Multifamily%20Buildings.pdf

Cheers, Ralph

Ralph Wells MRM M.Eng (He, Him, His)
Community Energy Manager
Sustainability and Engineering | Campus and Community Planning
The University of British Columbia | Vancouver Campus
M 604 219 7155 | ralph.wells@ubc.ca | www.sustain.ubc.ca

From: Christian Cianfrone <christian@zebx.org>
Sent: Friday, June 12, 2020 10:55 AM
Subject: ZEBx Report on Improving ESC for MURBs

Here is the link to the report I just presented. It's an easy read at only ~10 pages with lots of images. All of the graphs and data sources I presented can all be found in the report. There is an extensive appendix with detailed analysis that can be provided upon request.

https://zebx.org/wp-content/uploads/2019/11/ZEBx-Report-Improving-NZER-codes-for-MURBS_201910_R1.pdf

Christian Cianfrone, P.Eng. | Executive Director
Zero Emissions Building Exchange | 604.330.2017 | @zebxchange

RE: North Van District

From: Bob Deeks <bdeeks@rdcfinehomes.com>
To: Mark Sakai <mark@havan.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Wark, Robyn (Robyn.Wark@bchydro.com) <Robyn.Wark@bchydro.com>
Cc: Jeff Fisher (jfisher@udi.org) <jfisher@udi.org>
Sent: June 12, 2020 4:42:13 PM PDT
Attachments: image002.png, image004.jpg, image005.png, image003.jpg

Hi Mark,
Thanks for forwarding on. Can they impose GHG targets and comply with the Building Act?
I expect we are going to see this in other municipalities. Squamish has discussed strategies to de-incentivise gas and this is a discussion developing in Whistler. West Van of course has already imposed Step 5 on homes with gas.
Agenda for next meeting?
Cheers,

Bob Deeks
President – Certified Housing Professional

RDC FINE HOMES | Healthy Homes. Happy Families. PIQUE BEST OF WHISTLER 2018 PIQUE BEST OF WHISTLER 2019

Cell: 604.967.1142 **Office:** 604.932.3618 **Email:** bob@rdcfinehomes.com
203-1390 Alpha Lake Road, Whistler, BC V8E 0H9
www.rdcfinehomes.com

From: Mark Sakai <mark@havan.ca>
Sent: June 12, 2020 11:06 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wark, Robyn (Robyn.Wark@bchydro.com) <Robyn.Wark@bchydro.com>; Bob Deeks <bdeeks@rdcfinehomes.com>
Cc: Jeff Fisher (jfisher@udi.org) <jfisher@udi.org>
Subject: North Van District

Zachary/Robyn/Bob:

Our favourite Metro Van Council seems to be at it again.

In her report, Councillor Megan Curren directly attacks the integrity of the Energy Step Code Council (see page 185).

https://app.dnv.org/OpenDocument/Default.aspx?docNum=4399436

I'll leave it up to you to decide whether or not the Council should respond.

MARK SAKAI
Director of Government Relations
Homebuilders Association Vancouver
direct: 778-373-9784 / cell: 604-928-8126
#1011, 7445 132 Street, Surrey, BC V3W 1J8
Working From Home (except Wednesday)
@Mark_HAVAN
www.havan.ca

HAVAN | Homebuilders Association Vancouver

RE: COVID survey

From: Mark Sakai <mark@havan.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Jeff Fisher <jfisher@udi.org>
Sent: May 4, 2020 11:14:26 AM PDT
Attachments: image001.png

Here are the results of the two in-webinar polls that we did

	Apr 7	Apr 21
Almost Normal w/ adjusted operations	43.6%	38.1%
Some Impacts: Some Reduced revenues, some layoffs	32.7%	28.9%
Significant impacts: Signif reduced rev, signif layoffs	12.7%	17.3%
Near Complete Shutdown	9.3%	11.6%
Complete Shutdown	1.9%	4.1%

Sample size for Apr 7 was about 250; for Apr 21 was 370.

Topic of webinar may have had an impact on the type of attendees.
April 7 was about Construction Site Safety, April 21 was about Economic Impacts & Outlook.

MARK SAKAI
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@Mark_HAVAN
www.havan.ca

HAVAN | Homebuilders Association Vancouver

Proudly affiliated with CHBA BC and CHBA

From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: May 1, 2020 9:42 AM
To: Mark Sakai; Jeff Fisher
Subject: RE: COVID survey

Hi Mark,

Any information you have would be appreciated.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Mark Sakai <mark@havan.ca>
Sent: April 30, 2020 4:46 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>
Subject: RE: COVID survey

Hi Zachary;

We've been doing some short surveys of attendees of some of our COVID-19 Webinars, to gauge the impact that they have encountered, both from the market and the new site safety requirements.

We haven't specifically asked them to identify challenges, but we've heard of some of them anecdotally.

I can get the results of the two webinar surveys for you, if you think you'd find them interesting.

MARK SAKAI
Director of Government Relations
Homebuilders Association Vancouver
direct: 778-373-9784 / cell: 604-928-8126
#1011, 7445 132 Street, Surrey, BC V3W 1J8
Working From Home
@Mark_HAVAN
www.havan.ca

HAVAN | Homebuilders Association Vancouver

Proudly affiliated with CHBA BC and CHBA

From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: April 30, 2020 3:57 PM
To: Jeff Fisher; Mark Sakai
Subject: COVID survey

Hi Jeff and Mark,

I heard that your organizations have been collaborating on a survey of issues and barriers for development and construction since COVID. Is this true? Do you happen to have any early results you can share?

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

As of: May 5, 2020

UDI Development Impacts Survey Summary: April 2020

Highlights

- **37 companies** have provided information on the impacts to their businesses due to COVID-19. This survey was open from March 30 to April 7.
    - On March 26, construction was listed as an essential service, and that sites were to follow the protocols of the Provincial Health Officer (PHO). This survey was conducted shortly following the announcement as businesses were adapting to the new protocols.

- Respondents were split across the four property classes surveyed, with the majority of companies indicating that they currently had residential projects underway.
    - Residential: 36
    - Commercial: 21
    - Industrial: 7
    - Institutional: 3

- **9 companies had laid-off employees** due to the impacts of COVID-19.
    - All lay-offs reported were 20 or fewer employees in each case.

- Only 5 of the 37 companies who completed the survey had shut down construction sites.
    - Reasons included: temporary shut-downs for cleaning, temporary shut-downs due to reduced staff capacity, and client initiated closures.

- **60% had paused a launch or stopped pre-construction sales** as a result of COVID-19. This accounts for at least 29 residential or mixed-use projects affecting over 1,300 homes.

- Of those who had not made yet changes to projects as a result of COVID-19, **over 75% were considering it**.

Survey Question:	Yes	No
Has your company laid-off any workers due to the impacts of COVID-19?	9 *(24%)*	28 *(76%)*
Has your company shut-down any worksites due to the impacts of COVID-19?	5 *(14%)*	32 *(86%)*
Has your company paused a launch or stopped pre-construction sales as a result of COVID-19?	22 *(59%)*	15 *(41%)*
If you have NOT made changes to any projects due to the impacts of COVID-19, are you considering it?	21 *(78%)*	6 *(22%)*

RE: Built Environment - COVID Response and Recovery

From: May, Zachary OHCS:EX

To: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, Terhune, Katie EMPR:EX <Katie.Terhune@gov.bc.ca>, Muncaster, Katherine EMPR:EX <Katherine.Muncaster@gov.bc.ca>, LeRoy, Sean EMPR:EX <Sean.LeRoy@gov.bc.ca>, Shook, Cameron EMPR:EX <Cameron.Shook@gov.bc.ca>, Finkelstein, Ben ENV:EX <Ben.Finkelstein@gov.bc.ca>, Pye, Andrew EMPR:EX <Andrew.Pye@gov.bc.ca>, Amy, Chris EMPR:EX <Chris.Amy@gov.bc.ca>, Moonie, Grant EMPR:EX <Grant.Moonie@gov.bc.ca>, Nikoofard, Sara EMPR:EX <Sara.Nikoofard@gov.bc.ca>, Nowell, Rylan EMPR:EX <Rylan.Nowell@gov.bc.ca>

Sent: June 17, 2020 1:03:53 PM PDT

Attachments: Economic Dashboard - June.docx

Here is our initial summary of economic impact data. Interested in how we can improve this for our July version.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Appointment-----
From: Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>
Sent: April 2, 2020 2:52 PM
To: Gosman, Nat EMPR:EX; Terhune, Katie EMPR:EX; Muncaster, Katherine EMPR:EX; LeRoy, Sean EMPR:EX; May, Zachary OHCS:EX; Shook, Cameron EMPR:EX; Finkelstein, Ben ENV:EX; Pye, Andrew EMPR:EX; Amy, Chris EMPR:EX; Moonie, Grant EMPR:EX; Nikoofard, Sara EMPR:EX; Nowell, Rylan EMPR:EX
Subject: Built Environment - COVID Response and Recovery
When: June 17, 2020 1:00 PM-2:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Skype Meeting

Bi-weekly forum for discussing and coordinating built environment-related COVID response and recovery concepts/initiatives.

Agenda to precede each meeting.

Feel free to pass on the invite.

Join Skype Meeting

Trouble Joining? Try Skype Web App

Join by phone

s.15

Labour Force Survey



B.C.'s job market rebounded by 68,900 jobs in May but B.C. is still down 313,700 jobs since February. Employment has fallen 12.1% and hours worked by 18%.

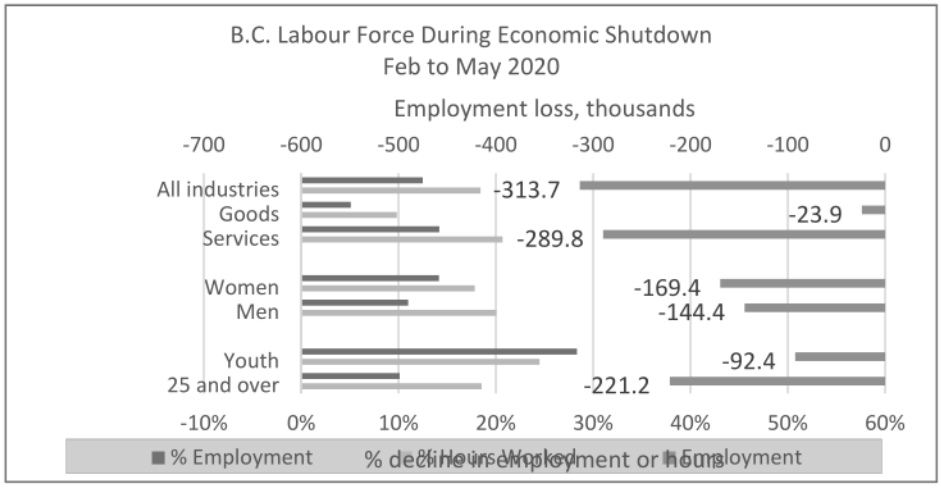
The unemployment rate increased from 5.2 to 13.1 per cent between February and May.

The services sector accounts for 92% of job losses since February. The worst-hit industries have been accommodation and food services, retail trade and other services.

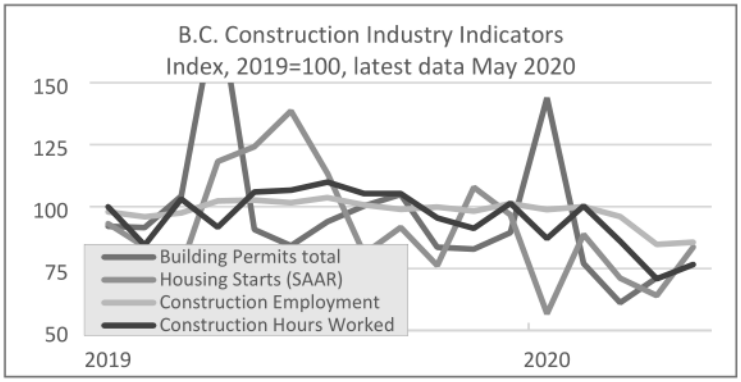
More women lost employment but men lost more full-time jobs and hours worked overall.

Youth were hardest-hit and are three times more likely to have lost jobs than workers aged 25+. Young women are 60% more likely to have lost jobs than young men.

There are 192,100 more unemployed people (+138% since February), including 127,000 who report that they are on temporary layoff (a 20x increase). This indicates some attachment to their jobs after the shutdown is over.



Construction Industry Indicators



The total value of all building permits issued in April increased 16.4% from March. The value of building permits can vary dramatically from month to month and is an indicator of potential future activity.

B.C. housing starts declined 34% between February and April but rebounded 31% in May and now stands at 36,000 when seasonally adjusted at an annualized rate (SAAR).

Construction has been the worst-hit industry in the goods-producing sector. Construction employment rebounded slightly in May but, compared to February, employment is still down by 34,000 or 14%, and hours worked declined 24%.

B.C. Construction Industry Indicators, 2020					
	January	February	March	April	May
Building Permits ($m, s.a.)	$2,282	$1,222	$971	$1,130	n/a
Housing Starts (SAAR)	24,518	38,350	30,721	27,689	36,156
Construction Employment (thousands)	233.7	236.6	227.1	200.5	202.6
Construction Hours Worked (thousands of hours total in reference week)	7,215	8,299	7,124	5,866	6,346

Stakeholder Feedback and Surveys

Executive Summary:

- Minor impact to new construction right now, but longer-term concerns about development approvals, access to financing, market confidence, and market demand that need to be addressed to avoid further decline.
- Significant impact to residential renovation market and lack of specific guidelines on how to restart this sector safely.
- Local governments and regulatory partners that have embraced online permits and inspections and virtual public hearings have been most successful at maintaining service levels.
- Some risks and confusion about inspecting and managing occupied buildings as social activities increase.
- On May 29, stakeholders from the real estate and development sector sent a joint letter outlining general concerns about the sector and recommendations to government for successful economic recovery.
- The May 29 letter also highlighted:
    - The real estate accounts for 50,000 jobs;
    - In a recent survey by the Canadian Federation of Independent Businesses 32% of businesses reported being unsure of they will reopen; and
    - The province's population will increase by 1.3 million, and there is opportunity to encourage more housing starts by supporting the real estate and development sectors.

Energy Step Code Council (May 5, 2020):

Safety

- No significant issues

Innovation

- Online permits and remote inspection practices are being used to varying degrees by local governments, building officials, TSBC, and other regulators
- Private sector is increasing use of technology to facilitate quotes (primarily in residential retrofit)

Productivity, employment and the business environment

- New construction is operating at roughly 80%, although market confidence is creating risks for long-term stability
- Retrofit market is down significantly, especially in residential spaces
- UDI is seeking LG approval to extend work hours to minimize staff numbers on site at one time

How COVID affects normal business

- Some confusion about how essential services (e.g. fire sprinkler inspectors) can safely access occupied spaces
- Vacant spaces seeing increase in crime

Financial assistance and incentives

- CHBA BC reports the $40k loan is helpful for them (Canada Emergency Business Account). For other government assistance, they find it difficult to prove drop in income when applying for government services because noticeable drop will only come in the later months (contracts)
- BC Hydro: Relief fund available for residential and small business (~70k applications). New remote tools for education (e.g. Indigenous program energy savings kit.).
- Concern from builders outside urban areas that one-size solutions don't fit all

Opportunities

- Collective sense of opportunity to consider new ways of thinking/doing/working
- LG buildings could take advantage of closure to undergo maintenance and an opportunity to rethink public space (reclaiming road space for parks/pedestrians, bikes, etc.)
- CEA: offering technical training and heat pump training in Columbia Valley, huge opportunity here to move to lower carbon sources for communities. Don't miss this opportunity
- BC Hydro: Focusing on education. High-performance building fund enabling remote integrated design for LEEP, 1 hour free training with good uptake. CHBABC is offering Step Code courses for free

- Increased virtual learning from BC Hydro could help Step Code training/implementation in rural communities

Risks

- Need a clear public communication about the importance of investments in buildings during a crisis
- New construction is fine, but occupied space is a problem. Developing inspection/repair protocols when going into occupied spaces. Supply chain is a concern (e.g. PPE for builders, normal products required for repairs, installations).
- BOMA wonders: what is landlord duty of care? Who enforces rules? However, they say people are largely self-policing effectively.

Homebuilders' Association of Vancouver (HAVAN):

Association survey results with webinar participants (Sample size for Apr 7 was about 250; for Apr 21 was 370)

	Apr 7	Apr 21
Almost Normal w/ adjusted operations	43.6%	38.1%
Some Impacts: Some Reduced revenues, some layoffs	32.7%	28.9%
Significant impacts: Signif reduced rev, signif layoffs	12.7%	17.3%
Near Complete Shutdown	9.3%	11.6%
Complete Shutdown	1.9%	4.1%

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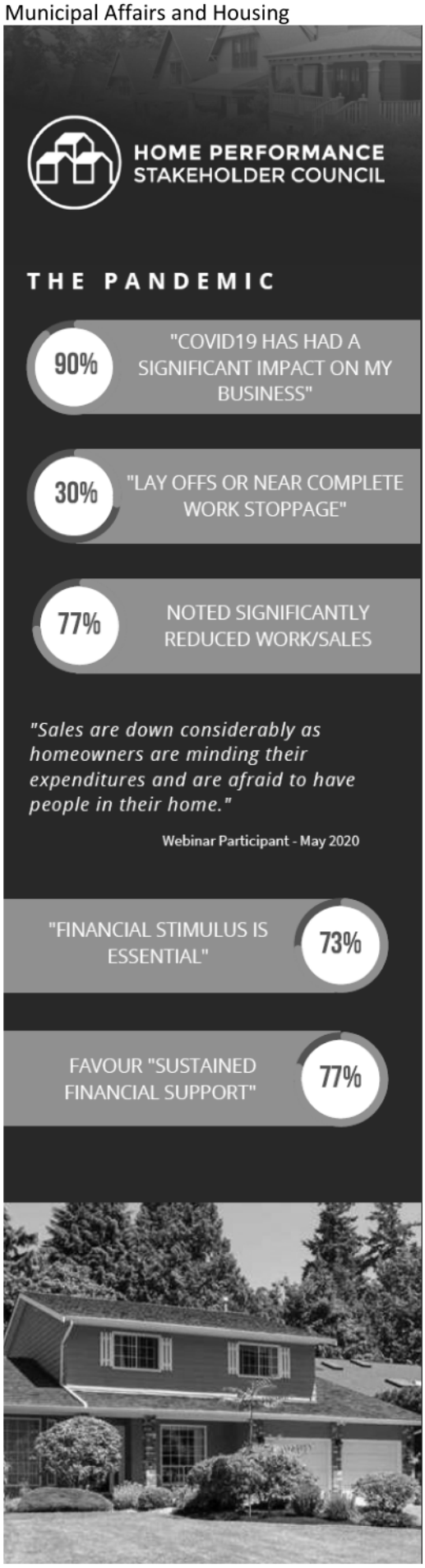


RESPONSE RECOMMENDATIONS

JUNE 2, 2020

THE HOME RETROFIT INDUSTRY

BC's home energy retrofit industry is essential to meeting GHG reduction targets.

- 70 per cent of buildings standing today will still be in use as of 2050. [Pembina]
- 7 per cent of BC's GHG emissions come from our homes. [Provincial GHG Inventory]
- Every dollar we invest in energy efficiency generates up to four times its value in economic growth. [CleanBC]

This contracting industry is composed of thousands of small and medium sized businesses distributed across almost every community in the province of BC, so the potential of financial stimulus to benefit homeowner and businesses across the province is strong.

The Home Performance Stakeholder Council is a voice for this industry. Here is what our network is saying:

STIMULUS PRIORITIES

- Home energy renovation tax credits
- New rebates
- Enhanced rebates
- Financing programs
- Consumer engagement

ENABLING PRIORITIES

- COVID19 safety guidelines
- Safe residential retrofits consumer campaign

RECOVERY PRIORITIES

- Expanding rebates for programs to medium-income, low income, social housing, market rental housing
- Mass scale regional retrofit programs
- Better integrate energy evaluations into programs
- Mass scale long term national investments
- Training

info@homeperformance.ca www.homeperformance.ca



HOME PERFORMANCE STAKEHOLDER COUNCIL

TRAINING

"Training without demand or framework to require it for specific industry is difficult for employers to justify/pay for."

Survey Participant - May 2020

"There is a big gap in knowledge with skilled sub trades and I do see this as something that should be an industry focus long term. Training does not help with the enormity of this problem short term."

Survey Participant - May 2020

CONSUMER CONFIDENCE

"The most important thing right now is to create consumer confidence in the industry..."

Survey Participant - May 2020

"If there aren't good, clear guidelines on how to work safely in occupied homes, any retrofit stimulus measures will be running uphill."

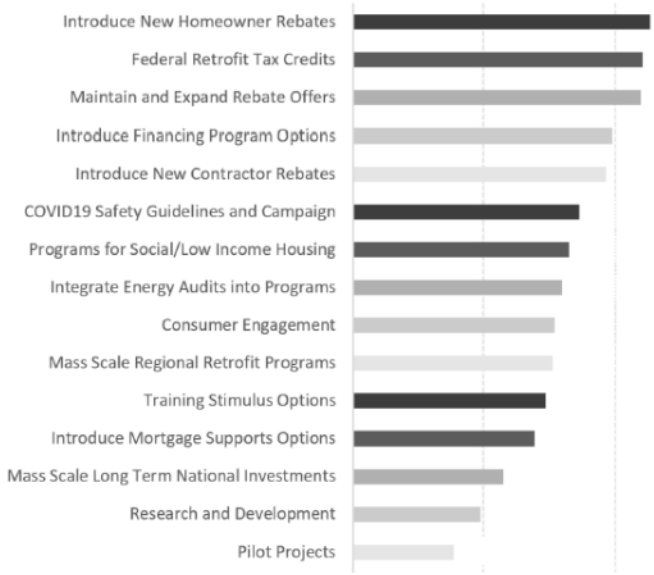
Survey Participant - May 2020

The content presented was developed using feedback gathered by the HPSC through a survey, three webinars and directly by email and phone. Content may not be representative of all contractors in BC.

RESPONSE RECOMMENDATIONS

JUNE 2, 2020

WHAT KIND OF A RESPONSE DO CONTRACTORS WANT TO SEE?



NEW/ENHANCED REBATES

- Incentives for air sealing
- A $200 Rebate for 1.0 U-Factor window
- Higher rebates for all retrofits, low-medium income homes and deep energy retrofits
- New and improved incentives for electrification
- Incentives for heat pump upgrades, replacing older, less efficient models with R22 refrigerant
- Insulation rebates increased for headers and crawlspace walls
- Rebates for quality installations

CONTACT THE HPSC FOR MORE INFORMATION ON HOW BEST TO SUPPORT BC'S HOME ENERGY RETROFIT INDUSTRY

info@homeperformance.ca

www.homeperformance.ca

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting

Meeting Package

Date and Time of Meeting: Thursday June 25, 2020 | Time: 9:00 a.m. to 2:00 p.m. Pacific Time
Webinar link: Join Microsoft Teams Meeting
Note: There is no conventional dial-in option, but you can request a call back to join the meeting by phone.

Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Meeting Materials

1. Agenda
2. Work Plan from Capacity Building and Communications Subcommittee + Short Report
3. Energy Step Code Policy Issues
4. Work Plan from Part 9 Residential Subcommittee meeting
5. Work Plan Part 3 & Part 9 Non-Residential Subcommittee meeting

Contacts if You Require Assistance

- Hugo Wong, BSSB – 250 880 6418 (call or text); hugo.wong@gov.bc.ca
- Dale Andersson, BSSB – 778-679-9653 (call or text)

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
09:00	Welcome and Introductions	Zachary May, ESCC Chair	▪ Welcome participants ▪ Approval of agenda
09:05	COVID-19 check-in	All	▪ Roundtable to discuss effects of COVID-19 during Phase 2 re-opening ▪ Seeking input on what data would be helpful to track and communicate as a council?
9:30	Step Code policy/implementation issues	Maya Chorobik and Laura Sampliner, LGPN Co-chairs; Dale Andersson (BSSB), Mark Bernhardt (Bernhardt Contracting)	▪ Local Government Peer Network: Maya Chorobik and Laura Sampliner (7 min) ▪ Capacity Building and Communications: Dale Andersson and Mary McWilliam (7 min) (Work Plan attached) ▪ Inconsistent use of Part 9 Energy Compliance Reports with Mark Bernhardt ▪ EA Working Group and EA Capacity Issues ▪ Update on EA/EM Scope of Practice Report ▪ Local Government with no Step Code Involvement ▪ Industry Readiness/Capacity Research Project Proposal ▪ Other issues identified by ESCC
10:30	**Morning Break (15 mins)**		
10:45	Step Code technical issues	Scott Williams, BSSB, Subcommittee Co-Chairs and Council members	▪ Part 9 Residential: Nicholas Heap and Mark Sakai (5 min) ▪ Part 3 & Part 9 Non-residential: Toby Lau and Norm Connolly (5 min) ▪ Proposed Code Changes for 2022 ▪ Implementing "20%-better" ▪ Overheating Risks ▪ Air Leakage Testing ▪ Significant work mid-stream, seeking endorsement of work plans for Part 3 sub-co (Toby Lau/Norm Connolly) and Part 9 sub-co (Nicholas Heap/Mark Sakai)
12:00 p	**Lunch Break (30 mins)**		
12:30 p	Carbon + GHGi issues in Step Code	Zachary May, ESCC Chair	▪ Low-carbon energy system relaxations ▪ District energy ▪ New GHGi targets in BC Housing projects

1:00 p	Existing Buildings	Zachary May, ESCC Chair and Nicole Vukosavljevic, Senior Policy Analyst	• Initial outcomes
			• Renovation roadmap for single-family dwellings, strata housing, and purpose-built rentals
			• Focus on:
			  ○ Assessment: Understanding where buildings and local governments are at
			  ○ Expectations: Defining outcomes
			  ○ Actions: Achieving and measuring outcomes

2:00 p	Final Comments and Adjournment	All	• Discuss proposed meetings in 2020

Vancouver's Climate Emergency - Building decarbonization advisory committee (BM4EAC)

From: Tony Gioventu <tony@choa.bc.ca>
To: davidh@landlordbc.ca, karentw@pembina.org, christine@harbourgreene.ca, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, jfisher@udi.org, dstathonikos@boma.bc.ca, conor.reynolds@metrovancouver.org, jowen@surrey.ca, kbarbero@mcabc.org, s.22 , brady.faught@vancouver.ca, sean.pander@vancouver.ca, prussell@richmond.ca, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, micah.lang@vancouver.ca, robyn.wark@bchydro.com, lworth@bcpiac.com, syano@davidsuzuki.org, phil.white@vancouver.ca,s.22 , mark@havan.ca, brenda.scott@vancouver.ca, christian@zebx.org
Sent: June 19, 2020 12:00:40 PM PDT

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Vancouver's Climate Emergency - Building decarbonization advisory committee (BM4EAC)
Scheduled: Monday, Jun 22, 2020 from 12:30 PM to 2:30 PM
Location: Conference Link to follow
Invitees: 'davidh@landlordbc.ca', 'Karen Tam Wu', 'Christine Gustafson', 'Nathaniel.gosman@gov.bc.ca', 'jfisher@udi.org', 'dstathonikos@boma.bc.ca', 'Conor Reynolds', 'JOwen@surrey.ca', 'Kim Barbero', 'Rebecca (Sustainabiliteens)', Faught, Brady, Pander, Sean, 'prussell@richmond.ca', 'Zachary.May@gov.bc.ca', Lang, Micah, 'Robyn Wark', 'Leigha Worth ', 'Sherry Yano', White, Phil, 'Gary Milligan', 'mark@havan.ca', Scott Castro, Brenda, 'Christian Cianfrone (christian@zebx.org)'

Sent from my iPhone

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

ZEBx is inviting you to a scheduled Zoom meeting.

Topic: BM4EAC - City of Vancouver
Time: Jun 22, 2020 09:30 AM Vancouver

Join Zoom Meeting
s.15

—-

Respected Colleagues,

I am Vancouver's Green Building Manager. Our team leads the City's efforts to decarbonize buildings in Vancouver. I am writing this morning to invite you to join Vancouver's Climate Emergency Big Move 4 External Advisory Committee (BM4EAC for short) for Zero Emissions Buildings.

Big Move 4 of Vancouver's Climate Emergency Response (2019) directed staff to begin developing plans to ensure all new and replacement heating and hotwater equipment is zero emissions by 2025 and to reduce greenhouse gas emissions in Vancouver by 50% by 2030. While this work is meant to shape how the City continues to roll-out its Zero Emissions Building Plan (2016), the emphasis of the new planning work is focused on how to get deep emission reductions from existing buildings.

Meeting these objectives will be effectively impossible for the City to achieve on its own; our success will require alignment in thinking and action from a broad range of partners and will need to carefully weigh the tradeoffs that meaningful action will entail. While we have numerous research initiatives and technical experts involved in shaping this work, the BM4EA's role will be to challenge and inform staff thinking on our strategic direction, to maximize this alignment, and to help us balance the tradeoffs.

At a minimum, BM4EAC involvement will include participating in 2-3 meetings over the next 5 months to share your

ideas, concerns, and to identify areas for further research and consultation. The outcome will be incorporated as part of our recommendations to Council in November on Vancouver's Climate Emergency Action Plan and a detailed Zero Emission Buildings Retrofit Plan. As part of these meetings, additional opportunities will likely arise to participate in this work further but these will be optional and specific to individual committee members.

I will follow-up this email with an e-poll to check availability for the first Committee meeting on either morning of Jun 22 or afternoon of Jun 18. If you'd like more information on the Committee's role, expectations for participation, or feel there maybe another representative from your organization that would be better suited to participate, please contact me directly to discuss.

At this first meeting, we will present and discuss the main elements of the draft Plan including:
* New buildings actions and importance
* Clear Retrofit Signals and Flexible Requirements
* Supporting Voluntary Leaders
* Building Capacity
* Removing Barriers
* Access to renewable energy
* Equity
* Follow-up actions

I hope you will be able to support us as your voice and the people it represents is critical in this important work.

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver
City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
t: 604.871.6542

sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>

RE: Building Industry Contacts for Adaptation Strategy Engagement

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: Berry, Julia ENV:EX <Julia.Berry@gov.bc.ca>
Cc: Back, Theodore ENV:EX <Theodore.Back@gov.bc.ca>, Williams, Haley ENV:EX <Haley.Williams@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: June 22, 2020 2:51:55 PM PDT
Attachments: Copy of Stakeholder List for CAS - 2020-06-22.xlsx, image001.png

Hi Julia,

Sorry for the delay in getting back to you.
I have attached a spreadsheet with a number of contacts for both industry organizations and industry professionals (Thanks Dale!).
Hope this helps.

For the upcoming strategy session on July 14th, please keep both myself and Nicole in the loop and we can arrange with our BSSB colleagues.

Cheers,

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Berry, Julia ENV:EX <Julia.Berry@gov.bc.ca>
Sent: June 17, 2020 3:31 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Back, Theodore ENV:EX <Theodore.Back@gov.bc.ca>; Williams, Haley ENV:EX <Haley.Williams@gov.bc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Building Industry Contacts for Adaptation Strategy Engagement

Hi Scott,

I hope you are staying well. On July 14th, the Climate Risk Management team will be hosting a targeted engagement session with industry on the Climate Preparedness and Adaptation Strategy. It is important to us to have good representation from the building sector and I am wondering if you have any suggestions for who we should invite. It can include industry associations as well as leading experts.

We also welcome someone from your team attending the session as a government representative.

Ted Back and Haley Williams, cc'd, are compiling the invitee list and can provide more information regarding attending the session if needed.

Best,

Julia Berry, MRM

A/ Senior Policy Analyst, Climate Risk Management
Climate Action Secretariat

p: 778-698-5038 | e: Julia.Berry@gov.bc.ca

BRITISH COLUMBIA | Ministry of Environment and Climate Change Strategy

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all Indigenous Peoples of British Columbia, on whose territories I gratefully work and live.

Inudstry	Name	Email
MH	Alex Blue	ABlue@morrisonhershfield.com
MH	Ruth McLung	rmclung@morrisonhershfield.com
RDH	Lorne Ricketts	lRicketts@rdh.com
RDH	Graham Finch	gfinch@rdh.com
AME	Taio Waldhaus	taiowaldhaus@amegroup.ca
AME	Marc Trudeau	marctrudeau@amegroup.ca
Stantec	Wendy Macdonald	wendy.macdonald@stantec.com
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June ESCC agenda and materials

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

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Sent: June 24, 2020 2:07:15 PM PDT

Attachments: June ESCC Meeting Agenda and Materials.pdf

Hello, everyone:

Please find attached the agenda and materials for tomorrow's meeting, which is now slated to end at 2 p.m. If you have any questions or concerns before or during the meeting, please contact me by cell: 250 880 6418.

Best,
Hugo

Hugo Wong (he/him)
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ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting

Meeting Package

Date and Time of Meeting: Thursday June 25, 2020 | Time: 9:00 a.m. to 2:00 p.m. Pacific Time
Webinar link: Join Microsoft Teams Meeting
Note: There is no conventional dial-in option, but you can request a call back to join the meeting by phone.

Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Meeting Materials

1. Agenda
2. Work Plan from Capacity Building and Communications Subcommittee + Short Report
3. Energy Step Code Policy Issues
4. Work Plan from Part 9 Residential Subcommittee meeting
5. Work Plan Part 3 & Part 9 Non-Residential Subcommittee meeting

Contacts if You Require Assistance

- Hugo Wong, BSSB – 250 880 6418 (call or text); hugo.wong@gov.bc.ca
- Dale Andersson, BSSB – 778-679-9653 (call or text)

ENERGY
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AGENDA

Time	Topic	Speaker(s)	Purpose(s)
09:00	Welcome and Introductions	Zachary May, ESCC Chair	▪ Welcome participants ▪ Approval of agenda
09:05	COVID-19 check-in	All	▪ Roundtable to discuss effects of COVID-19 during Phase 2 re-opening ▪ Seeking input on what data would be helpful to track and communicate as a council?
9:30	Step Code policy/implementation issues	Maya Chorobik and Laura Sampliner, LGPN Co-chairs; Dale Andersson (BSSB), Mark Bernhardt (Bernhardt Contracting)	▪ Local Government Peer Network: Maya Chorobik and Laura Sampliner (7 min) ▪ Capacity Building and Communications: Dale Andersson and Mary McWilliam (7 min) (Work Plan attached) ▪ Inconsistent use of Part 9 Energy Compliance Reports with Mark Bernhardt ▪ EA Working Group and EA Capacity Issues ▪ Update on EA/EM Scope of Practice Report ▪ Local Government with no Step Code Involvement ▪ Industry Readiness/Capacity Research Project Proposal ▪ Other issues identified by ESCC
10:30	**Morning Break (15 mins)**		
10:45	Step Code technical issues	Scott Williams, BSSB, Subcommittee Co-Chairs and Council members	▪ Part 9 Residential: Nicholas Heap and Mark Sakai (5 min) ▪ Part 3 & Part 9 Non-residential: Toby Lau and Norm Connolly (5 min) ▪ Proposed Code Changes for 2022 ▪ Implementing "20%-better" ▪ Overheating Risks ▪ Air Leakage Testing ▪ Significant work mid-stream, seeking endorsement of work plans for Part 3 sub-co (Toby Lau/Norm Connolly) and Part 9 sub-co (Nicholas Heap/Mark Sakai)
12:00 p	**Lunch Break (30 mins)**		
12:30 p	Carbon + GHGi issues in Step Code	Zachary May, ESCC Chair	▪ Low-carbon energy system relaxations ▪ District energy ▪ New GHGi targets in BC Housing projects

1:00 p	Existing Buildings	Zachary May, ESCC Chair and Nicole Vukosavljevic, Senior Policy Analyst	• Initial outcomes
			• Renovation roadmap for single-family dwellings, strata housing, and purpose-built rentals
			• Focus on:
			  ○ Assessment: Understanding where buildings and local governments are at
			  ○ Expectations: Defining outcomes
			  ○ Actions: Achieving and measuring outcomes

2:00 p	Final Comments and Adjournment	All	• Discuss proposed meetings in 2020

Category	Task - Based on Scope of Work	Working Group	Approximate Timeline 2020				Approximate Timeline 2021				Deliverables	Evaluation	Status
			Jan - Mar	April - June	July - Sept.	Oct. - Dec.	Jan - Mar	April - June	July - Sept.	Oct. - Dec.			
A. Strategic Planning	Host Capacity Building and Communications Subcommittee - to support the 'convening and catalyzing' role	NA									2 - 3 meetings/year		Meetings: March 11, June 25,
	Matrix Working Group - Modus Report Update - Part 3 & Part 9 Buildings	Matrix Working Group	March Start	Ongoing							Updated 2017 Modus Report for Part 9 & 3 Buildings - with recommendations to guide work of many organizations	Updated Report complete - KPI/Benchmarking Metrics Identified	Scope of Work complete by WG June 2020 - project delayed Timeline TBD
	Integrate, update and/or align existing training and education initiatives and programs	Educators/Training Working Group		WG launch									Educators WG established June 2020
B. Provision of Training Role	Part 9 Energy Compliance Report BCBC 2018 Rev 2 Version: In-person Training Workshop and Development of Online Recorded Version	Part 9 Energy Compliance Report Training	February Start	Ongoing	Completion						Training session & recorded training for onling reference	# of attendees for in-person session # of downloads in 2020 of recorded version	Free webinars starting June or July 2020 Recorded training coming soon Project proceeding but delayed
	Part 3 Energy Design Report (Part 3 Checklist): Development of Guidelines for Use; In-Person or Webinar Training Session; Online Training Recording	Part 3 Energy Design Report Training		May start	Completion						User manual, training session & recorded training for onling reference	# of attendees for training sesssion # of downloads in 2020 of recorded version	Project delayed as Report itself not available until end of May In progress: two webinars for users; 1 webinar for LGs; recorded user training; tip sheet First user webinar: TBD July 2020
	Other training identified as needed	TBD											Step coede training in other languages - request pending
C. EA Capacity (EA Scope of Practice Training Recommendations Implementation)	Develop Core Competency Framework for EA/EM Training (pages 26 & 32 of EA report)	Energy Advisors Working Group	February Start	Ongoing	Ongoing	Completion					Core Competency Framework for Energy Advisors & energy modellers		Project delayed. Competitive process through FortisBC. Completion anticiated for late Sept./Oct 2020
	Grow Capacity: Delivery of training to prepare for NRCan ERS Foundation Exam (page 46 of report)	Energy Advisors Working Group											TBD
	Grow Capacity: Delivery of training to prepare for NRCan ERS EA Exam (page 46 of report)	Energy Advisors Working Group											TBD
	EA Capacity Monitoring	Energy Advisors Working Group	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing			EA WG meetings: April 8, April 21, June 4 Supporting CEA UBC Scholar Project on EA capacity in rural/remote regions
D. Communications	Advise on/support preparation of monthly Step Code newsletter	Communications Working Group	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Monthly newsletter - 9 - 10 editions/year	Increased subscriber #s & increased open rate Note: Reader survey Feb 2020 - to assess plans for future editions	April, May, June editions Future: July to Dec (no August edition)
	Maintain, update and enhance the Step Code website and events calendar	Communications Working Group	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Maintain and enhance website	Website use stats & analysis	Ongoing updates Minor refresh - still in works as time permits
	Develop and promote Step Code Case Studies - Part 9 and Part 3 buildings	Communications Working Group			Start	Ongoing	Ongoing	Ongoing	Start	Complete	Develop several sets of case studies		3 new video case studies added spring 2020 1 case study in development (with CHBA CI)
	Develop 2022 BC Building Code communications plan and lead implementation	Communications Working Group			Start	Complete	Implementation	Implementation	Implementation	Implementation	Communications Plan - Timing TBD	TBD	Not formally started yet

ENERGY
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BUILDING BEYOND THE STANDARD

Energy Step Code Council
Capacity Building and Communications Subcommittee Report
Report Prepared for the June 25, 2020 ESCC Meeting

GENTLE REMINDER: Step Code Newsletter

- Step Code monthly newsletter sign-up: http://eepurl.com/cE-VnX
- Please share the sign-up with your members and networks

SUBCOMMITTEE WORK PLAN

- See attached

SUBCOMMITTEE MEETINGS SINCE FEBRUARY 28, 2020

- March 11 & June 24, 2020 = meetings of the whole Subcommittee

FOUR WORKING GROUPS

1. **Communications Working Group**
   - Objective: Support the website, newsletter, case studies and other communications channels and opportunities + prepare 2022 communications plan
   - Progress:
     - working on minor website refresh
     - 3 new videos Clayton Passive House
     - new web page and info for Part 3 Energy Design Report (with support of the Part 3/9 Subcommittee co-chairs)
     - minor revisions to the Part 9 Energy Compliance Reports and web page

2. **Energy Advisors Working Group**
   - Objective: Support efforts to secure EA capacity for BCBC 2022 (and related matters)
   - Progress: Three Working Group meetings; extensive information gathering; supporting CEA summer UBC Scholar Research project on EA capacity in rural/remote regions
   - Findings to date – to be confirmed with WG members: Capacity not likely an issue – cost/delivery in rural/remote regions is – see further info in policy discussion document

3. **Matrix Working Group**
   - Objective: Guide and advise on the update to the 2017 Modus Report
   - Progress: Scope of work drafted June 2020 to engage consultant to do study of key construction professionals' industry readiness for BCBC 2022 + develop Key Progress Indicators
   - Key construction professions: 21 different groups including designers, EAs, architects, engineers, Part 9 licensed residential builders, Part 3 developers, various trades, etc.
   - Next Steps: Determine funding, competitive bid process, start research

4. **Educators/Training Working Group**
   - Objective: Support better collaboration, coordination and cooperation amongst key organizations providing education/training
   - Progress: Initial short meeting June 24, 2020 to gauge interest

PART 3 ENERGY DESIGN REPORT AND PART 9 ENERGY COMPLIANCE REPORT TRAINING

- Training coordinated by BSSB with financial support from the High-Performance Builder Training Fund members (BC Hydro, BC Housing, FortisBC, MEMPR)

- **Part 3 Energy Design Report** – Focal Engineering engaged to offer 3 webinars on new report
  - Two webinars for report users – i.e., energy modellers – first session July 30, 2020
  - One webinar for local government staff – date TBD
  - Recorded version of user webinar + tip sheet also coming

- **Part 9 Energy Compliance Report** – City Green & Enerlytics engaged to offer 3 webinars for users
  - Detailed webinars about Step Code metrics & how to complete the Part 9 report
  - First webinar July 9. 2020 (sold out) – other dates to come in August and September
  - Recorded version also coming

ENERGY
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Energy Step Code Council
POLICY ISSUES
Prepared by BSSB for the June 25, 2020 ESCC Meeting

POLICY ITEMS FOR DISCUSSION

Inconsistent Use/Distinct Versions of Part 9 Energy Compliance Reports

- Some Local Govts are using their own version of the Part 9 Energy Compliance Report – e.g., City of Kelowna, City of North Vancouver/District North Van/West Vancouver
- Issues with distinct LG versions:
  - Reduces consistency among local govts and industry – more work for industry
  - Forms not always current
  - Forms not always fillable, creating the need to transcribe information from the Excel report calculator version and risking transcription errors
  - Also reports of Local Govts requiring EA signatures on the forms
  - Also reports of Local Govts requiring EAs to do on-site verification/inspection
- Mark Bernhardt, Bernhardt Contracting, will provide info at the meeting
- Seeking Council endorsement: CBC and LG Peer Network Subcommittees work together to determine how to address this item as a priority activity, and involve the Part 9 Subcommittee as needed.

Energy Advisor Capacity Estimates

Part of the work of the Energy Advisor Working Group

EA Capacity Estimates: To be Confirmed with EA Working Group Members

- Spring 2020 - B.C. has approximately 85 to 86 EAs active in B.C.

The *broad findings for EA capacity* for 2022 (based on 2019 data which is presumed to be very similar) can be summarized provincially as follows:

- **Total number of EAs** currently working in B.C.: **86**
- Estimated total number of Part 9 units needing modelling and testing: **27,000/year**
- Total number of units needing EA/current # of EAs: 27,000/86 = **314 files/year for each EA**

Scenario A: 314+ Files/EA/Year

- **If average annual file completion rate/EA is 314 or higher**, B.C. will need: 27,000 units/314 files per EA = 86 EAs
- Potential estimated shortage: 86 needed – 86 current EAs = **0 new EAs needed**
- In this scenario, B.C. has sufficient EA capacity (apart from illness, temporary leave, holidays, retirements, natural turnover, and other typical workplace absences)
- CACEA (Canadian Association of Consulting Energy Advisors) reports 314 files/EA/year is 'do-able' & not problematic

Scenario B: 200 Files/EA/Year

- **If average file completion rate/EA is up to 200**, B.C. will need: 27,000 units/200 files per EA = **135 EAs**
- Potential estimated shortage: 135 EAs needed – 86 current EAs = **49 new EAs needed**
- In this scenario, B.C. needs 49 or more new EAs

Scenario C: 150 Files/EA/Year

- **If average file completion rate/EA is up to 150**, B.C. will need: 27,000 units/150 files per EA = **180 EAs**
- Potential estimated shortage: 180 EAs needed – 86 current EAs = **94 new EAs needed**
- In this scenario, B.C. needs 94 or more new EAs

Note: Energy Advisor White Paper recommended training support would be needed for new EAs in B.C. (but no indication of how many new EAs needed).

ENERGY ADVISOR WHITE PAPER

- Also known as the EA/EM Scope of Practice Report
- Prepared March 2019 by City Green and funded by NRCan
- Four sets of inter-related recommendations for:
    1. *Professional Regulation of the Industry* – AEST (Advanced Education and Skills Training) which is working on the CleanBC industry training
    2. *Industry Code Compliance Services Training* = Action started - see below
    3. *Quality Assurance* = For Future Action
    4. *Stakeholder Support Mechanisms* = For Future Action
- Report has been presented to ESCC by the Part 9 Subcommittee co-chairs (formerly the Compliance and EA Subcommittee)

Re: #2 - Industry Code Compliance Services Training

EA/EM BC Energy Step Code Compliance Competency Framework

- From the EA Report: "It was identified that, *as a first step*, it is important to identify what training needs to be provided. Training development must be based on *core competencies frameworks that outline the knowledge and learning needs of the industry for delivery of the BC Energy Step Code and BC Building Code services*." (Page 26, emphasis added.)"
- BC Energy Step Code Compliance Competency Framework for EAs/Energy Modellers is in preparation and should be ready fall 2020
- Progress: Scope of work being tendered via FortisBC – will evaluate proposals and determine successful proponent mid-July 2020 – goal is to be finished within three months of award date

Training Delivery in Step Code Metrics

- From the EA Report: "Development and delivery of accessible and ongoing appropriate training initiatives for both ERS EA training *and BC Energy Step Code training for EAs and EMs*."
    - Training in the Step Code metrics will form the first part of the free Part 9 Energy Compliance Report webinars for EAs and Service Organization staff starting July 9
    - Recorded version will be prepared likely early fall for ongoing reference

Local Governments with no Step Code Involvement

- Issue raised: How will local governments 'step up' in December 2022 if they take no action until then? How can we support them?
- Reminder: CEA/BC Housing issuing local government readiness survey again in 2020
- Seeking Council endorsement: CBC and LG Peer Network Subcommittees work together to determine how to address this item once LG survey results available

Industry Readiness/Capacity Research Project Proposal ('Matrix' Working Group)

- Objective: Guide and advise on the update to the 2017 Modus Report
- Progress: Scope of work drafted June 2020 to engage consultant to do study of key construction professionals' industry readiness for BCBC 2022 + develop Key Progress Indicators
- Key construction professions: 21 different groups including designers, EAs, architects, engineers, trades, and so forth
- Important initiative of Working Group members including ZEBx, BC Hydro, Vancouver Economic Commission – to help shape future funding and capacity building activities
- Ministry of Advanced Education and Skills Training – working on CleanBC Workforce Development Report to support the development of BC's Job Readiness Plan – want to confirm content of that report to avoid any duplication (doesn't appear to be)
- Proposal: Inviting interested partners to help support funding – current estimate $50 – 70K

Proposed Part 9 Residential Subcommittee Work Plan, 2020

Item	Priority	Timeline and Progress	Status	Project Funders	Lead	WG members
BSSB to revise a Technical Bulletin (19-03) on how to address a blower door No Fail path for Step 1 in the Step Code (i.e. using a fixed airtightness value by following Subsection 9.36.5.) Part of work on 3 Tech Bulletins from BSSB about meeting Step 1.	High	Start: March 2018 19-03 complete April 2019. Revision to 19-03, TBD.	In progress		Nick	n/a
Achieving 20% better (Step 3-equiv.) for 2022 BCBC	High	Will discuss at P9 subco meeting to start dividing the work.	In progress	TBD	P9 Subco/BSSB	Unique building types: Ray Smith, Niels Anthonsen, Einar Halbig, Remi Charron, Chris Frye, Torsten Ely, Richard Mathews, Gary Hamer, Pauline Rupp, Nelson Wall, Mark Bernhardt
Overheating risk : Include overheating risk analysis in the code for 2022 using future weather files.	High	Study June-August. Present to SCC in fall 2020	In progress	TBD	BSSB	Ray Smith, Mark Bernhardt, Richard Mathews, Remi Charron, Torsten Ely, Gerry Sawkins, Chris Frye
Airtightness metrics (NLA) - Conduct further review of airtightness testing metrics in proposed changes to NBC for suitability	High	Study June-August. Present to SCC in fall 2020	In progress	TBD	BSSB	Niels Anthonsen, Stan Jang, Sepehr Foroushani (potentially), Gerry Sawkins
%-better TEDI issues and review of this metric for Climate Zone 4.	Medium				Nicholas Heap	Nicholas Heap, Pauline Rupp, Mark Bernhardt, Remi Charron, Sepehr Foroushani, Niels Anthonsen
Crawlspace Issue Working Group Working to address modelling issue identified for crawl spaces	Low	Start: June 2018 Currently on hold.	In progress	NA	Zhi Chen/City Green, Co-chairs	n/a.
Correction for Intentional Openings: developing a protocol for adjusting the airtightness rate to account for leakage through mechanical equipment.	Low	Start: July 2018 Completion: TBD	Not started	NA	Einar	Einar Halbig, Stan Jang, Niels Anthonsen, Gerry Sawkins, Kelly Lane
Verification of Construction by EAs.	Low	On hold	Not started	TBD	TBD	n/a
Articulations and impacts on Upper Steps	Low					Richard Mathews, Roberto Pecora
AHJs who have not implemented Step 1	Low	Will support LGPN and EA WG as needed				n/a

BC Energy Step Code – Part 3 / Part 9 Non-Residential Subcommittee Work Plan

Task #	Work Plan Initiative -	Deliverable(s)	Project Timing and Reporting (Start Date / Completion Date)	Status	Consulting Support?	Project Funders (or project lead)
1a	**Step Code for Part 9 non-residential (all Climate Zones)** Develop additional Step Code table for each Climate Zone for Part 9 non-residential buildings. • Identify prioritized archetypes	Step Code tables for each Climate Zone for Part 9 non-residential buildings	Projected timing to be completed in 2021.	Not started Next steps: Identify priority archetypes	Yes - TBD	Province of BC (BSSB)
1b	**Step Code for Part 3 Other Occupancies Classifications (all Climate Zones)** Develop new Step Code tables for 'other occupancies' as defined in the BC Building Code, such as care homes (B3 occupancies) and similar uses. Tables will be developed for each BC climate zone, ready for adoption into BCBC 2022.	Step Code tables for prioritized 'other occupancies' for each Climate Zone	Subcommittee to identify priority occupancy types for development of Step Code tiers and performance metrics. *Example: Group F, Division 2 and Division 3 (Warehouses)*	Not started Next steps: Identify priority occupancy types	Yes - TBD	Province of BC (BSSB)
2	**Step Code for Provincial Public Sector Buildings** Develop new Step Code tables for typical archetype public sector buildings such as schools, community centers, libraries, colleges lecture halls / labs, hospitals and care facilities.	Step Code tables for public sector buildings	Workshop was held on March 20 – attended by energy modelers. Draft report prepared, final report will be available by June.	In progress	Yes	Province of BC (Climate Action Secretariat and BSSB)

DRAFT

BC Energy Step Code – Part 3 / Part 9 Non-Residential Subcommittee Work Plan

Task #	Work Plan Initiative -	Deliverable(s)	Project Timing and Reporting (Start Date / Completion Date)	Status	Consulting Support?	Project Funders (or project lead)
3	**Revised Energy Modeling Guidelines & Standards** Province of BC has recommended to NRCan to develop a CSA standard for building energy modeling. Developing this CSA standard would constitute the second phase of work for this task.	CSA standard for building energy modelling	Anticipated CSA to publish in 2021/2022	CSA Standard Z5020 in progress	No	Team effort with IBPSA, City of Vancouver, Province of BC (BSSB) and BC Hydro
4	**Part 3 Building Energy Requirements Tool (BERT) (Scott lead)** Develop a Step Code compliant, online checklist for reviewing modeled energy performance characteristics of Part 3 building at both pre-construction and as-built stages. Part 3 Energy Design Report is an Excel-based tool that can be used by energy modelers and reviewed by local government authorities for purposes of Step Code compliance. Part 3 Energy Design Report (spreadsheet tool) will be replaced by an online BERT system in 2021.	Part 3 Energy Design Report (ready for use in Q2 2020) Building Energy Reporting Tool (BERT)	ZEBx engaged through contract in December 2019 to develop Part 3 Energy Design Report. Step Code compliant draft checklist created in Q1 2020 and reviewed by working group February-April. Pilot ready for use on energystepcode.ca website, May 2020.	P3 Energy design report – complete BERT – In progress	Part 3 Energy Design Report (ZEBx and VRCA)	Province of BC (BSSB) P3 Energy Design Report – City of Richmond, BC Hydro Multi-stakeholder working group provides input and review for Part 3 Energy Design Report

DRAFT

Task #	Work Plan Initiative -	Deliverable(s)	Project Timing and Reporting (Start Date / Completion Date)	Status	Consulting Support?	Project Funders (or project lead)
5	**Inform a regulatory strategy for alterations to existing buildings** Defer Step Code work on existing buildings and alterations to be aligned with the work by the Province on an existing buildings code.	Strategy to address alterations to existing buildings	Timeline TBD but anticipated to start sometimes in 2020 and anticipated adoption in 2024 in the BCBC.	In progress	TBD	BSSB/BC Hydro
6	**Actively monitor (and where appropriate provide input on) the National Net Zero Energy Ready Code** Continue coordination/collaboration with the NECB and NBC new code development work	Submission with recommendations to the Province for national public review	Provincial comments submitted Q1 2020. Note: Details on proposed NECB approach shown in table below[1]	In Progress	No	N/A
7	**Industry training/education** Training/education needs, including: • Best practice airtightness scheduling and testing procedures for Part 3 buildings. • Webinar training for energy modelers and building officials on the new Part 3 Energy Design Report (beginning June 2020). • Additional training opportunities as identified / needed	Best practice guides and bulletins, including Webinars.	Ongoing, in coordination with BSSB Training and Capacity Coordinator.	In Progress	TBD	BSSB/ BC Hydro/ Fortis BC (?)

DRAFT

Task #	Work Plan Initiative -	Deliverable(s)	Project Timing and Reporting (Start Date / Completion Date)	Status	Consulting Support?	Project Funders (or project lead)
8	**20% Improvement for BC Building Code 2022** • Adjustment of Steps based on new NECB baseline. Determine if correlation can be made between 20% better and Step level. • Adoption of NECB tiers in the BCBC? • Determine research needs, stakeholder engagement and impact analysis as necessary.	Incorporate 20% baseline improvement within the 2022 code.	Stakeholder engagement, research and impact analysis to be conducted over summer of 2020. Seek endorsement of changes by SCC once completed.		TBD	
9	**Over-heating risks – BCBC 2022** • Determine method of evaluating overheating and incorporation into code • Feasibility of incorporation of PCIC climate files into the BCBC	Incorporate overheating risk evaluation requirements within the BCBC 2022.	Stakeholder engagement, research and impact analysis to be conducted over summer of 2020. Seek endorsement of changes by SCC once completed.		TBD	
10	**Air leakage Testing** • Address airtightness test procedures • Explore feasibility of mandatory air leakage testing as base code minimum.	Issue bulletin for clarity of existing procedures or provide clarity within BCBC 2022.	Stakeholder engagement, research and impact analysis to be conducted over summer of 2020. Seek endorsement of changes by SCC once completed.		TBD	

Note (1):

Tiered Performance Requirements (NECB)

In order to prepare industry for increasingly stringent energy efficiency codes in the future and acclimate industry to the use of performance modeling solutions and airtightness testing as a comprehensive compliance methodology, introducing tiered code metrics to the code will offer increased flexibility to authorities having jurisdiction (AHJ) such as provinces, territories and charter cities such as Vancouver.

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As Tier 1 requirements are the same as the balance of the NECB there is no cost impact or energy savings attributed to this Tier [Codes Canada 2020-3]. Progressive Tiers were selected to improve efficiency levels, leading to a top tier which is equivalent to net zero energy ready performance.

While Tier 4 was originally set at 25% of the building energy target (NECB-2020 reference building), or a 75% reduction in energy use, the modelling rules, non-regulated loads, and fixed loads, made this target near impossible to achieve for several building typologies. As a result, the Tier was increased to 40%, for the NECB-2020, to enable progressive designs to achieve Tier 4 irrespective of the noted modelling limitations.

It should also be noted that all the tiers are voluntary until they have been adopted into legislation by an AHJ. In that sense, the tiers represent voluntary standards that have been codified. It is up to the AHJ to decide whether to adopt a tier or not, and at which level. The publication of these voluntary tiers in the code should help industry and the public prepare for potential upcoming code changes, essentially 'priming' the market for upcoming code cycles.

The four tiers proposed for the NECB with each successive tier being increasingly stringent in terms of building energy consumption is show in Table 5.

Energy Performance Tier	Performance of Proposed Building Relative to Performance of Reference Building (% building energy target)
1	≤ 100%
2	≤ 75%
3	≤ 50%
4	≤ 40%

DRAFT

RE: [External Email] - June ESCC agenda and materials

From: Bains, Bea <Bea.Bains@fortisbc.com>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 24, 2020 3:12:14 PM PDT
Attachments: image003.jpg

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Hugo - thanks for the agenda and materials. Much appreciated.

I was wondering if we have review materials for these two agenda items:

12:00 p	Lunch Break (30 mins)		
12:30 p	Carbon + GHGi issues in Step Code	Zachary May, ESCC Chair	• Low-carbon energy system relaxations • District energy • New GHGi targets in BC Housing projects
1:00 p	Existing Buildings	Zachary May, ESCC Chair and Nicole Vukosavljevic, Senior Policy Analyst	• Initial outcomes • Renovation roadmap for single-family dwellings, strata housing, and purpose-built rentals • Focus on: ○ Assessment: Understanding where buildings and local governments are at ○ Expectations: Defining outcomes ○ Actions: Achieving and measuring outcomes

Thx Bea

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Wednesday, June 24, 2020 2:07 PM
To: msohi@boabc.org; catherine.ernst@boabc.org; sean.pander@vancouver.ca; NConnolly@richmond.ca; Maxwell.Sykes@surrey.ca; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; jjung@asttbc.org; MGatensby@aibc.ca; warrenp@bccassn.com; muneesh@boma.bc.ca; bdeeks@rdcfinehomes.com; joe.iconhomes@shaw.ca; kelly@hkrbuilders.com; hradhakrishnan@egbc.ca; mark@havan.ca; jfisher@udi.org; christian@zebx.org; Guido.Wimmers@unbc.ca; robyn.wark@bchydro.com; Bains, Bea <Bea.Bains@fortisbc.com>; christine.gillis@canada.ca; wileung@bchousing.org; Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; toby.lau@bchydro.com; NConnolly@richmond.ca; nheap@richmond.ca; mark@havan.ca; mmcwilliam3@bcit.ca; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; mchorobik@communityenergy.bc.ca; lsampliner@portmoody.ca; Lisa.Mak@bchydro.com
Cc: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>; msohi@telus.net; vanessa@chbabc.org; pauline@chbabc.org; mark@bernhardtcontracting.com; Lise.Townsend@surrey.ca; Frye, Christopher (NRCAN/RNCAN) <christopher.frye@canada.ca>
Subject: [External Email] - June ESCC agenda and materials

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Hello, everyone:

Please find attached the agenda and materials for tomorrow's meeting, which is now slated to end at 2 p.m. If you have any questions or concerns before or during the meeting, please contact me by cell: 250 880 6418.

Best,

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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FW: PIBC & COVID response

From: Jeff Fisher <jfisher@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 25, 2020 9:38:37 AM PDT
Attachments: image001.png

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Zachary, given our conversation, you might find this interesting on Best Practices from one of our members who has several Lower Mainland projects.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: Brad Jones <bjones@wesgroup.ca>
Sent: April 30, 2020 9:53 AM
To: Jeff Fisher <jfisher@udi.org>
Cc: Anne McMullin <AMcMullin@udi.org>; Beau Jarvis <bjarvis@wesgroup.ca>
Subject: FW: PIBC & COVID response

Hi Jeff, hope you're well. I sent some criticism to PIBC, as a member, of the limited efforts I've seen to date to be a facilitator between municipalities about their efforts to respond to COVID from the perspective of continuing to move applications forward, their rights under the LGA etc. Dave Crossley's response was pretty positive and opened the door to see what we/the industry thought best practices were, so I took at shot at this with our team. Does UDI want to look at this and add anything based on documenting municipal efforts to-date?

Thanks

Application Submission & Fee Payment

- Best Practice
  - Online application submission & payment- City of Vancouver
  - Online fee payment
- Alternative – City of Coquitlam
  - Courier drawings & provide digital submission -City of Coquitlam
  - Pre-confirm application fees & mail cheque following application submission

Pre-Application Open Houses

- Best Practice- Not required- City of Vancouver

Public Hearing & Council Meetings

- Best Practice- Not required for OCP aligned rezoning- Township of Langley & City of Delta
- Alternative- Digital Public Input- City of Surrey

Permit Reviews & Circulation

- Best Practice- digital submission & permit review [Dean, I think Victoria already does this?]
- Alternative- Traditional hard copy & digital submission- City of Coquitlam
  - Digital set can be distributed to speed up circulation process with groups reviewing digital sets

- If the municipality is looking at staff reductions, explore what non-essential items can be eliminated from processes, putting more reliance on Professionals for things like parking review, project statistics, FSR etc.

Inspections & Construction

- Best Practice- limit physical inspections, rely on consultant site reports- City of Richmond
- Best Practice- extend noise by-law hours to allow for split shifts for construction workers

WESGROUP

Brad Jones
Vice President, Development

D 604 648 1831
C 604 830 1664

From: Dave Crossley (Executive Director) <dave.crossley@pibc.bc.ca>
Sent: April 29, 2020 1:44 PM
To: Brad Jones <bjones@wesgroup.ca>
Subject: Re: PIBC & COVID response

Hi Brad:

Thanks for your note and I hope you are well, and taking care in these challenging times. Thanks for sharing your experience with respect to shifting approaches to planning and development approval processes in different municipalities. I know it's been a challenging period all around and on 'both sides of the counter', so to speak, in sorting out how to continue to keep processes moving while meeting statutory obligations and the requirements for meaningful public input for decision makers, while also adhering to the new realities of a pandemic and strict public health and safety guidelines. And there are many different elements and parties involved in all this in every community, beyond just the planners too - from municipal administrators, legal counsel, the elected officials, the Ministry of Municipal Affairs and Housing, various proponents, to even local citizens.

As you indicate, it is part of the reason we added that new topic & webinar to our programming this spring to cover this important issue, and help disseminate the information and some best practice guidance to members. I appreciate that it might not be coming as fast and soon as you or I might ideally wish, but we're endeavouring to pull this stuff together as quickly as we are able given the constraints and resources we have. I will certainly follow up with our team though, to see what other options we might have to be able to augment our work and information sharing in that area - perhaps there is some kind of piece on tips and best practices that we could work to develop and publish or disseminate and share in advance of the upcoming webinar, for example. I will follow up on that.

Additionally, just in terms of peer sharing and best practices, if there are particular municipalities or process adaptation examples that you believe, from your perspective, are working well and leading the way, so to speak. Let me know, and we can perhaps look at ways to potentially share and highlight those as part of our member outreach/education and sharing efforts. Also, you may or may not know, we've recently set up an online discussion group via LinkedIn where were facilitating and encouraging members to share, ask questions, adaptation strategies etc. I'll see if we can tap into that as a source as well. You may also find it a valuable place to engage in dialogue with other members on these kinds of topics.

Thanks again for following up, and if there's anything more you want to share that might help us in these efforts, that would be much appreciated. And I'll keep you posted on what we can do to try to assist and do what we can going forward. Thanks again, and keep well.

Kind regards,

Dave Crossley
Executive Director

Planning Institute of British Columbia

Forward Thinking. Shaping Communities.

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COVID-19:
In response to the ongoing COVID-19 coronavirus outbreak the PIBC office is currently closed & our team is working remotely, continuing to serve PIBC Members. We thank you for your patience & support.

Stay safe. Stay connected. For more information visit:

https://www.pibc.bc.ca/pibc-news-and-media

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On Apr 29, 2020, at 12:23 PM, Brad Jones <bjones@wesgroup.ca> wrote:

Hi Dave,

I wanted to pass on my experience working with Lower Mainland municipalities as COVID has emerged. It appears that each municipality is working on their out to try to sort out how to keep their City Hall operations functioning. I'm writing this email in reaction to a planning department asking me today what other cities are doing in response- they haven't looked or asked their counterparts in other cities. I have found this really shocking, as we're now 2 months into reacting to this crisis. There is significant variance in how each municipality is continuing to work, for example, the Township of Langley is not having a public hearing for a rezoning that conforms to their OCP, as is permitted in the Local Government Act. The City of Richmond is requiring public hearing speakers to attend in person with a cap of 15 speakers- if more speakers register, they're just going to defer the item until the feel comfortable having more than 15 people in Council chambers. Both of these municipalities operate under the same legislation.

We as a company have taken an active role in speaking with our competitors in the industry to understand their efforts to shift their business, along with each municipality we work in to discuss how they are adapting their practices to move development applications forward. We have actively shared what we've experienced in other cities and our own experiences with our business with them. The Urban Development Institute has also been active in trying to document all of the changes to municipal practices on their website as a resource.

I must say as a PIBC member and RPP, I believe that PIBC should be taking a more active role in assisting municipal planning departments facilitate some of this transition and at a minimum, providing an environment to share the actions that they are taking and troubleshoot common issues. I see that there is a webinar scheduled for May 27th on the "legal requirements of holding virtual council meetings, committee meetings, public hearings, consultations etc. and what local governments should consider as they adapt processes and strategies in response to COIVD-19". That's a great subject and I look forward to it, but May 27 is far too late. Municipalities are trying to resolve these items now and make recommendations to Council's to move forward. These efforts need to happen sooner. I believe that PIBC could add a lot of value to it's members by being this information source, facilitating collaborative problem solving, documenting emerging best practices and facilitating recommendations from experts based on what is permitted in law. It is extremely important for municipalities to be open for business, for processes to

continue, for planning and building approvals to be granted so we aren't in a deeper hole on housing and business space delivery coming out of this crisis. PIBC could play an active role in using this as an opportunity to innovate, to create more modern, broader public participation in the future by adopting technology that may seem to be an emergency action today.

I'm happy to discuss this further if you'd like.

Thank you

WESGROUP

Brad Jones
Vice President, Development

D 604 648 1831
C 604 830 1664

From: Planning Institute of British Columbia <notices@cip-icu.ccsend.com> **On Behalf Of** Planning Institute of British Columbia
Sent: April 29, 2020 11:04 AM
To: Brad Jones <bjones@wesgroup.ca>
Subject: PIBC e-News April 29, 2020

View the PIBC e-News on your web browser instead - click here

April 29, 2020

Bradley, although we are disappointed with the cancellation of the ELEVATION 2020 joint CIP-PIBC national conference, we are excited to be offering two online webinars in May. Be sure to register for our CPL Webinar #4 on May 13th and save-the-date for our CPL Webinar #5 on May 27th. We will continue to prepare and share upcoming online events with you; in the meantime, be sure make the most out of our latest PIBC Member services, including our online LinkedIn group and PIBC Consultant Listings. Read on below for the latest PIBC news and updates. Questions? Don't hesitate to contact us! #WeAreInThisTogether.

Please note you are receiving this email because you are a PIBC member and/or have an interest in PIBC news.

Page 240 of 402 to/à Page 251 of 402

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FW: Step Code CBCSC - June 24, 2020 Meeting Notes and Action Items

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 25, 2020 2:44:44 PM PDT
Attachments: image003.png

FYI – Elizabeth Tang of CMHC writes:

Another reason that I wanted to stay involved is that **PM Trudeau promises $40K interest-free loans to make homes energy efficient and safer from severe weather in the election. Some government departments believed CMHC would be delivering the program, but at this point we have received no directives or information other than that NRCan and FCM will also be closely involved.** I am not sure if Chris has touched upon this. It looks like these federal programs including CMHC's existing funding programs can be inter-related.

Don't know any more than this … also not sure which election she means (last fed election or next).

From: Elizabeth Tang <etang@cmhc-schl.gc.ca>
Sent: June 24, 2020 5:20 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Cc: Mary McWilliam <mmcwilliam3@bcit.ca>
Subject: RE: Step Code CBCSC - June 24, 2020 Meeting Notes and Action Items

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Hi Dale and Mary,

Sorry I missed the first 30 minutes of our call, was in another meeting which went longer.

I am interested in both the NRCan capacity-building funding and Educators Working Group. At CMHC we have a sibling team for Housing Sector Capacity, they're newly formed and don't have anyone BC-based, I will be collecting intelligence for them. Another reason that I wanted to stay involved is that PM Trudeau promises $40K interest-free loans to make homes energy efficient and safer from severe weather in the election. Some government departments believed CMHC would be delivering the program, but at this point we have received no directives or information other than that NRCan and FCM will also be closely involved. I am not sure if Chris has touched upon this. It looks like these federal programs including CMHC's existing funding programs can be inter-related.

Thank you again for everything, and my best wishes for the upcoming summer.

Elizabeth

Elizabeth Tang
Knowledge Transfer Specialist - Outreach
Partnerships and Promotions, Client Solutions
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Telephone: 604 737-4052
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1111 West Georgia, Suite 2000, Vancouver, BC, V6E 4M3
Canada Mortgage and Housing Corporation (CMHC)
www.cmhc.ca

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: June 24, 2020 4:54 PM
To: 'Maura Gatensby' <MGatensby@aibc.ca>; 'jjung@asttbc.org' <jjung@asttbc.org>; 'srutherford@bchousing.org' <srutherford@bchousing.org>; 'Lisa.Mak@bchydro.com' <Lisa.Mak@bchydro.com>; 'Michaela@zebx.org' <Michaela@zebx.org>; 'bertine.stelzer@bchydro.com' <bertine.stelzer@bchydro.com>; 'robyn.wark@bchydro.com' <robyn.wark@bchydro.com>; 'warrenp@bccassn.com' <warrenp@bccassn.com>; 'mmcwilliam3@bcit.ca' <mmcwilliam3@bcit.ca>; 'jackie@bcnpha.ca' <jackie@bcnpha.ca>; 'catherine.ernst@boabc.org' <catherine.ernst@boabc.org>; 'sruhle@cagbc.org' <sruhle@cagbc.org>; 'aschatz@cagbc.org' <aschatz@cagbc.org>; 'pbell@communityenergy.bc.ca' <pbell@communityenergy.bc.ca>; 'probinson@communityenergy.bc.ca' <probinson@communityenergy.bc.ca>; 'GCarignan@communityenergy.bc.ca' <GCarignan@communityenergy.bc.ca>; 'mika@chbabc.org' <mika@chbabc.org>; 'ocappon@cietcanada.com' <ocappon@cietcanada.com>; 'Peter.Sundberg@citygreen.ca' <Peter.Sundberg@citygreen.ca>; 'CRay@kelowna.ca' <CRay@kelowna.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Elizabeth Tang <etang@cmhc-schl.gc.ca>; 'snash@egbc.ca' <snash@egbc.ca>; 'yasmin@empowerme.ca' <yasmin@empowerme.ca>; 'nabila.hussein@empowerme.ca' <nabila.hussein@empowerme.ca>; 'Tanya.Rumak@fortisbc.com' <Tanya.Rumak@fortisbc.com>; 'Stephanie.Yen@fortisbc.com' <Stephanie.Yen@fortisbc.com>; 'Sabine@icba.ca' <Sabine@icba.ca>; Burns, Susan G AEST:EX <Susan.Burns@gov.bc.ca>; Pye, Andrew EMPR:EX <Andrew.Pye@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'christopher.frye@canada.ca' <christopher.frye@canada.ca>; 'anna.joynt@canada.ca' <anna.joynt@canada.ca>; 'patric.langevin@canada.ca' <patric.langevin@canada.ca>; 'kally.narvaez@canada.ca' <kally.narvaez@canada.ca>; 'Jen@refbc.com' <Jen@refbc.com>; 'bsoutham@reibc.org' <bsoutham@reibc.org>; 'janice.larson@ubc.ca' <janice.larson@ubc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'Emily_Pearson@vancity.com' <Emily_Pearson@vancity.com>; 'gbenson@vancouvereconomic.com' <gbenson@vancouvereconomic.com>; 'roberto@zebx.org' <roberto@zebx.org>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: mmcwilliam3@bcit.ca; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: Step Code CBCSC - June 24, 2020 Meeting Notes and Action Items

Hello Subcommittee members,

It was great to connect with those who could join our meeting today. Please find attached:

- Brief meeting notes with action items
- Updated membership list with email contact information

As always, if anything is incorrect, please let me know and I'll adjust

Two particular follow-up items:

- **NRCan funding** – For anyone interested, we'll hold a Subcommittee meeting in July to discuss potential collaborative projects that might be eligible for NRCan's capacity-building funding (keeping in mind Chris's caveat of 'no promises') – invite to come.
- **Educators Working Group** – Many members were interested in this potential new working group and stayed for the second half of our meeting to discuss it. Brief notes attached. There was sufficient interest that we will schedule a meeting in July to continue this – all will be invited, please participate if you are interested.

Thank you – please be in touch with me or Mary if you have questions or ideas to share.

Kind regards,

Dale and Mary – Step Code Capacity Building and Communications Subcommittee Co-chairs

DALE ANDERSSON, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Office: 778-974-3903 | Mobile: 778-679-9653
Email: Dale.Andersson@gov.bc.ca

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ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Notes

Date and Time of Meeting: Thursday June 25, 2020 | Time: 9:00 a.m. to 2:00 p.m. Pacific Time
Webinar link: Join Microsoft Teams Meeting
Note: There is no conventional dial-in option, but you can request a call back to join the meeting by phone.

Chair: Zachary May, Building and Safety Standards Branch, Ministry of Municipal Affairs and Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Participants

1. Dale Andersson, BSSB and co-chair, CBC Subcommittee
2. Bea Bains, FortisBC
3. Maya Chorobik, LGPN Co-chair
4. Christian Cianfrone, ZEBx
5. Norm Connolly, Richmond/PIBC, and P3 Subco Co-chair
6. Jeff Fisher, UDI
7. Chris Frye, NRCan Housing Division
8. Maura Gatensby, AIBC
9. Joe Hart, Icon Homes/CHBA BC
10. Toby Lau, BC Hydro and P3 subco co-chair
11. Wilma Leung, BC Housing
12. Megan Lohmann, CEA and UBCM rep
13. John Madden, UBC
14. Warren Perks, BCCA
15. Harshan Radhakrishnan, EGBC
16. Kelly Reid, HKR Builders/CHBA BC
17. Mark Sakai, HAVAN & P9 subco co-chair
18. Laura Sampliner, LGPN Co-chair
19. Muneesh Sharma, BOMA
20. Manjit Sohi, BOABC
21. Lise Townsend, City of Surrey/UBCM Rep and Chair, Large LG Peer Network
22. By teleconference – MAH: Holly Wacker (Local Government Division, Planning and Land Use Management); , BSSB Staff: Kylie Sandham; Nicole Vukosavljevic; Scott Williams; Hugo Wong
23. By Teleconference: Nat Gosman, MEMPR; Mark Bernhardt, Bernhardt Contracting and CHBA BC (guest); Catherine Ernst, BOABC; Nicholas Heap, City of Richmond and P9 subco co-chair; Vanessa Joehl, CHBA BC

Guests: Pauline Rupp, CHBA BC; Bertine Stelzer, BC Hydro

24. Regrets: Jason Jung, ASTTBC; Patrick Enright, City of Vancouver; Lisa Mak, BC Hydro; Mary McWilliam, BCIT, co-chair, CBC Subcommittee

1. Welcome and Introductions

Zachary May welcomed Council members and guests. New Council members include Lise Townsend, filling in for Maxwell Sykes during his parental leave.

2. COVID-19 Check-in

Zachary May sought Council input on what data should be tracked as the Province plans an economic recovery strategy.

Discussion:

- Builders report increasing activity in Metro Vancouver and the North. BC Hydro has returned to business as usual re: connections. Banks continue to be slower than normal with more demand.
- BOMA focused on operational recovery and safety, would have preferred to be included in consultation in rental plan. They hope for faster development permits, Vancouver moving to online systems which is speeding it up. Members aren't spending and don't have access to capital. Consider tying future funding

to energy efficiency or resiliency. Increasing incentives for upgrades or lower carbon energy systems, good chance.

- UDI appreciates that construction stayed open. Launching of projects, particularly large ones, has slowed. They have analysis to share as it was part of their pre-budget submission. Would hope for some COVID changes (virtual public hearings, skipping public hearings) to stay.
- HAVAN reminded the Council that the DAPR report makes some of these recommendations. Energy retrofits could achieve economic stimulus and efficiency goals.
- No additional protocols or measures expected from the Province regarding construction, with most internal discussions around economic recovery and the unique value of construction sector. Bea Bains said additional safety equipment was an unanticipated cost, and help may be required there, an issue Zac said has been raised.
- CHBA BC and UDI have heard from members that CERB makes it hard to find labourers as support programs can pay the same or better.
- UDI found recent provincial announcement on strata insurance reforms very interesting, including that insurance for newer buildings is more expensive than older buildings, which is unusual. Insurers are apparently also concerned about six-storey wood frame, which may be concerning given 12-storey mass timber. Zac said there was a new MAH division on mass timber implementation.
- Maya Chorobik of the LGPN said LGs worry about budget uncertainties or property tax deferrals due to COVID. They are just starting to re-hire staff, and they continue to have concerns.
- Toby Lau said BC Hydro surveyed Community Energy Managers and Building Energy Managers on the impact on building permit applications and delays. Effect on LGs vary but they report about a 25-30% reduction in residential and commercial permit applications
- Megan Lohmann reports many building applications, significant interest from Alberta residents to building in the southeast of B.C., quick turnaround on sales of existing homes. Some suppliers report higher demand than before in trim, paint etc. Wonder how to take this opportunity to include energy efficiency as part of home improvement.
- Training for the EnerGuide Rating System, provided by Yardstick, was closed due to COVID but re-opening again. Chris Frye encourages anyone with EA challenges to contact NRCan.
- BC Housing has a monthly new housing registry report, with a COVID addendum published every two weeks.
- Joe Hart of CHBA BC encourages Province to implement findings from DAPR. A new Associate Deputy Minister, Silas Brownsey, will oversee DAPR.
- Harshan from EGBC said Susan McDougall from Focal Engineering is doing training on the Part 3 Energy Design Report. There are also upcoming webinars for Part 9 training. The EGBC AGM will happen virtually.

ACTION: Toby Lau to share survey results from Community Energy Managers and Building Energy Managers.
ACTION: Maya to share LG survey results to LGPN members.
ACTION: Harshan to provide a link to the International Initiative for the Sustainable Built Environment.

3. Step Code Policy/Implementation issues

a. Local Government Peer Network report-out (Maya Chorobik and Laura Sampliner)

- After combining the small and large Peer Networks, there are now 75 local governments and 150 staff participating.
- They hold quarterly meetings following the ESCC meetings, each with a deep dive. One past deep dive was on compliance, yesterday's was on GHG and Step Code with some LGs sharing the two-step approach.
- Two local government surveys, one each for those who have and have not adopted, are being drafted with BC Housing to launch in July. Feedback welcome on questions.

b. Capacity Building and Communications Subcommittee Report-Out (Dale Andersson and Mary McWilliam)

- See work plan.

c. Inconsistent use of Part 9 Energy Compliance Reports (Mark Bernhardt)

- EAs work in multiple AHJs, so there is a time cost if forms are rejected. Multiple form designs also increase risk of errors. Sometimes a signature is required when a checkbox must be ticked to the same effect. The "sign off" is not within an EA's authority. Kelowna has its own form and asks for a Full House Report. Richmond, which does use its own form, are doing audits and finding many problems, and encouraged implementing professionalization recommendations from the EA White Paper. Some LG forms are also outdated. Others want their own form just for branding consistency.
- EAs have insurance, so risk/liability is small compared to a structural engineer
- A call to have stronger language from the ESCC describing the benefits of using the provincial form, which is always up-to-date.
- Discussion: LGPN to ask LGs via survey which LGs are using their own forms and why.
- **Action: Communications and Capacity Building Subcommittee and Peer Network to work on this.**
- **Action: Topic to be addressed again at the next LGPN meeting.**

d. EA Working Group and EA Capacity Issues

- After a study (see attached report), the working group believes B.C. has enough EAs to meet capacity. These findings are preliminary, with more work and reporting back to do. This study did not consider renovation work.

e. Local Governments Who Have Not Adopted Step Code

- General concern expressed that their construction sector will not be able to meet Step 3 in 2022 without Step 1 today. For builders that operate in communities that do have Step Code, this is less of an issue, but builders who work exclusively in large municipalities that have eschewed Step Code may find themselves unprepared for the shift.
- #1 barrier to referencing Step Code in smaller communities was a lack of EAs. Other LGs lack money for incentives so don't do it. Incentive support may be valuable in the context of economic recovery.
- **Action: MAH to bring this issue up at our standing meeting with UBCM**
- **Action: LGPN to identify which LGs haven't yet referenced Step Code, with help from CBCSC.**

f. Industry Readiness/Capacity Research Project Proposal

- See report for details. **No decision recorded.**

g. Part 9 Residential Subcommittee Report Out

- The former "Compliance and Energy Advisor" subcommittee is now the "Part 9 Residential subcommittee". There are 10 work items and 3 working groups. Several high-priority items relate to working on the development of the 2022 BC Building Code. There are 5 low-priority items. See work plan for more information and Scott's report out.

h. Part 3/Part 9 Non-Residential Subcommittee Report Out

- See work plan for major items.
- About 40 members, with lots of technical expertise. Many key items on the work plan, also relating to 2022 BC Building Code development.
- New Part 3 Energy Design Report, an Excel-based tool similar to the City of Vancouver checklist, funded by Richmond and BC Hydro. Christian Cianfrone retained and finalized, and IBPSA involved.

4. Step Code Technical Issues

a. Proposed Code Changes for 2022

- Focus: 20% improvement on energy efficiency, analyzing overheating risks for Parts 3 and 9, and air leakage testing for Parts 3 and 9.
- Implementing "20%-better", see attached PowerPoint. Currently considering Step 3 plus potential prescriptive measures. Still determining role of NBC points-based approach
- Morrison Hershfield engaged to get 20% better on Part 3 aligned with National Building Code
- Work will happen in earnest over the summer, with a report back by the fall.
- The council discussed using the NBC as an alternative path. Step Code is ahead of the national code, so there is a disincentive to "go back". Future climate files will go on to 2050. The BC code development process is more nimble than national, so there is tension between alignment with national and maintaining our progress. The national points based approach is apparently designed to accommodate areas of other provinces without EA capacity, which B.C. mostly has.
- CleanBC and tall wood are key provincial policy pillars.
- The Metrics Report will need updating as 2022 approaches we will need to ensure we're asking the right research questions. We will look at costs for LGs that haven't yet moved on Step Code.
- **Council endorses work plan for Part 3/9 Non-Residential and Part 9 Residential Subcommittees**
- BC Housing has engaged a PhD student to research reference building approach for several years, for both Part 3 and Part 9 buildings. BOMA also has a Victoria-based research project (collaboration with UVic on 50%-better); seeking one more building for a pilot project. Five buildings total.
- Action: Tell ESCC when RFP goes out for Matrix report.
- Action: Similar open process for RFP for archetypes the Council may wish to include.

5. Carbon + GHGi issues in Step Code

- LCES relaxations (by one Step) exist in Richmond, Surrey, New West and Burnaby. UDI said this would drive builders to invest in equipment over envelope. Victoria is also considering this. Typically, it's a "Three-Two" implementation (Step 3 for Residential or Step 2 with LCES). Mark Sakai wonders whether this runs contrary to a stated goal of Step Code: consistency, seeing as Step 3 on the North Shore requires an LCES, but Step 3 in other places does not. Zac understands this concern, and carbon is being brought up by many stakeholders, like how to define an LCES or how to measure GHGi.
- Nicholas Heap thanked BC Hydro for funding air tightness training originally developed by the City of Vancouver. Events were popular and saw improvement in air quality in Step Code homes. Great to get other jurisdictional data to see if airtightness training contributed to measurable improvement.
- BSSB proposed to move forward with the following types of work:
    1. A group to help define how to measure GHG for application in buildings to get a consistent measure
    2. By August, have the ESCC consider appropriate stepped targets and an implementation approach that provides flexibility for LGs and industry. There is a provincial mandate in CleanBC to lower GHGs and emissions from natural gas. Likely another committee on this issue. Parallel discussion on embodied carbon (and NRCan can support on embodied carbon). Goal: recommendations to ESCC by December.
- A minimum GHG standard by the 2022 BCBC is not on the table at this point.
- Discussion: The "Five-Three" approach by some municipalities has a limited shelf life, and it's hard to predict which LG will choose which approach, making it hard to predict whether this will meet provincial GHG reduction goals. BSSB is trying to include GHG changes in a bundle with Code changes for the Minister's approval in early 2021.
- BC Housing has done a carbon calculator with UDI. Report (PDF) and Calculator

ACTION: Bea to share Fortis analysis on two paths: an electrification pathway and diversified pathway that includes gas. BSSB to follow up with Bea here with aim of a presentation at the next ESCC meeting.

6. Existing Buildings

- Presentation by Nicole Vukosavljevic, Senior Policy Analyst at BSSB (see attached)
- Discussion:
    - If an single-family dwelling is on a transit line, it will likely be developed so there should be criteria for when a building should not be invested in. Planners should be involved. Translink should also be involved. OCPs have this future-looking element, but are time-limited. CHBA suggests the first step is an ERS rating at point-of-sale. General public needs education on how older buildings perform. EMPR is looking at energy labelling and pathways to conservation. Online assessment tools are in the works that might help. Some homeowners who can barely afford their homes won't want to do extensive retrofits.
    - Robyn: The timeline to 2050 should also include actions for the next four years. What can we in the short-term to ensure success? Pilots, labelling, incentives, etc.
    - The first step is data: asset and operational data, baselines, labelling, benchmarking, to make the right investments in the right buildings.
    - Lise: Standardized mapping information to see where the least efficient buildings are, racial distribution could help, even if the data is imperfect right now.
    - HAVAN encourages gentle densification for affordable options, but with RS1 zoning all over the province, no additional density can be done. There are options to tie this in with creating more affordable housing and neighbourhood revitalization with infill opportunity. CHBA supports home labelling and renovation incentives, but some regulations may force renovations underground. Low-income homeowners won't be swayed by incentives, they will need government to pay it all if they're to do it.
    - UDI: Currently, retrofits/upgrades increase value of home, and thus property taxes. This is a disincentive to upgrade, and consumers shouldn't be penalized for doing what governments want.
    - **ACTION: BSSB to connect with Lise Townsend on Surrey considering an alterations to existing buildings strategy themselves. There is interest in co-operating.**
    - On strata housing: if the strata insurance crisis and this could be linked somehow, stratas may be inclined to participate. For example: a financing mechanism to spread upgrade costs to future owners (PACE?)
    - The New York model of benchmarking had a decade of data, and is a potential model. The market signal is strong to prepare owners for upgrades.

7. Final comments and adjournment

- Robyn thanks departing council member Mark Sakai for his many contributions over the years as he departs HAVAN for the BC Real Estate Association.
- **Action: BSSB can share FortisBC letter of support of Step Code to District of North Vancouver.**

Meeting adjourned: 2:05 p.m.

FW: Final Budget Submission

From: May, Zachary OHCS:EX
To: Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca>
Cc: Mezynska, Urszula MAH:EX <Urszula.Mezynska@gov.bc.ca>
Sent: June 29, 2020 2:21:29 PM PDT
Attachments: image002.jpg, image003.jpg, UDI Preliminary 2021 Budget Submission.pdf, image001.jpg

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: June 28, 2020 10:17 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Marissa Chan-Kent <mchan-kent@udi.org>; Cassandra McColman <cmccolman@udi.org>
Subject: FW: Final Budget Submission

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Zachary, as discussed, here is our *2021 Budget Submission*. Please see the graph on page 2. Also, here is the data from Urban Analytics for Metro:

"Just ran a custom search on our new home data base and we have an estimation of new condominium & townhome units released by year as follows:

2012 – 12,943
2013 – 11,511
2014 – 13,674
2015 – 13,436
2016 – 19,285
2017 – 17,074
2018 – 20,423
2019 – 7,464

So the 2,207 units x 4 quarters would translate into just below 9,000 units which is apx 40% below the 8 year average. 2019 was a slow year for launches as well."

Jeff Fisher, M.PL., CAE, MCIP, RPP
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Suite 1100, 1050 West Pender Street
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From: Cassandra McColman <cmccolman@udi.org>
Sent: June 26, 2020 5:39 PM
To: Marissa Chan-Kent <mchan-kent@udi.org>; Jeff Fisher <jfisher@udi.org>

Subject: Final Budget Submission

FYI

Cassandra McColman | Policy and Research Coordinator
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June 26, 2020

Chair Bob D'Eith and
the Select Standing Committee on Finance and Government Services
Room 224, Parliament Buildings
Victoria, BC V8V 1X4

Dear Chair:

Re: Budget 2021 Submission of the Urban Development Institute

On behalf of the 950 members of the Urban Development Institute (UDI), we thank the Committee for the opportunity to submit our comments and recommendations for *Budget 2021*. We believe that through our recommendations, the Government can restart the economy in the wake of the serious impacts of the COVID-19 pandemic.

Please note that in our submission, we do not address the immediate needs of our members and the businesses and residents they serve related to COVID-19, such as extending the rent supplement program for landlords as long and the *Emergency Program Act* (EPA) and Public Health Officer's (PHO) Orders are in place. These issues are immediate in nature, and need to be addressed well before *Budget 2021* is introduced next February.

Our focus is on recovery measures that are critical to British Columbia's economy as the immediate health and financial impacts of COVID-19 begin to subside. Our proposals will also seek to assist the Government in meeting its laudable objective of building 114,000 new affordable housing units before 2027, as well as its climate change goals. The three key areas we ask that the Government consider in *Budget 2021* are:

1. Housing Tax Policy;
2. Transit and Transportation Funding; and
3. The CleanBC Strategy.

ABOUT THE URBAN DEVELOPMENT INSTITUTE AND THE REAL ESTATE DEVELOPMENT INDUSTRY

UDI Pacific Region is a non-profit and non-partisan association of the development industry and its related professions in British Columbia. UDI represents thousands of individuals involved in all facets of land development and planning, including: builders, property managers, landlords, financial lenders, lawyers, engineers, planners, architects, appraisers, construction companies, real estate professionals, local governments and government agencies.

The real estate and development industry has a significant positive impact on employment, economic growth and government tax revenues. An independent analysis conducted in 2017 found that the B.C. development industry annually:

- Contributes almost $23 billion to the provincial GDP;
- Employs over 230,000 British Columbians; and
- Generates $6.6 billion in revenues to governments at all levels.

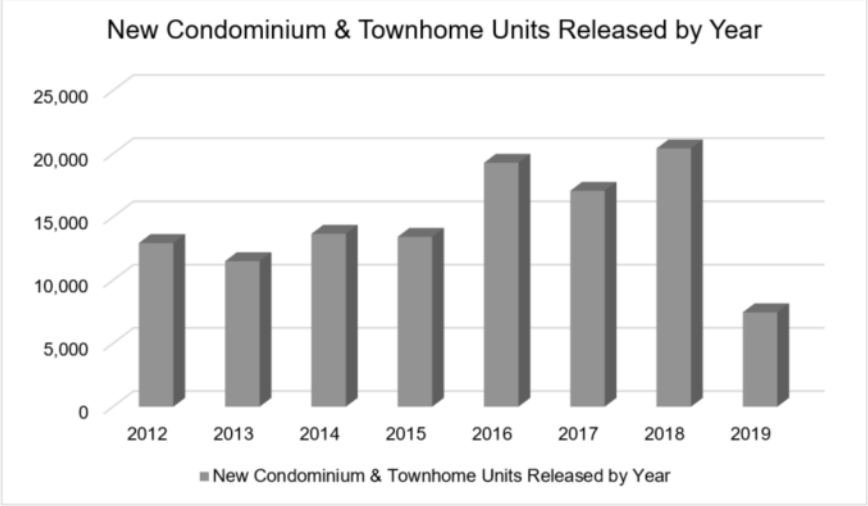
HOUSING TAX POLICY

Since the introduction of a host of housing tax changes beginning in *Budget 2016*, UDI has raised significant concerns pertaining to the direct and indirect impact that a number of recent tax measures introduced by Province would have on the supply and affordability of much-needed housing (including affordable and rental housing) for British Columbians. These taxes included:

- Speculation & Vacancy Tax (SVT)
- Additional Property Transfer Tax (also known as the "foreign buyers' tax" or FBT);
- a "luxury" marginal Property Transfer Tax rate of 5% on residential properties valued in excess of $3,000,000;
- Additional School Tax (AST); and
- Provincial legislation enabling the implementation of City of Vancouver's Empty Homes Tax (EHT).

These tax measures are currently applicable to development lands and unsold inventory, which add to the cost of housing and discourage the supply of new homes.

We are already experiencing a shortfall of new housing. Between 2016 and 2019 there was a 60% drop in multi-family project launches in Metro Vancouver. In fact, in 2019 there were only 7,464 units released for sale, which is far less than a normal year (please see the table below). As of the beginning of 2020 there were 44 multi-family projects with over 17,000 units on hold. All of this occurred before the COVID-19 crisis. We have also seen a precipitous drop since the beginning of the year in new projects. So far, in 2020, only 2,207 units have been released for pre-sale.



Metro Vancouver data as presented by Urban Analytics

The Government has taken some steps to reduce these taxes on development lands/unsold inventory, especially with regard to the exemptions offered under the SVT, but much more work still needs to be done to make a meaningful difference in housing for British Columbians.

Exempting Partnerships with Foreign Capital from the Foreign Buyer's Tax

Last month, the Province amended the *Property Transfer Tax Regulation, B.C. Reg. 74/88* (the PTT Regulation) in an attempt to implment measures announced in *Budget 2020* that were to make the treatment under the FBT regime of corporations and certain limited partnerships (LPs) consistent. This amendment was to recognize that foreign capital often supplements the equity that many Canadian homebuilders require to create housing in British Columbia.

The impact of this amendment on Government revenues should have been negligible because it was intended to simply clarify the existing rules as they pertain to LPs that include a minority of foreign limited partners. However, the current language of the PTT Regulation appears to introduce a new modification to the existing rules which applies prospectively, creating an unfair result for existing partnerships created prior to the effective date of the PTT Regulation since it adds to the uncertainty of the existing rules rather than clarify them.

Under new section 22 of the PTT Regulation, if a general partner of a LP purchases land to which the FBT applies, the LP is exempt from the FBT if all of the following conditions are met:

- "On the date of transfer of the property (or other application for registration of the taxable transaction at the Land Title Office):
  - each general partner of the limited partnership is either a Canadian citizen, permanent resident of Canada or a corporation other than a foreign corporation;
  - the combined interest in the limited partnership of all the foreign limited partners accounts for less than half of the partners' entitlement to share in the profits of the limited partnership; and
- Each general and limited partner of the limited partnership is a resident of Canada for income tax purposes throughout the taxation year in which the taxable transaction occurs."

Given that the amendment only applies in rare circumstances when the general partner of the LP becomes the resistered owner of the land. In the vast majority of development land acquisitions, a nominee company of the LP will purchase sites due to the fact that the partners of the development project are not firmly established at the time of initial site acquisition and, in fact, the LP itself may not exist at the time the sites are put under contract.

UDI recommends that section 22 of the Property Transfer Tax Regulation, B.C. Reg. 74/88 be amended to remove the requirement that a general partner of a limited partnership must be the registered owner of the land purchased for residential construction. We also recommend that the application of section 22 be made retroactive to August 1, 2016, when the FBT was put in place, so that it provides clarity of the rules in a fair and consistent manner.

Exempting Foreign Capitalized Builders from the Foreign Buyers' Tax

In addition to LPs with a minority of foreign limited partners that create new housing supply in British Columbia, there are number of foreign capitalized builders (FCBs) with a proven track record of creating housing supply for British Columbians. These FCBs want to continue this positive work but, since the introduction of the FBT, they have been effectively excluded from acquiring residential sites for redevelopment. As these FCBs are not currently purchasing residential sites, they are not currently paying FBT. Therefore, the introduction of an exemption to enable FCBs to continue creating housing supply in British Columbia, should be revenue-neutral to the Province.

We recommend that the Province considers introducing new measures to exempt FCBs that meet certain conditions, as outlined in the attached appendix, from the application of the FBT.

Exempting Development Sites from AST

It can take up to six years for a project to go through the permitting and rezoning process. During the process, the AST can apply in every year of the project's lifespan, since most housing projects are on sites that are well in excess of the $3,000,000and $4,000,000 thresholds. In fact, the AST can increase during the permitting phase and during construction because the value of land and improvements is added to a site's assessment.

The AST can also apply to purpose-built rental (PBR) buildings when their value exceeds the thresholds noted above. This counterproductive to the Province's objective to create more PBR housing.

UDI recommends that the current SVT exemptions applicable to sites under development be extended to the AST.

TRANSIT/TRANSPORTATION FUNDING

UDI has long supported ongoing senior government funding for transit and transportation projects. This infrastructure services the projects our members build – transit stations serving mixed use, commercial and multi-family residential buildings, or highways serving industrial uses.

These are also great projects for "kick-starting" economic and job growth, which is needed now more than ever to address the impacts of COVID-19 on our Province. In addition, it improves transportation linkages within regions. As noted in TransLink's *Transport 2050 Discussion Paper*, the annual cost of congestion in Metro Vancouver is $500 million to $1.4 billion. Funding transit will also assist the Province in achieving its goals of reducing greenhouse gas (GHG) emissions, improving public health and increasing housing affordability opportunities (see below). As such, ***UDI strongly supports continued provincial funding for transit and transportation projects in British Columbia***.

However, there are two key areas of concern for our membership with regard transit and transportation funding – the growing reliance on the new construction sector to fund TransLink, and the need to link transit funding to land use planning/outcomes.

Increasing Reliance on the Building Sector to fund TransLink

As noted above, UDI has recognized that transit expansion is important for the Metro Vancouver as well as our members. In fact, we conditionally supported the creation of a TransLink Development Cost Charge (DCC), which is now in effect – on top of local government transportation DCCs.

When we supported the TransLink DCC, we were assured by TransLink that "*Should an increase to the DCC rates above inflation be considered by the Mayors' Council for incremental funding for future Investment Plans, substantive consultation would need to be undertaken as a requirement of the expected legislation*." Before the DCC legislation was approved by the Province, and only three months after the original tax and rate was approved by the Mayors' Council, the DCC rate was increased 30% with no consultation with builders and little notice.

Now, TransLink and others are exploring additional potential charges on builders such as Land Value Capture (LVC), an Annual Area Benefiting Tax and a variable rate DCC. UDI's response to the TransLink study on LVC is appended to this submission. In addition, we are concerned that this is occurring at a time when our members are facing a challenging economic environment

because of COVID-19 and a number of policy pressures imposed by all levels of government, including:

- A proposed Federal Vacancy & Speculation Tax on Residential Properties;
- Ongoing Federal restrictions on mortgage lending such as the 2018 "stress test" imposed by the Office of the Superintendent of Financial Institutions, and the recently announced changes to the Canada Mortgage and Housing Corporation underwriting policies for insured mortgages;
- The provincial taxes that apply to development lands noted above;
- A proposed future Metro Vancouver water DCC on top of a 2018 Greater Vancouver Sewerage and Drainage District DCC increase of up to 200% for some projects;
- Substantial increases to DCC and Community Amenity Contribution rates in several municipalities; and
- Increasing requirements for new projects such as the *B.C. Energy Step Code* (see below) and Electric Vehicle Charging Infrastructure.

We ask that the Government and TransLink not add to these issues with new fees/taxes for new construction. Instead, other sources of revenue, such as the road pricing, need to be contemplated.

Linking Transit Funding with Land Use Planning Outcomes

UDI has long advocated for the need to link transit investments with land-use planning. This is critical to fully leveraging the billions of taxpayer dollars being used to fund transit capital programs and operating costs. This is not only important for the economy and increasing transit revenues, it is also needed if the Province is going to meet its GHG emission reduction, public health and affordable housing goals.

Unfortunately, after over 30 years of SkyTrain, there are too many rapid transit stations in the Region that are surrounded by low-density housing and commercial uses. There is little point in investing in billions of dollars in transit infrastructure if only a few people are allowed to live and work nearby.

The Province and local governments that receive substantial transit infrastructure investments need to work together to ensure that increased housing and job spaces are zoned within 800 metres of our mass transit stations. This Transit Oriented Development (TOD) approach will help meet other provincial objectives that all political parties support, including:

- Fully leveraging tax-payer investments in transportation infrastructure with increased ridership;
- Economic development benefits from a more connected region (noted above);
- Carbon emission reductions as multi-family units are smaller and better protected from the elements, and people are more likely to walk, bike or take transit to destinations rather than cars;
- Improved public health (and thus lower health-care costs) as people are utilizing more active transportation options; and
- Improved affordability for households as multi-family units are smaller and vehicle ownership/commuting costs are lower for households in TOD areas (as detailed in the *Metro Vancouver Housing and Transportation Cost Burden Study: A New Way of Looking at Affordability*).

UDI continues to recommend that transit investments in local communities be linked to land-use changes commensurate with those investments. This could be accomplished through the further development and implementation of Transit Supportive Policies Agreements between TransLink and local governments that are signed when commitments for new transit are made. However, we believe these Agreements need to be improved, so they:

- ***Are binding on future Councils;***
- ***Include more specific housing targets that need to be achieved;***
- ***Are co-signed by senior levels of government that are providing much of capital funding; and***
- ***Include penalties if targets are not being met, such as reduced transit services or increasing the TransLink Property Tax.***

CleanBC STRATEGY

The Premier, the Hon. John Horgan, has made it clear that the Province's Climate Strategy, *CleanBC*, will be the centerpiece of British Columbia's economic recovery, stating "*When I announced our restart plan, I made it abundantly clear that the foundation of that plan was CleanBC*."

As noted in the previous section on linking transit investments with land use planning and outcomes, we can achieve a growing economy and meet our climate goals – as well as other objectives. There are other steps under *CleanBC* that the Government can take to reduce carbon emissions while supporting business and job opportunities – mass timber construction and green building technology. However, both will require government investments.

Mass Timber Construction

UDI is pleased that the Province is working with local governments and builders on the Tall Wood Initiative, so our members have the option to construct "*… encapsulated mass timber buildings up to 12 storeys in height*," and that the Ministry of Municipal Affairs and Housing has appointed an Assistant Deputy Minister of Mass Timber Implementation. We have been very supportive of this type of construction and have held several Breakfast Seminars and Webinars on the issue, and would be pleased to involve the Province in future events.

There are some clear advantages that Tall timber has over concrete and steel with regard to GHG emissions during construction (embodied carbon). "*The estimated avoided and sequestered greenhouse gases (GHGs) from the wood used in …*," the Tallwood House at Brock Commons "*… is equivalent to removing 511 cars off the road for a year. The total carbon dioxide equivalent avoided by using wood products over other materials is more than 2,432 tonnes*."

Mass timber construction would also assist B.C.'s forestry dependent communities due to the extensive use of wood. Economic development is and should also be as a result of new investments in production facilities for value-added prefabricated building components. This is already happening in communities such as Penticton and Castlegar.

The initial findings of the cost of tall timber construction range from 4% to 7% higher than concrete, but we anticipate that these costs will decline as more buildings are constructed and more project teams gain experience with tall timber buildings. One issue that we believe needs further exploration is how prefabrication can reduce construction costs and times. The prefabricated components could also be utilized to assist builders in meeting energy efficiency requirements noted in the next section.

Another issue that needs to be addressed is insurance. There is a wariness amongst some in the insurance industry regarding both mass timber buildings – and even six-storey wood-frame construction. This is critical to our members because in the last year strata insurance costs have been rapidly increasing, and this has added unforeseen substantial costs to homeowners.

UDI recommends that the Government invest resources in this emerging approach to construction by:

- ***Supporting local prefabrication/modular production facilities to supply the B.C. market and other jurisdictions;***
- ***Establish an approach to quickly certify mass timber products, so they can be used in projects without facing approval delays;***
- ***Improve the training of designers and construction trades, so they can become for familiar with this new type of construction; and***
- ***Converse with the insurance industry to resolve their concerns with mass timber construction.***

Building Energy Codes

UDI has been involved in the development of the *B.C. Energy Step Code* (*ESC*) since its inception in 2014, and we have sat on the Energy Step Code Council since its creation. We have also held numerous educational events on *ESC* to prepare our members for municipal and provincial energy requirements in new construction. Recently, UDI has also been working with Ministry of Municipal Affairs and Housing staff on the development of the proposed *Alterations Code* (the *Building Code for Existing Buildings*) that is anticipated to be in place by 2024.

While we are confident that our members can meet the lower steps of the *ESC* in Lower Mainland and the Capital Region, we are concerned about their ability to meet the higher steps without incentives being offered by the Province, utilities and municipalities. We are concerned that local governments may mandate the higher steps of the *ESC* without the needed incentives when the Province updates the *B.C. Building Code* (*BCBC*) with new energy requirements in 2022. This could be further complicated if additional requirements are made to reduce GHGs in projects at the same time.

To address these issues, UDI recommends that:

- ***The Province increase awareness of energy efficiency expectations for new and existing buildings through a public education campaign;***
- ***The Province and utilities provide substantial incentives for projects built at the higher steps of the ESC, in addition to a long term reduction in financial barriers through tax and fee reductions or rebates;***
- ***The Province work with local government to strongly encourage them to offer incentives – especially density increases – which would be especially helpful in the TOD areas noted above; and***
- ***If the GHG requirements are mandated for new construction, they be incorporated in a way, so that builders are provided options. For example, in several communities, proponents can build to a lower step of the ESC if they reduce carbon emissions.***

With regard to the *Alterations Code*, it is not clear how many owners will be able to afford to pay for substantial renovations to their buildings to improve energy efficiency, meet seismic standards or remove asbestos – without incentives – especially PBR owners.

As we discussed in our December 2019 letter to the Ministry of Municipal Affairs and Housing, we remain concerned that if the Province proceeds with the implementation of the *Alterations Code*, it could have a negative impact on housing affordability. Where major upgrades are required, we fear that they will be accompanied by substantial costs, which will be borne by

building owners (homeowners, strata owners and landlords) irrespective of their financial capacity or access to financing to fund the improvements. In the case of rental buildings, these costs will be passed on to tenants. If this is not possible, investment in needed new PBR projects would diminish – restricting the housing options for British Columbians.
In addition, newly upgraded buildings will add costs for commercial tenants. This may be less of a problem for established firms, but for start-ups the added costs may become an obstacle for them to find space. This challenge will be exacerbated by the COVID-19 pandemic, which has had a devastating impact on many small businesses.

UDI recommends that the Alternations Code not move forward without substantial incentive programs and financial mechanisms to fund the mandated improvements. This requires further discussions with building owners, tenants and businesses.

There are also steps that the Government can take that will assist builders and building owners with the *ESC* and the *Alterations Code*. ***As a first step, the Government could remove the current property tax disincentives for building upgrades. Currently, if energy efficiency improvements are incorporated into new projects or added to existing buildings, BC Assessment increases the valuations of them, which leads to higher property taxes.***

Another area where the Province could provide assistance is in skills training. We are deeply concerned that as we move to the higher steps of the *ESC*, and the *Alterations Code* is rolled out at the same time, the labour shortages builders have been facing will be exacerbated – adding costs for new construction and the upgrades mandated under the *Alterations Code*. As with mass timber construction, ***UDI recommends that the Province expand funding for designers and construction trades training as well as building officials, so we have a workforce that is ready for the future in green building construction. This will be especially important in the interior and the northern parts of British Columbia.***

CONCLUSION

In conclusion, we would like to thank you and the Select Standing Committee on Finance and Government Services for the opportunity to submit our recommendations for Budget 2021. We believe that the measures outlined above will support government objectives, including the creation of new affordable homes and assist in meeting provincial climate change goals. As British Columbia moves forward with the provincial restart plan, we hope that Budget 2021 will make the investments that are needed to support the building industry as we continue to build homes, offices, retail and industrial spaces across B.C.

We ask that you consider our recommendations, and we would be very interested in discussing them further should additional information be required. If you have any questions regarding our Budget Submission, please do not hesitate to contact me.

Yours sincerely,



Anne McMullin
President and CEO, Urban Development Institute

APPENDIX: PROPOSAL FOR THE ADDITIONAL PROPERTY TRANSFER TAX FOR FOREIGN ENTITIES & TAXABLE TRUSTEES EXEMPTION FOR BC FOREIGN CAPITALIZED BUILDERS (FCBs)

The UDI proposal would only apply to FCBs that are Canadian incorporated companies subject to tax on their building earnings in B.C. ("Canadian FCBs"). UDI estimates that there are approximately 25 established Canadian FCBs in the Province that would qualify for the proposed certificate noted below.
Canadian FCBs have been a key supplier of new housing inventory in the Province. Unfortunately, their continued contribution to the residential construction sector is under threat due to the FBT, which would single out their housing units for additional costs not faced by other builders. Our shared goal is to increase the housing supply in the Province and deliver more affordable housing to British Columbians. There are three components to the proposal:

1. Creating a B.C. Certificate for active foreign entity builder parent companies

UDI believes that it should be relatively easy to determine whether an applicant is a Canadian FCB with an established track record in the Province. UDI proposes two options for Canadian FCBs to confirm, to the satisfaction of the Ministry of Finance, that the company should qualify for a certificate as an active builder. That certificate would then be required to access our proposed exemption.

- Under Section 22 (see the language below), the first option would require that a foreign entity builder has developed two or more residential projects. The test for this is if a corporation has filed a *Real Estate Development Marketing Act* (*REDMA*) disclosure statement on a project that has reached the marketing stage, or completed construction of a residential property with five or more rental units. Note that to be able to market under *REDMA*, significant development milestones such as subdivision and/or strata approvals must have been achieved.
- The second option would require that a foreign entity builder has developed at least one project as described in the first option and the corporation, together with the corporations controlled by it, regularly and continuously employs at least five full time or equivalent employees in its residential marketing or development activities.

2. Mechanism to apply certification to projects

Under *Section 23* (also below) – in order for a company to qualify for an FBT exemption, the project proponent company (or partnership General Partner) will have to file a ministry form that illustrates that it is controlled by a company with the certificate (as obtained from *Section 22)*. They will also need to provide a copy of the certificate and a statement that the land to be purchased is for the purposes of development. UDI believes this process can be easily administered.

3. Mechanism for new foreign entity builder entrants

Section 24 (see below) applies to new entrants to the BC housing construction market that do not yet meet the requirements of *Section 22.* As such, it would apply where the Canadian FCB project company *intends* to construct five or more new residential units and is able to provide evidence of building activity at the time of purchase (as defined in the *Speculation and Vacancy Tax Act).* This new entrant will then request that the Minister accept a security as agreed upon by the administrator and the company. Once the new entrant meets the requirements under Section 22 (the *REDMA* or rental availability threshold) the security would be released. Of note, UDI believes that this process will be used infrequently as it would only be relied on during the initial project(s) undertaken by new entrants to the market.

PROPERTY TRANSFER TAX REGULATION
Part 4 — Additional Tax for Foreign Entities and Taxable Trustees
Division 2 — Exemptions and Refunds

17.1 Definitions [add to 17.1]

"British Columbia developer" means a corporation that meets the requirements of subsection 22(1);

"development property" has the meaning of that term in the *Real Estate Development Marketing Act;*

"qualifying transferee" means the following: **[after existing paragraphs (a) and (b)...]**

(c) in relation to an eligible transaction referred to in subsections 23 (1) and 24 (1) is a corporation incorporated in Canada which, if the Act and Regulations were applied without reference to those subsections, would be liable for the tax imposed under section 2.02 (3) (a) of the Act on the application for the registration of the transfer of the residential property that is the subject matter of the eligible transaction.

22. British Columbia developer [after existing exemptions in sections 18-21]

(1) A corporation incorporated in Canada is a British Columbia developer if

(a) on **[two or more]** occasions, in a specified area, the corporation, or a corporation controlled by it,

(i) has filed a disclosure statement under the *Real Estate Development Marketing Act* in respect of a particular property described in paragraphs (a), (b), (c), or (g) of the definition of "development property" **[NTD: five or more bare land lots, strata lots, leasehold units]** and that has become eligible for marketing in accordance with section 3 of that Act*;* or

(ii) has completed construction of a "residential property" with five or more "rental units" as defined in section 1 of the *Residential Tenancy Act*; or

(b) on at least one occasion, the corporation, or a corporation controlled by it, has undertaken one of the actions described in paragraph (a) and the corporation, together with the corporations controlled by it, regularly and continuously employs at least five full time or equivalent employees in its residential marketing or development activities.

(2) A corporation referred to in subsection (1) may at any time tender an application for a certificate evidencing that the corporation meets the qualifications for British Columbia developer under this section that

(a) is in the form required by the minister; and

(b) includes a consent, in the form required by the minister, by which the corporation consents to the administrator conducting inquiries respecting the corporation, and corporations controlled by it, that the administrator considers necessary to confirm the qualifications of the corporation for the purposes of this section.

(3) The minister shall, on a timely basis upon receipt of the application described in subsection (2), provide a British Columbia developer with a certificate evidencing that the corporation meets the requirements set out in subsection (1).

23. British Columbia development exemption – eligible transactions

(1) Subsection (2) applies to an eligible transaction if, on the registration date

(a) the transferee is a qualifying transferee that is, or is controlled by, a corporation that is a British Columbia developer as evidenced by a certificate described in section 22(3); and

(b) the residential property that is the subject matter of the eligible transaction is acquired by the qualifying transferee for the purpose of developing

(i) a "development property" as defined in paragraphs (a), (b), (c), or (g) in section 1 of the *Real Estate Development Marketing Act,* or

(ii) a "residential property" with five or more "rental units" as defined in section 1 of the *Residential Tenancy Act.*

(2) Subject to subsection (3) and section 24, a qualifying transferee who applies for registration, at a land title office, of an eligible transaction to which this subsection applies is exempt from the obligation to pay tax under section 2.02 (3) (a) of the Act on that transaction.

(3) A qualifying transferee referred to in subsection (2) must tender with the application for registration of the eligible transaction and an application for an exemption under this section that

(a) is in the form required by the minister; and

(b) includes a consent, in the form required by the minister, by which the corporation consents to the administrator conducting inquiries respecting the corporation that the administrator considers necessary to confirm the qualifications of the corporation for the purposes of this section.

24. British Columbia development security and refund – eligible transactions

(1) Subsection (2) applies to an eligible transaction if, on the registration date

(a) the residential property that is the subject matter of the eligible transaction is acquired by a transferee that is a qualifying transferee for the purpose of developing

(i) a property described in paragraphs (a), (b), (c) or (g) of the definition of "development property", or

(ii) a "residential property" with five or more "rental units" as defined in section 1 of the *Residential Tenancy Act;* and

(b) the qualifying transferee has commenced a "building activity" in respect of the residential property within the meaning of section 40 of the *Speculation and Vacancy Tax Act.*

(2) Subject to subsection (4), upon the written request of the qualifying transferee, the minister shall accept security, in such form as it is acceptable to the administrator in lieu of the payment of the tax imposed under section 2.02 (3) (a) of the Act on that transaction.

(3) Subject to subsection (4) upon completion of one of the actions described in paragraph 22 (1) (b), the minister shall release the security described in subsection (2).

(4) A qualifying transferee referred to in subsection (2) and (3) must tender with the application for registration of the eligible transaction, and at the time of the completion described in subsection (3) and an application under this section that

(a) is in the form required by the minister, and

(b) includes a consent, in the form required by the minister, by which the corporation consents to the administrator conducting inquiries respecting the corporation that the administrator considers necessary to confirm the qualifications of the corporation for the purposes of this section.

(5) If an application for a refund under subsection (3) is refused, the administrator must send a letter to the applicant stating the reason for the refusal, and the letter is deemed to be a notice of assessment made under section 18 of the Act for the purposes of allowing the applicant to file a notice of objection under section 19 (1) of the Act.

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February 14, 2020

Sarah Tseng
Senior Planner, Strategy & Plan Development
TransLink
South Coast British Columbia
Transportation Authority
#400 - 287 Nelsons Court
New Westminster, BC V3L 0E7

Dear Ms. Tseng

Re: UDI Comments on the Evaluation of Land Value Capture and Urban Development as Sources of Revenue for TransLink Draft Report

The Urban Development Institute (UDI) would like to thank TransLink for the opportunity to discuss and comment on the draft Coriolis Report on the *Evaluation of Land Value Capture and Urban Development as Sources of Revenue for TransLink*. We recognize that transit expansion is important for the Region – and our members who are locating commercial and residential projects near transit stations. UDI conditionally supported the creation of a TransLink Development Cost Charge (DCC), and we have always strongly endorsed TransLink developing its surplus lands as well as municipalities sharing their Community Amenity Contributions (CACs) and Density Bonusing (DB) revenues with TransLink. However, we are concerned about one proposal in the Coriolis draft Report - imposing an Annual Benefiting Area Tax (ABAT) on properties near TransLink services.

Strategic Acquisition and Disposition of Land/Participation in Urban Development Projects

For many years, UDI has supported two key revenue options that are recommended in the Coriolis Report as approaches that should be considered:

- TransLink strategically acquiring sites during the building of transit lines and then selling them; and
- TransLink taking these sites and developing them with partners.

Over time, both of these options could provide substantial revenues to TransLink, and they create "*… opportunities to include affordable housing and control the form and character of development so that it is supportive of walking, cycling, and transit ridership*." TransLink would have the advantage of being able to purchase sites early in the process (ideally at a lower price) close to future valuable transit infrastructure.

As noted in the Report, cities like Hong Kong have successfully funded "… *transit infrastructure through involvement in urban development at stations*." While we do not see TransLink being able to achieve the same densities or revenues from development as Hong Kong, there are certainly revenue opportunities from the disposition of sites and development that need to be further reviewed.
UDI supports the approach adopted by transit organizations in Seattle, Los Angeles and Calgary of looking "… *for strategic land acquisition beyond infrastructure needs* …". We are pleased that Coriolis also identified development opportunities from TransLink partnering with BC Hydro and the Province who own some of the stations. We agree that "… *air rights above transit facilities* …" and working with BC Hydro to take advantage of "… *locations along the Expo line right of way* …" should also be considered as a potential revenue sources.

In addition to these opportunities, UDI believes that the approach in Edmonton to build and later redevelop park-and-ride sites should be considered. Future park-and-ride facilities need to be considered for SkyTrain stations in suburban locations that have infrequent bus services – especially if mobility pricing (which UDI also supports) becomes revenue tool. Commuters will need an option to park and take transit to their workplaces. These facilities can then be redeveloped as these suburban communities urbanize and receive better bus services.

We agree with Coriolis that in terms of development, building up a portfolio of commercial and rental assets, would be the best way to grow a stable revenue stream for TransLink. This is the approach taken by pension funds for the same reason.

We also believe there may be an opportunity to gain local government support if the revenues generated from sale of land and/or development in a municipality are used to fund transit services and build affordable housing in that community. At the same time, it is important that TransLink have the opportunity to gain from the sale of sites and/or development. It would be a missed opportunity if TransLink had to provide a significant percentage of the land lift from rezonings of its properties to local governments. We recommend that the Project Partnership Agreements (PPAs) negotiated between TransLink and local governments receiving transit investments address the issues of what revenues from rezonings TransLink should receive and how the overall revenues from disposition and development are spent. Mechanisms could also be created in these Agreements to mitigate the approvals risk factor noted in Section 2.5.2.

If TransLink, through the PPAs, were allowed to build larger projects on their sites, this may assist in other projects obtaining approvals. This has been identified by our members as an advantage to having public sector projects near their sites.

Many of our members have long expressed interest in purchasing sites from TransLink and/or partnering with them in development projects. UDI would welcome the opportunity to work with TransLink regarding how it could best enhance its revenue opportunities in this regard.

Sharing Community Amenity Contribution and Density Bonus Revenues

UDI has advocated for many years that the millions of dollars of Community Amenity Contributions and Density Bonuses that municipalities have extracted from projects near TransLink's services should be shared with that organization. We agree with the assessment that "*Transit, therefore, has a major role in creating the urban economics circumstances that enable*

density bonusing and rezoning to provide public benefits, which means a compelling case can be made for TransLink to have access to some of this revenue potential." Some of the highest CACs in the Region are along the future Millennium Line Broadway extension to Arbutus Street where the Development Contribution Expectations range from $330/ft^2 to $425/ft^2.

These CAC and DB revenues may even be higher than reported in the Coriolis Report, which were estimated to be in the range of $660 to $690 million in 2017 and 2018 in Vancouver, Surrey, Coquitlam, Burnaby, Richmond, West Vancouver, and the District of North Vancouver. However, in 2018 alone, the City of Vancouver obtained over $70 million in cash-in-lieu CACs and over $700 million of public benefits were secured through approvals of additional density – although some of this value is "*… to be collected and/or delivered in future years*."

Depending on the approach taken, municipalities may not lose money through the CAC/DB revenue sharing; especially if TransLink used the funding for capital infrastructure to expand its network and services in the communities where the revenues are collected. If, for example, City of Vancouver CAC/DB revenues were spent on extending the Millennium Line west of Arbutus Street to UBC, this would provide the municipality with more opportunities to plan for higher density projects and receive the corresponding CACs/DBs along that portion of the future Extension.

UDI has one caveat to our support of sharing of Community Amenity Contributions and Density Bonuses. We do not believe that the rates should be increased to pay the additional revenues to TransLink. Most municipalities are already maximising their CAC/DB rates – especially near transit stations. For example, City of Vancouver staff recently noted in Report to Council that "*After taking into consideration development risks, public interests and a reasonable developer profit, CACs generally represent 75% of that increase in land value resulting from the proposed rezoning*." UDI would be concerned if increased CAC and DB rates undermined future building activity. Not deterring development is also a Guiding Principle of the City Vancouver's *Financing Growth Policy*.

Substantially increasing CACs and DBs would be particularly problematic for builders who have already purchased sites and made financial arrangements based on established municipal fees and charges. It would be very difficult to make adjustments. As a result, projects may become unviable and then delayed or cancelled – unless housing prices/rents can be adjusted upwards to accommodate the higher costs. None of these alternatives have a positive impact on affordability.

We would also not support the notion of "*… a TransLink-specific CAC to be applied to rezonings around major transit investments*," unless it came with a value proposition. One way CAC/DB revenues could grow would be to increase the density of sites (and therefore the CACs and DBs). This is an approach UDI would support, as it would be mutually beneficial. Local government revenues would not be lost, TransLink would earn more revenues from the CACs/DBs and increased ridership, and there would be little to no financial impact on builders.

In our letter on Phase 1 of *Transport 2050,* UDI supported an approach in which TransLink would receive a Density Bonus from proponents whose strata sites would benefit from an increase in FAR. There would still be room for local governments to obtain revenues from CACs and Density

Bonuses by increasing the densities further. Such an approach could be addressed through the PPAs.

Annual Benefiting Area Tax

UDI is concerned about the ABAT, in part, because of the history of the TransLink DCC. In a January 16, 2018 letter from TransLink, we were assured that "*Should an increase to the DCC rates above inflation be considered by the Mayors' Council for incremental funding for future Investment Plans, substantive consultation would need to be undertaken as a requirement of the expected legislation*." Before the DCC legislation was approved by the Province, and only three months after the original tax and rate was approved by the Mayors' Council, the DCC rate was increased 30% with no consultation with builders who were given three hours notice. As noted in the Coriolis Report, "*The legislation gives TransLink the ability to vary rates in the future if deemed appropriate*." The DCCs just came into effect a month ago, and TransLink is already seeking additional revenues from the real estate sector. In addition, Translink is receiving significant new revenue due to non-market revenue on assessment roles from rezonings and new construction.

In addition, builders are facing a number of economic pressures imposed by all levels of government at this time, including:

- A proposed Federal Vacancy & Speculation Tax on Residential Properties;
- Ongoing Federal restrictions on mortgage lending such as the 2018 "stress test" imposed by the Office of the Superintendent of Financial Institutions;
- The *Budget 2018* provincial taxes that apply to development lands, including the Additional School Tax and the "Luxury" Property Transfer Tax;
- A proposed future Metro Vancouver water DCC on top of a 2018 Greater Vancouver Sewerage and Drainage District DCC increase of up to 200% for some projects;
- Substantial increases to DCC, CAC and DB rates in several municipalities; and
- Increasing requirements for new projects such as the B.C. Energy Step Code and Electric Vehicle Charging Infrastructure.

Adding additional costs on top of this will undermine our members' ability to provide housing options to Metro Vancouver residents. We have seen a 42% decline in building activity between November 2018 to November 2019; falling from $1,067.8 billion to $618 billion.

In the Report, the argument is made that project proponents gain increased land values if their sites are near transit. While we acknowledge this, it is also true that TransLink benefits from development near its stations. New housing, office and retail drives ridership growth and with that, fare box revenues and tax revenues increase for all levels of government. This symbiotic relationship has not been taken account in the draft Report.

We are also concerned about the impact such the ABAT would have on Landlords. Rental properties near transit are already facing high valuations from BC Assessment and high property taxes because of the prospect of redevelopment. However, in many cases, the ability to landlords to benefit from redevelopment is limited because of municipal restrictions; for example, the City of Vancouver's "Rate of Change" Policy.

At the same time, landlords face provincial restrictions on passing on these higher taxes (as well as other rapidly growing operational costs) to tenants because of provincial rent controls. The rent controls in the *Residential Tenancy Act* were further tightened as the annual rent increases have been restricted to CPI – which is 2% below the previous allowable annual increases. As such, increases in taxes beyond the inflation rate, including the ABAT, cannot be passed onto to renters until units are vacated. It would be problematic if ABAT exacerbated the current problem – especially at a time when many market rental projects, such as Case Study #2 in the Report, are not viable.

Commercial owners/tenants along mass transit lines are also facing rapidly escalating taxes, and many are facing a double hit. Their properties are valued as if the unbuilt density above their actual buildings will be strata residential – the highest real estate value. However, this density is also classed as commercial – which has more than four times the mill rate as residential strata in some municipalities. Already many retail shops are closing as the Province and local governments negotiate a solution. This would not be the time exacerbate the problem with the ABAT. The short term impacts of this are identified in Section 6.1.1. of the Report.

It is noted in that section: "*The impact of property tax in the long run is to reduce the market rent that can be charged by landlords*." This would have the effect of discouraging commercial spaces from being built. While this has not been an issue in the central core of Vancouver, it is a significant concern in the rest of the Region. Suburban communities are having difficulty establishing office districts – even in areas well served by transit – and retail is going through substantial restructuring because of online competitors.

One potential option listed in the Report is "*Including properties in Frequent Transit Corridors served by buses in the definition of benefitting areas*." Given that the premium associated with bus networks is far less than around rapid transit station areas, we would strongly advise against this. In addition, unlike fixed rail transit, bus routes can change quickly, so residents and businesses who pay the ABAT for years may see their transit services diminish.

We are also concerned that TransLink is seeking to collect the tax in areas already served by transit. While the Report supports the notion that properties near transit receive a benefit and increased land values because of the proximity to stations and services, these benefits and increased values have already been priced into those properties. Purchasers of these sites have already paid for the advantage of being near transit and now will be mandated to do so again through the ABAT. In addition, they have paid for increased annual property taxes (and in many cases the Additional School Tax) because of high property values. For the same reason, higher Property Transfer Tax rates are also applied to these sites.

This would discourage commercial and rental development further, as both have investment time horizons that last decades. Builders and lenders of these projects have to trust that the tax and regulatory regime will remain stable over time. A surprise new tax would increase risks for them – especially given the track record of the TransLink DCC noted above.

If TransLink does proceed with this ABAT proposal, we strongly recommend that it be applied only to areas where new transit services are provided. This also has to be clearly communicated to builders and prospective buyers in advance of transit infrastructure funding announcements.

Otherwise, the land market will adjust, and purchasers may face the prospect of paying for the benefit of being near transit twice.

At the same time, TransLink has to consider that the prospect of higher annual taxes may generate a NIMBY reaction to new transit projects. Some residents are already concerned about the changes new transit lines could bring to their communities. Adding a tax would provide them with another reason to oppose transit expansion.

There is also the issue that residents and businesses are being financially punished for living, working and providing services in areas where we as a society want them to locate. They need to be near transit to reduce greenhouse gas emissions; fully leverage multi-billion dollar infrastructure investments; reduce congestion; and make it easier and cheaper for governments to provide services them. We would not want a situation in which people, businesses and developments are incented to move outside of the ABAT taxing areas where the transit services are. TransLink, for example, would likely not want to encourage new office parks away from transit.

For these reasons, TransLink should be wary of implementing the Annual Area Benefiting Tax. Its impact on rental and commercial spaces needs to be seriously considered. If TransLink does move forward with ABAT, it should only do so in areas where new transit infrastructure is being built. We would also advise that landowner associations such as LandlordBC, the Condominium Home Owners Association, NAIOP, Business Improvement Areas and the Building Owners and Managers Association be extensively consulted.

UDI recommends that the other revenue options – the strategic acquisition and disposition of land, partnering in the development of TransLink sites, and the sharing of CAC/DB revenues - be considered first. We look forward to working with TransLink, local governments, and other stakeholders regarding how best to increase TransLink's revenues to expand its critical transit system.

Yours sincerely,



Anne McMullin
President & CEO

RE: Economic dashboard

From: Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Mezynska, Urszula MAH:EX <Urszula.Mezynska@gov.bc.ca>
Sent: June 29, 2020 2:32:50 PM PDT

Thanks, Zac. Much appreciated.
Lee

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 29, 2020 2:25 PM
To: Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca>
Cc: Mezynska, Urszula MAH:EX <Urszula.Mezynska@gov.bc.ca>
Subject: RE: Economic dashboard

Everything we have is saved in the Q-drive. The dashboard is the overall summary: Q:\MAH Economic Recovery Framework\Economic Dashboard and Data Contacts\Economic Dashboard - June.docx

I don't have the BC Hydro survey yet. I'll ask again.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca>
Sent: June 29, 2020 12:22 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Mezynska, Urszula MAH:EX <Urszula.Mezynska@gov.bc.ca>
Subject: RE: Economic dashboard

Hi Zac,

Urszula and I are preparing a s.12 . I was hoping we could connect with you regarding s.13
s.13 As a start would you be able to share the economic dashboard and the BC Hydro survey results, if you have them (as soon as possible would be much appreciated). We're also aware of the CHBABC survey of members, as well as UDI work on this (although to be truthful I haven't looked at that recently). Is there anything else you would suggest?

Thanks,
Lee

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 17, 2020 6:09 PM
To: Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca>
Cc: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>; Hill, Jennifer MAH:EX <Jennifer.Hill@gov.bc.ca>
Subject: Re: Economic dashboard

Definitely.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch

On Jun 17, 2020, at 5:26 PM, Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca> wrote:

Hi Zac,
Would you be able to share the results of that survey with us? It would be very helpful for our DAPR work.
Thanks!
Lee

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 17, 2020 4:18 PM
To: Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca>; Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Cc: Hill, Jennifer MAH:EX <Jennifer.Hill@gov.bc.ca>
Subject: RE: Economic dashboard

Thanks Lee.

Sounds like BC Hydro has already surveyed local governments on this topic and are pulling the data for us.

This is for the July version of the economic dashboard tracking covid impacts. Trying to find some metrics that we can easily track month to month.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca>
Sent: June 17, 2020 3:58 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Cc: Hill, Jennifer MAH:EX <Jennifer.Hill@gov.bc.ca>
Subject: RE: Economic dashboard

Hi Zac – I suspect we'd need to enquire with individual LGs, but UDI and CHBABC may be doing some tracking. A few weeks ago I participated in an RPAC meeting (Regional Planning Advisory Committee – all of the directors of planning from Metro) and there was some mention of volume of applications during COVID. It was all anecdotal with no actual numbers, though.

Can I ask what you're needing the info for?

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 17, 2020 2:48 PM
To: Brooks, Jessica MAH:EX <Jessica.Brooks@gov.bc.ca>
Cc: Nicol, Lee A MAH:EX <Lee.Nicol@gov.bc.ca>; Hill, Jennifer MAH:EX <Jennifer.Hill@gov.bc.ca>
Subject: Economic dashboard

Hi Jessica,

Are you aware of any efforts to track monthly permit data from LGs to measure COVID impact? We have data from Vancouver and Technical Safety BC, but would be good to get some regional samples to tell the full story.

I have reached out to the Step Code LG peer network to see if they have anything. We might just do some cold calls if required.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

FW: Restart Economic Recovery Proposals

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 29, 2020 4:22:18 PM PDT
Attachments: image001.png, image002.png

FYI

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: June 29, 2020 4:21 PM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: RE: Restart Economic Recovery Proposals

Thanks, Andrew. I can't remember if I shared it, but below is the brief DAPR recovery proposal, which lists housing as a development type. There is certainly potential for alignment and I'll be interested to hear Jessica/Jennifer/Silas' thoughts.

Acceleration of Development Approvals Improvement Projects

The development industry is comprised of good paying skilled jobs (residential development accounted for $12B in wages in 2017) and was impacted by COVID-19, including the slowdown of projects, uncertain labor supply, and issues with the supply chain. Leveraging the 2019 engagement findings and working with a range of stakeholders, this proposal would accelerate a suite of projects to improve the efficiency of the development approvals system, stimulate development and jobs ranging from higher cost projects that prioritize expediting certain types of development (e.g. housing, mass timber, local industries) and making systemic impacts (e.g. electronic application tracking and permitting systems, provincial permitting portal), to lower-cost regulatory changes that will streamline and transform development processes (e.g. streamline zoning, development finance tools).

Estimated cost is $12-15M, with the initiative championed by MAH, UBCM and UDI; joint effort and provincial streamlining benefits through partnerships with MOTI, ENV, JEDC, and FLNRORD.

Cimarron Corpé
Director, Housing Secretariat

Municipal Affairs and Housing
Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

FW: Fire Sprinklers

From: May, Zachary OHCS:EX
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: July 13, 2020 9:34:53 PM PDT

FYI – I wonder if this is one of our recent letter writers looking for support from UDI. I'll give Jeff a call tomorrow to find out more.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: July 13, 2020 4:12 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>
Subject: Fire Sprinklers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Zachary,

I hope you're keeping well. In 2016, UDI was part of a working group on fire sprinklers that provided recommendations around how this issue would eventually return to Provincial jurisdiction. Given that some time has passed since then, are there any plans underway to make changes to the administration of fire sprinkler regulations in the near future? If not currently underway, do you anticipate that there is still an appetite to make the changes?

As context, this issue was recently brought to us by a (non-UDI member) builder operating in a municipality where a local Bylaw is in place with requirements over and above those contained in the BC Building Code.

If you are able to provide any information on this please don't hesitate to give me call.

Thanks,

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

RE: Question: UDI-Capital Region and Okanagan rep for Step Code Metrics Report update

From: Williams, Scott B OHCS:EX
To: Jeff Fisher <jfisher@udi.org>, UDIVictoria <UDIVictoria@udi.org>, UDIOkanagan <UDIOkanagan@udi.org>
Cc: Cassandra McColman <cmccolman@udi.org>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 15, 2020 4:08:57 PM PDT

Thanks Jeff.

Cheers,

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: July 15, 2020 2:14 PM
To: UDIVictoria <UDIVictoria@udi.org>; UDIOkanagan <UDIOkanagan@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Cassandra McColman <cmccolman@udi.org>
Subject: FW: Question: UDI-Capital Region and Okanagan rep for Step Code Metrics Report update

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Can you share with Scott potential participants from your chapter.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 15, 2020 11:31 AM
To: Jeff Fisher <jfisher@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: Question: UDI-Capital Region and Okanagan rep for Step Code Metrics Report update

Hi Jeff,

Scott and I are looking for regional representation for a steering committee that's updating Step Code Metrics Research Report. Would you have suggestions for a person from UDI-Capital Region and -Okanagan who could sit on such a committee over the summer and fall?

We're working on a formal invitation, but to give you some context, a draft excerpt is below:

Scope of Work

To meet CleanBC objectives, the Province is proposing changes to the BC Building Code in 2022, which includes a 20% improvement in energy efficiency over the current base code requirements and evaluation of overheating risks for both Part 9 and Part 3 buildings using future climate files. In anticipation of these upcoming changes, we are looking to form a Steering Committee to help guide the process of retaining a contractor to both update the Metrics Research Report and provide technical analysis regarding how the 20% baseline improvement lines up with the existing steps within the Step Code for the various archetypes. We anticipate that the steering committee will incorporate industry professionals, provincial and local government representatives, developers, service organizations, professional associations, utilities, and Crown corporations to provide guidance and expertise.

If you or a delegate can contribute to this work, please fill out this Metrics Report Doodle poll with your availability. *You don't have to attend every meeting, but we want enough input from a broad range of sectors at each meeting to ensure success.*

The kick-off meeting for the Metrics Report Steering Committee will:

- *Consider a proposed scope of the Metrics Report Update and 20% better analysis from BSSB*
- *Determine our meeting frequency and meeting dates over the summer (ideally a standing time)*
- *Discuss contracting and resourcing needs*
- *Introduce and invite participants to Microsoft Teams*

Happy to hear suggestions.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Fire Sprinklers

From: Cassandra McColman <cmccolman@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Jeff Fisher <jfisher@udi.org>
Sent: July 17, 2020 3:26:35 PM PDT

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Zachary,

Thanks very much for the insight, and we're glad that this is still something that the Ministry plans to address in the future.

This answers the questions that we had.

Have a great weekend,
Cassandra

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 15, 2020 3:39 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra McColman <cmccolman@udi.org>
Subject: RE: Fire Sprinklers

Hi Jeff,

There hasn't been much progress on that file for several reasons, mostly because every potential solution will have complex reactions from local governments and industry. I think it's unlikely we will make significant changes in the next year, although it's clear we need to resolve the issue at some point because local governments haven't been able to make new bylaws or update their bylaws since 2017 under the Building Act. Happy to discuss further if you have specific questions.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: July 13, 2020 4:12 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>
Subject: Fire Sprinklers

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Hello Zachary,

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Thanks,

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
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Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

BM4 External Advisory Commitee on Zero Emission Building Retrofits

From:	Pander, Sean <sean.pander@vancouver.ca>
To:	aschatz@cagbc.org, Bill MacKinnon (bmackinnon@bchousing.org) <bmackinnon@bchousing.org>, Christian@zebx.org, Christine Gustafson <Christine@harbourgreene.ca>, Conor Reynolds <Conor.Reynolds@metrovancouver.org>, davidh@landlordbc.ca, dstathonikos@boma.bc.ca, jfisher@udi.org, JOwen@surrey.ca, Karen Tam Wu <KarenTW@pembina.org>, Kim Barbero <kbarbero@mcabc.org>, Leigha Worth <lworth@bcpiac.com>, mark@havan.ca, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, s.22 , Peter Russell (peter.russell@richmond.ca) <peter.russell@richmond.ca>, Robyn Wark <Robyn.Wark@bchydro.com>, Sherry Yano <sYano@davidsuzuki.org>, tony@choa.bc.ca, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gary Milligan <s.22 >
Cc:	Scott Castro, Brenda <brenda.scott@vancouver.ca>, Lang, Micah <Micah.Lang@vancouver.ca>, White, Phil <Phil.White@vancouver.ca>, Faught, Brady <Brady.Faught@vancouver.ca>, Lee, Winnie <Winnie.Lee@vancouver.ca>
Sent:	July 17, 2020 3:38:40 PM PDT
Attachments:	BM4EAC June 2020.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you all for sharing your time and insights with us at the Climate Emergency Big Move 4 External Advisory Committee (BM4EAC - focused on zero emissions retrofits) at the end of June. Attached is the deck from that meeting – if you'd like to refer to it or discuss with your members/stakeholders please feel free to do so.

We covered a lot of material and there were many voices at the meeting but nine of the big take-aways included:

1. A **clear signal** for industry of future requirements **will be essential to success**. Owners and industry will need 5-10+ years to prepare for and successfully transition. For such a signal to be effective, stakeholders will have to believe it is real and hear the same or similar signal from multiple different sources consistently over time
2. There are **real barriers to fuel switching for some buildings that need to be addressed** before regulations that mandate these changes can be broadly implemented
3. **No single regulatory approach will work** for all buildings/owner types so a mixed approach should be explored. That said, **maximum flexibility for timing and showing compliance is very important** so a whole building GHG limit (where possible) would have the best chance of succeeding.
4. Regulations, support programs, and communications must seek to **maximize the synergies** between building investments/renewal, health (IAQ), resilience & comfort, safety, and climate action to overcome barriers and inertia to change
5. Most owners (especially home owners) will not be building energy experts and will need support and tools to **simplify information and help them take informed decisions**
6. Designers, contractors, and suppliers can create serious challenges or be the most powerful sales force. Support for the development of **workforce capacity, qualifications and motivation will be essential to success**
7. **Many of the highest emissions buildings may be owned by those with least resources to act but *cannot be ignored***. Understanding and addressing this tension will be important. That said, caution must be exercised about requiring or making large investments towards substantial improvements for buildings that may not realistically be retained over the long term.
8. **New ways of financing long payback improvements** will help reduce friction and may be essential for some owners
9. In some circumstances, **grid connection costs and complications/delays** will make fuel switching very challenging. City must collaborate with BC Hydro to address these issues.

As indicated, we are having follow-up meetings with smaller groups of experts and stakeholder to explore some of these issues and how they pertain to specific building types. We hope to have a DRAFT strategy that begins to address the points above while still setting Vancouver on a path to reduce emissions 50% by 2030 for discussion with you in late August/early September. I will work with Winnie to get a placeholder invitation out for that meeting soon – as there will be even more material to cover then, we will ask you to hold up to four hours in your calendar but aim to develop an agenda that will allow the meeting to be completed in three.

If you have any questions, ideas, or suggestions on who else should be represented on this committee please let Micah or I know and look forward to meeting with you all again at the end of the summer! Stay well until then and do get outside – it's why we do this work after all.

Sean Pander | Green Building Manager
Planning, Urban Design & Sustainability | City of Vancouver
City Hall, 7th Floor | 453 West 12th Ave, Vancouver, BC V5Y 1V4
t: 604.871.6542
sean.pander@vancouver.ca



CITY OF VANCOUVER

Climate Emergency - Big Move 4 External Advisory Committee

June 2020 Meeting

AGENDA

9:30 – 10:00 Setting the Stage

- Welcome and Logistics
- Who's Here
- Context and ~~The~~ Our Work
- Role of the Committee

10:00 – 10:10 Strategy Approach

10:10 – 10:55 Regulatory Framework

- Break-out discussion

10:55 – 11:25 Daylighting Barrier, Opportunities, and Equity

- Break-out discussion

WHO'S HERE

Zero Emissions Building Exchange (ZEBx)	Christian Cianfrone
BC Ministry of Energy, Mines, and Petroleum Resources	Nat Gosman
BC Safety and Standards Branch	Zach May
Metro Vancouver	Connor Reynolds
BC Hydro	*Robyn Wark*
City of Surrey	Jason Owen
City of Richmond	Peter Russell
BC Housing	Bill MacKinnon
Mechanical Contractors Association of BC	*Kim Barbero*
Canadian Institute of Plumbing and Heating	
Thermal Energy Comfort Association	Gary Milligan
BOMA BC	Damien Stathonokis
Home Performance Stakeholder Council	Christine Gustafson
HAVAN	Mark Sakai
Condominium Home Owners Association	Tony Gioventu
Landlord BC	David Hutniak
Urban Development Institute	Jeff Fisher

WHO'S HERE?

Canadian Green Building Council	Akua Schatz
David Suzuki Foundation	Sherry Yano
Pembina	Karen Tam Wu
Sustainabiliteens	Zoe Ng
City of Vancouver Green Buildings Team	Sean Pander
	Micah Lang
	Brenda Scott-Castro
	Brady Faught
	Winnie Lee
City of Vancouver Sustainability Engagement	Amanda Mitchell
	Lihwen Tsu

WHO'S NOT?

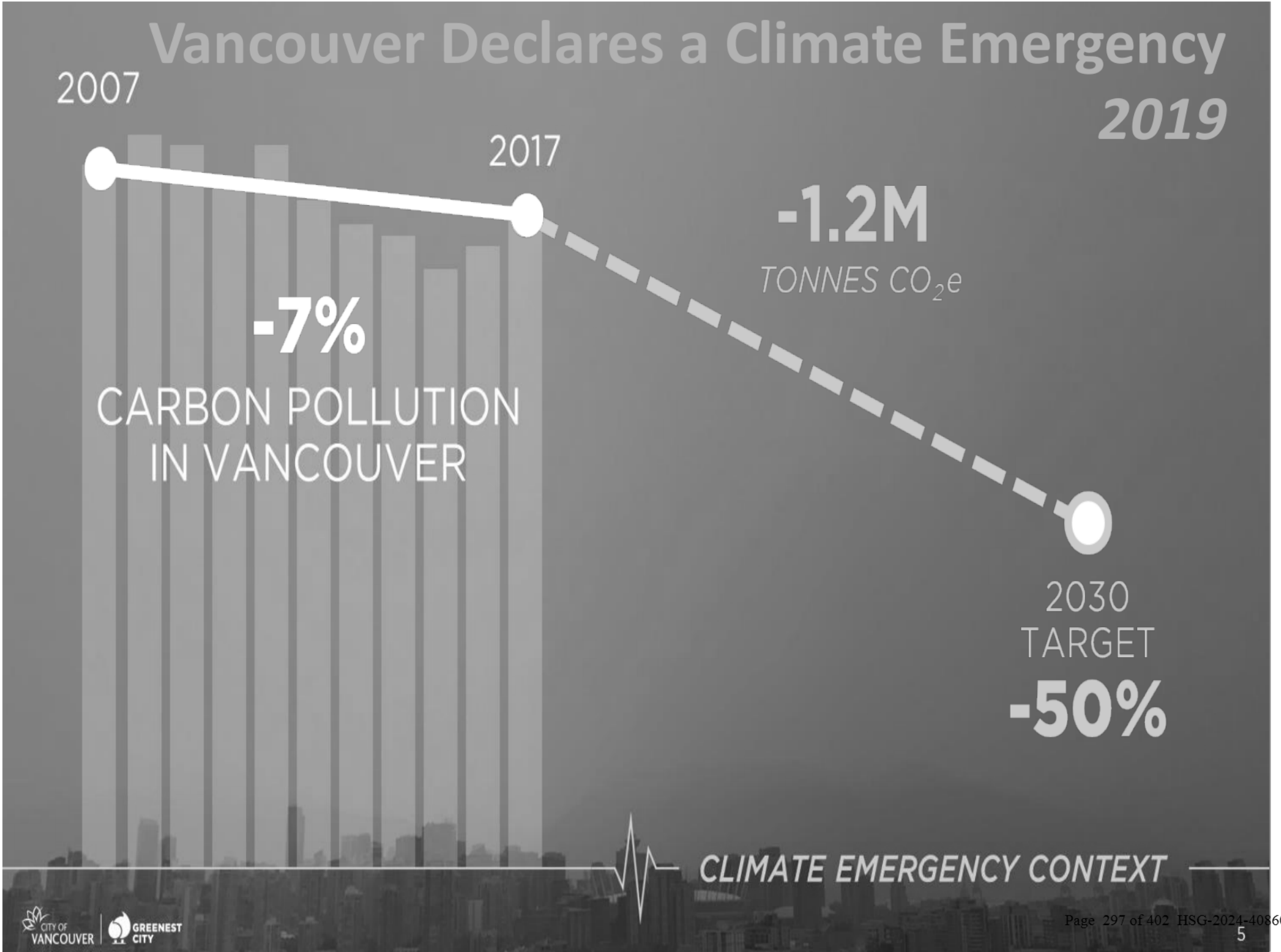
COMPLETE THE POST-MEETING SURVEY



CONTEXT & OUR WORK

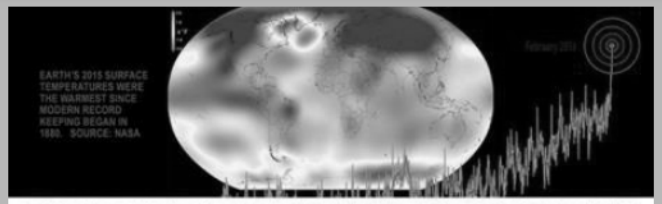
92% of Vancouverites are concerned about climate change

Vancouver Declares a Climate Emergency



CLIMATE EMERGENCY CONTEXT

400+
cities globally



THIS IS WHAT A CLIMATE EMERGENCY LOOKS LIKE

The world is on track for
3°C warming

Climate Emergency Response (Spring 2019)

6 Big Moves:

1. **Walkable complete communities**
2. **Safe and convenient active transportation and transit**
3. **Pollution free cars, trucks and buses**
4. **Zero emission space and water heating**

   By 2025, all new and replacement heating and hot water systems will be zero emissions.
5. **Lower carbon construction**
6. **Restored forests and coast**


0.2M
0.4M
0.6M
0.8M
1.0M
1.2M
1.4M
TONNES CO_2e REDUCED BY 2030
BIG MOVES 1.1M TONNES
RENEWABLE FUEL STANDARDS 0.2M TONNES
1
2
3
4
1.3M
TONNES REDUCED
13%
12%
24%
46%
14%
OF 2030 TARGET
CITY OF VANCOUVER
GREENEST CITY

CLIMATE EMERGENCY BIG MOVE 4

By 2025, all new *and replacement* heating and hot water systems will be zero emissions

2016 Zero Emissions Building Plan

Focus initially on new buildings because:

- **50% fewer buildings to retrofit by 2050**
- **City growth does not increase overall emissions**
- **Rapid growth in knowledge, skills and supply of high performance building elements and equipment**

Vancouver's Zero Emissions Building Plan established the ground work for the BC Energy Step Code

Timeline for Energy Efficiency Regulatory Requirements in the BC Building Code

Here's what the province's CleanBC plan will mean for new-construction requirements.

	PART 9 BUILDINGS	PART 3 BUILDINGS	NET-ZERO ENERGY-READY
2032	STEP 5	STEP 4	UP TO: 80%
2027*	STEP 4	STEP 3	40%
2022*	STEP 3	STEP 2	20%

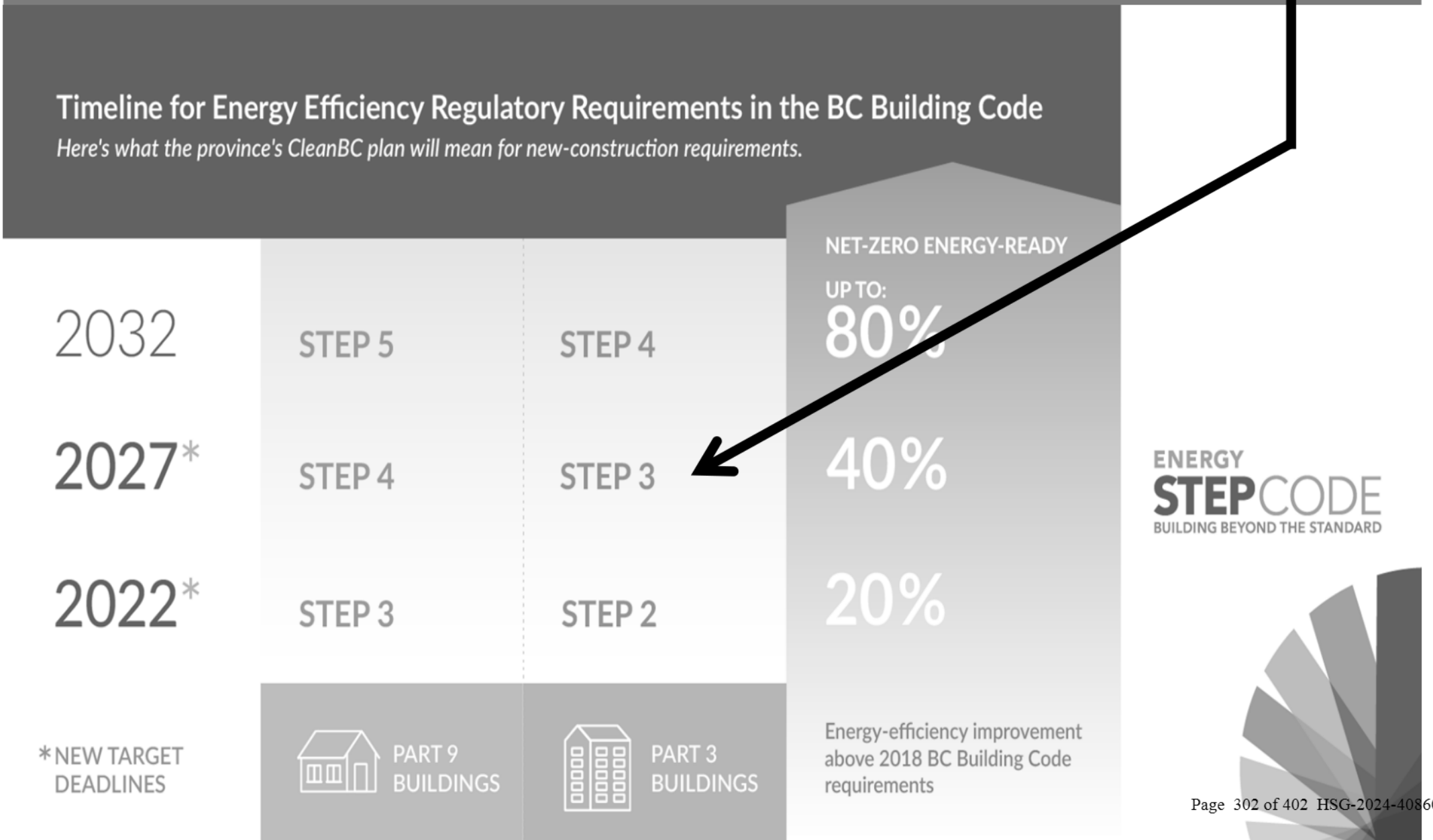
*NEW TARGET DEADLINES

Energy-efficiency improvement above 2018 BC Building Code requirements

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

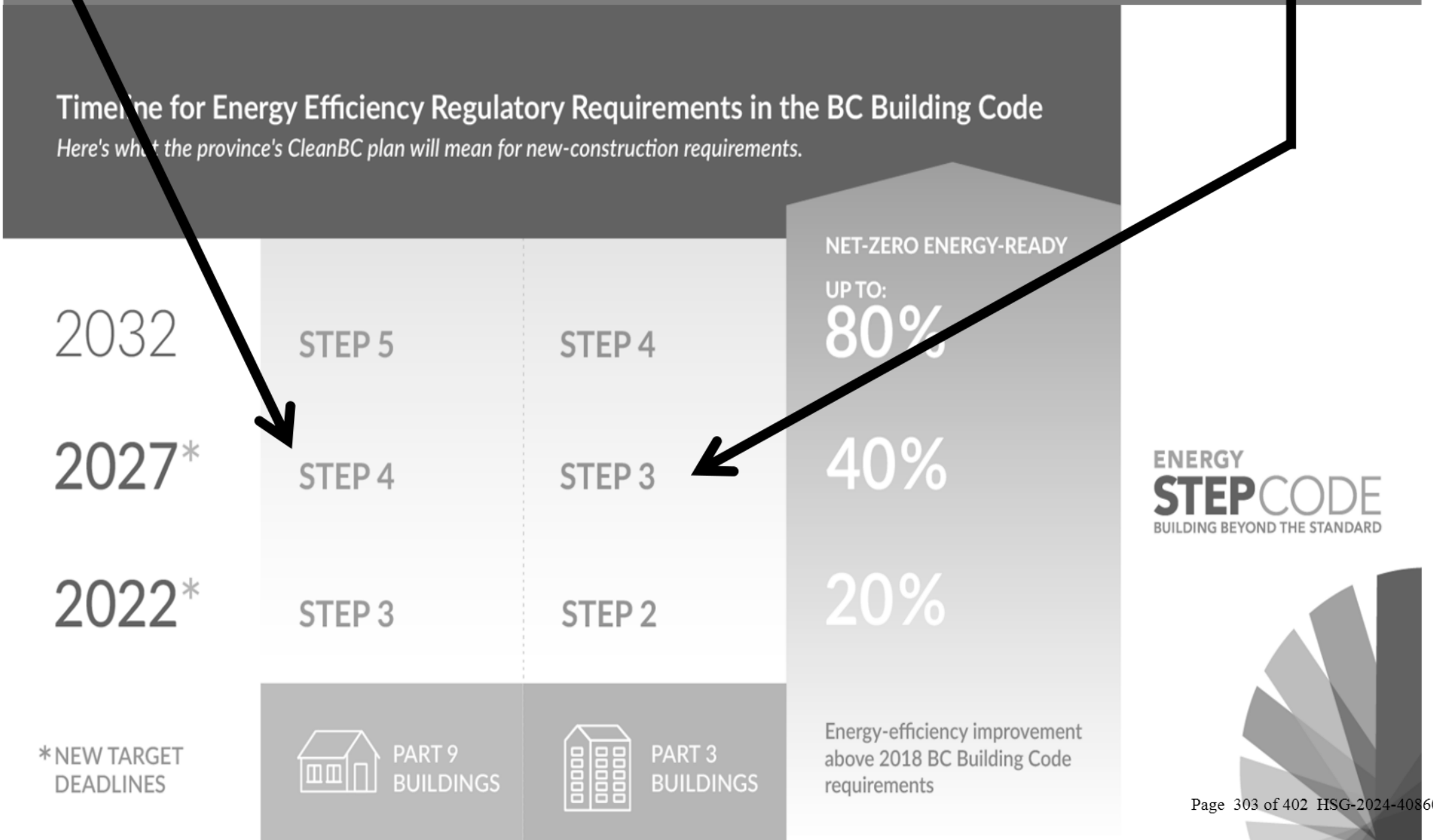
Jun 2021: VBBL for Part 9 at Step 3 with GHGi = 6kg/m2

\+ Consultation on Rezoning Policy updates for zero emissions heating and hot water Fall 2020



Jun 2021: VBBL for Part 9 at Step 3 with GHGi = 6kg/m2

Jan 2022: VBBL for Part 9 at Step 4 with GHGi = 3kg/m2



VANCOUVER IS NOT ALONE

- BC Energy Step Code is world class example of collaborative action
- Wide spread declarations of climate emergency in MetroVancouver; many focus on renewable energy for heating and hot water
- CleanBC and national Build Smart aiming at heat pump equipment standards by 2035
- Metro Climate Neutral 2050 Buildings Roadmap underway
- Collaborative Building Electrification Roadmap nearing completion
- Trades capacity studies and grid capacity research will be completed next month

ROLE OF THIS COMMITTEE (BM4EAC)

By 2025, all *new and* replacement heating and hot water systems will be zero emissions

1. Develop a shared understanding of the technical, economic, and social challenges of deep retrofits in existing occupied buildings
2. Provide input into a plan of action to successfully achieve Big Move 4; **OR** a plan that would result in retrofits of existing buildings to reduce emissions 50% by 2030
3. Provide advice on balancing tradeoffs
4. Facilitate understanding and information flow between the City and your stakeholders
5. Participate in three meetings (Jun, Sep, Oct)
6. If possible; support the Zero Emission Building Retrofit Plan recommendations to Council as part of the Climate Emergency Action Plan in November, 2020

OPPORTUNITIES FOR ADDITIONAL INPUT

BC Building Electrification Roadmap

- *Tomorrow 9 AM – 4:30 PM:* Workshop #2
- To Register: https://www.eventbrite.ca/e/bc-building-electrification-road-map-workshop-2-tickets-106968234870
- Or contact: Michaela@zebx.org

SECTOR SPECIFIC WORKSHOPS

Retrofit ops and barriers, reg structure, supporting actions & financing tools

Contact: micah.lang@vancouver.ca

- **Commercial Building Workshops with BOMA**
- **Rental Apartment Workshops**
- **Condo Workshops**
- **Industry Workshops**
  - *Skilled Trades, professional associations, suppliers*

AGENDA

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STRATEGY STARTING POINT:
APPLY THE LESSONS OF THE BC ENERGY STEP CODE

Timeline for Energy Efficiency Regulatory Requirements in the BC Building Code

Here's what the province's CleanBC plan will mean for new-construction requirements.

	PART 9 BUILDINGS	PART 3 BUILDINGS	NET-ZERO ENERGY-READY
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2022*	STEP 3	STEP 2	20%

*NEW TARGET DEADLINES

Energy-efficiency improvement above 2018 BC Building Code requirements

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

STRATEGY FRAMEWORK – LESSONS FROM THE STEP CODE

1. **Clear and consistent requirements that step up over time**
   - Raises awareness; initiates capacity building
   - Enables an orderly transition
   - Catalyzes voluntary action/incentive uptake
   - Ensures outcomes

2. **Support Voluntary Leaders**
   - Use incentives (time, certainty, money)
   - Create demand for high performance goods and services
   - Identify barriers

3. **Remove Barriers**

4. **Develop Capacity**
   - Training and certifications, best practice guides, peer exchange

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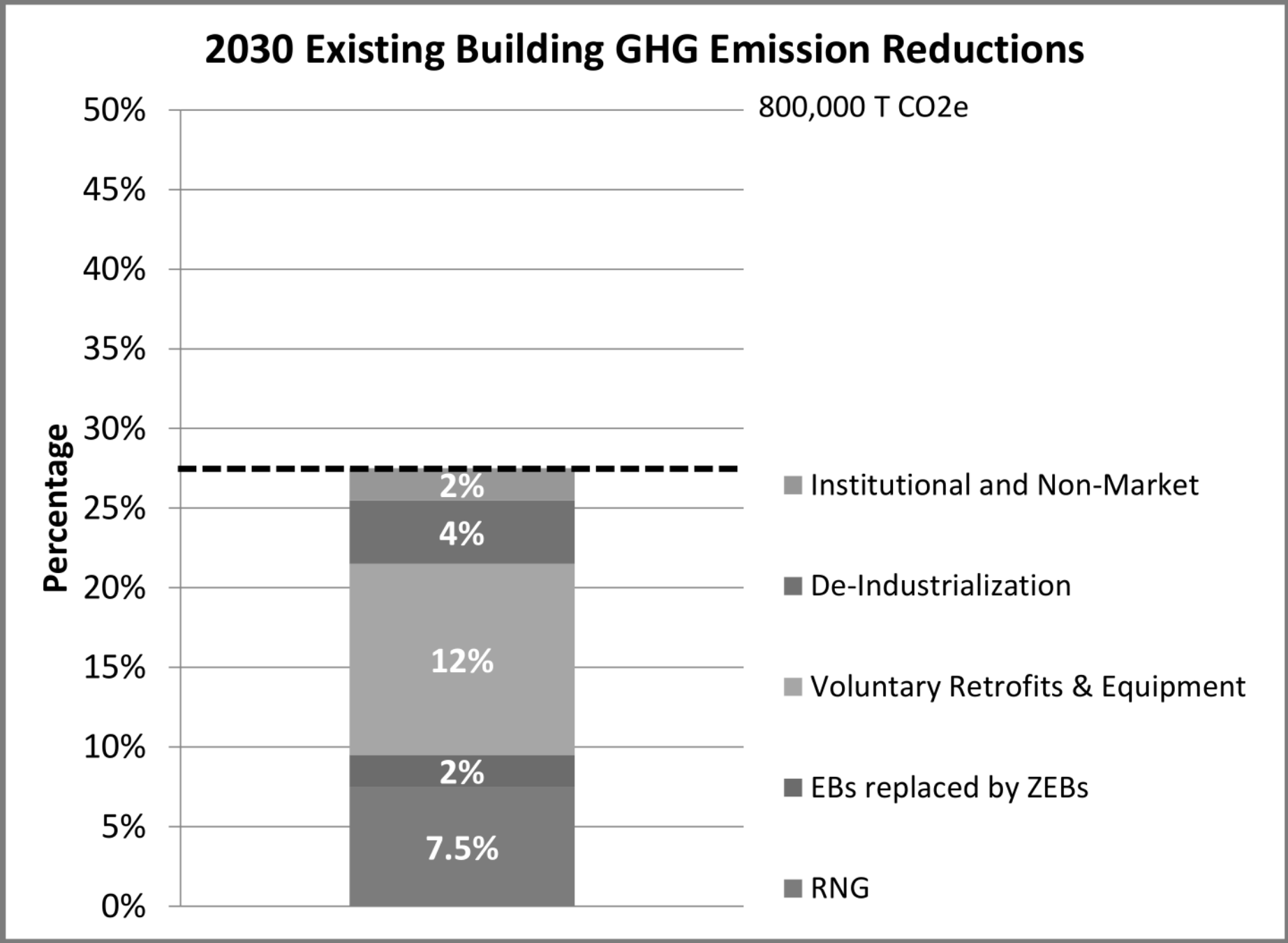
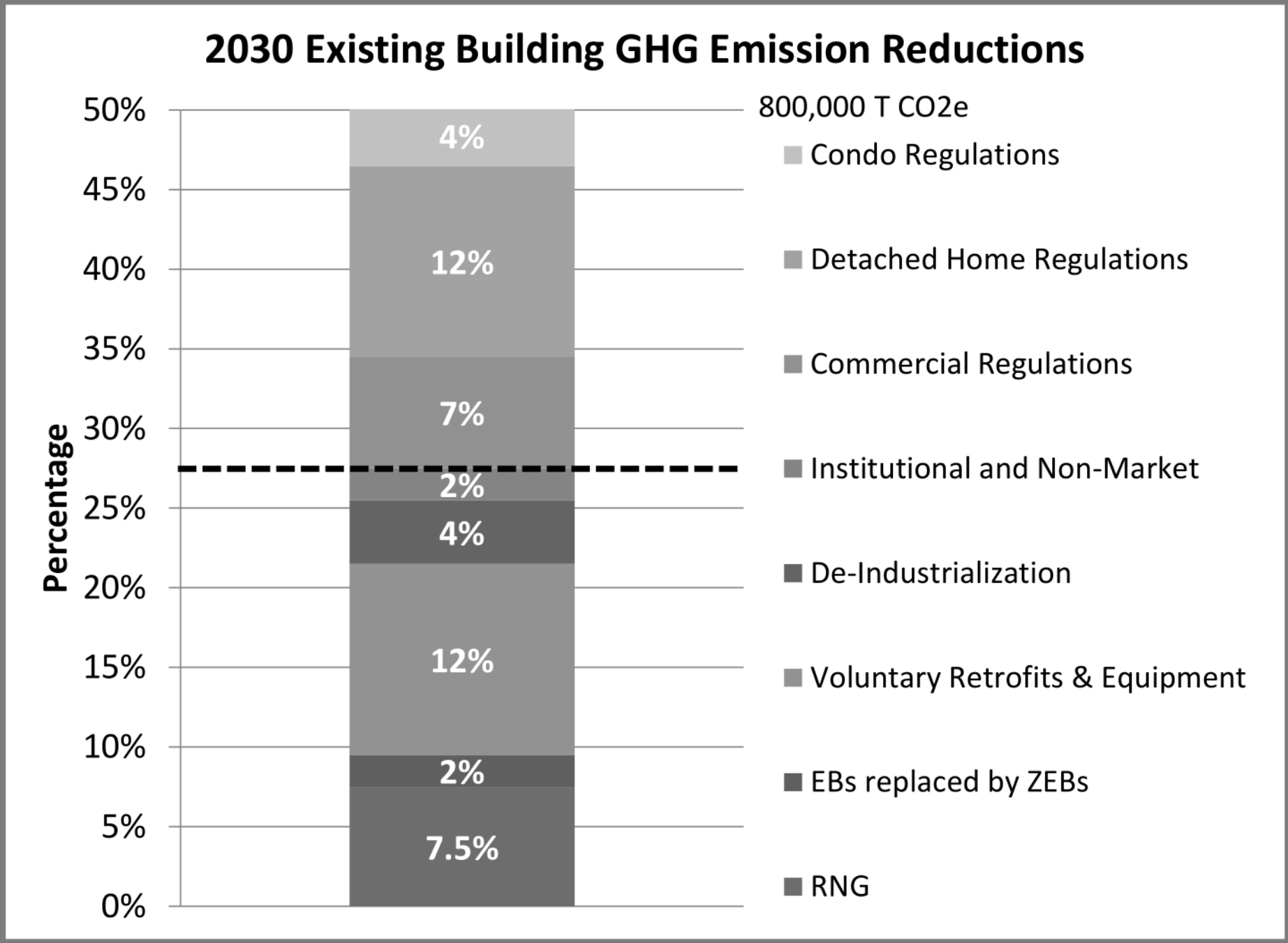
EXISTING BUILDING STOCK & GHGS

	Detached Homes	Multi Family	Commercial	Industrial	Other
					
Buildings	80,580	6,115	3,420	1,081	355
Floor Area (m2)	22.5 m	16.0 m	9.8 m	2.2 m	1.1 m
Annual GHGs (tCO2e)	400,000	350,000	375,000	290,000	15,000
% GHGs	28%	24%	26%	20%	1%


2030 Existing Building GHG Emission Reductions
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Percentage
800,000 T CO2e
2%
4%
12%
2%
7.5%
Institutional and Non-Market
De-Industrialization
Voluntary Retrofits & Equipment
EBs replaced by ZEBs
RNG


2030 Existing Building GHG Emission Reductions
Percentage
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
4%
12%
7%
2%
4%
12%
2%
7.5%
800,000 T CO2e
Condo Regulations
Detached Home Regulations
Commercial Regulations
Institutional and Non-Market
De-Industrialization
Voluntary Retrofits & Equipment
EBs replaced by ZEBs
RNG

PRINCIPLES OF A REGULATORY STRUCTURE

1. Clear and consistent signal to catalyze/enable planned transition
2. Align with planned or required building investments
3. Maximize owner flexibility
4. Simplify permitting
5. Equitable: lower requirements/more support for those with higher barriers
6. Achieve real and substantial GHG reductions by 2030

ELEMENTS OF A RETROFIT REGULATION

Structure

- Prescriptive equipment minimum efficiencies
- Prescriptive upgrades (Upgrade menu mechanism)
- GHG Budget/Performance – total GHGs or GHG-intensity
  - Entire lot
  - House/building model
  - Asset-based
  - Actual

Triggers

- Time of replacement
- Time of renovation
- Time of sale
- Milestone years
- Annual

Option	Key advantage	Key disadvantage
1. Prescriptive, time-of-replacement requirements	✓ Aligns with end-of-life replacements ✓ Simple to communicate	X Discourages renovations &/or increases permit avoidance (bad & ineffective) X Inflexible = higher costs, decreased co-benefits, excludes good solutions X Doesn't allow for transition
2. GHG emissions budget that steps down over time	✓ High flexibility = least cost + maximum cobenefits ✓ Start easy but signal future expectation (enable transition) ✓ Simplify building retrofit permitting	X Flexibility = complex decisions X Smaller owners lack resources to measure and plan X May lead to shallow retrofits in early years
3. Time-of-Sale Requirements	✓ Aligns with significant financial investment ✓ Aligns with natural building renovations	X Requires Charter change X Sudden significant upgrade not aligned with "end-of-life" X Long turn-over period and/or sale avoidance X Not aligned with other regs

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10:55 – 11:25

Daylighting Barriers, Opportunities, and Equity

- Break-out discussion

CHALLENGES

- Low owner awareness and capacity
- Low industry knowledge and capacity
- Currently zero emissions equipment are either higher capital costs (heat pumps) or higher operating costs (resistance, RNG)
- In building heat distribution systems may be incompatible with full heat pump replacement
- Adding HVAC electrical equipment can trigger in building and connection upgrades to address increased peak demand

the world is in a state of:

- *pandemic*
- *racial and economic inequity*
- *climate emergency*

= unprecedented uncertainties and opportunities for change



1,300+ climate emergency declarations as of Jan 2020

CITY OF VANCOUVER | GREENEST CITY

OPPORTUNITIES

- Change is coming; time to get aligned and collaborate is now
- COVID recovery will increase funding for efficiency and GHG reduction measures and capacity
- Economic development
- Demand for cooling is increasing
- Many measures to reduce GHG and prepare for renewable heat are very cost effective and/or improve comfort
- Successful models in Vancouver, Metro and BC do shape national and international actions

BREAK OUT NUMBER 2

OPPORTUNITIES FOR ADDITIONAL INPUT

BC Building Electrification Roadmap

- *Tomorrow 9 AM – 4:30 PM:* Workshop #2
- To Register: https://www.eventbrite.ca/e/bc-building-electrification-road-map-workshop-2-tickets-106968234870
- Or contact: Michaela@zebx.org

SECTOR SPECIFIC WORKSHOPS

Retrofit ops and barriers, reg structure, supporting actions & financing tools

Contact: micah.lang@vancouver.ca

- **Commercial Building Workshops with BOMA**
- **Rental Apartment Workshops**
- **Condo Workshops**
- **Industry Workshops**
  - *Skilled Trades, professional associations, suppliers*

FW: Meeting invite: BC Energy Step Code Metrics Report Update Steering Committee

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: July 20, 2020 8:43:26 AM PDT
FYI

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 17, 2020 11:12 AM
To: jfisher@udi.org; UDIVictoria@udi.org; UDIOkanagan@udi.org; reception@concertproperties.com; wileung@bchousing.org; rcharron@bchousing.org; gregory.mccall@vancouver.ca; Enright, Patrick <Patrick.Enright@vancouver.ca>; Iain.Macdonald@nrc-cnrc.gc.ca; SForoushani@richmond.ca; NHeap@richmond.ca; NConnolly@richmond.ca; mchorobik@communityenergy.bc.ca; lsampliner@portmoody.ca; bob@rdcfinehomes.com; joe.iconhomes@shaw.ca; vanessa@chbabc.org; mark@bernhardtcontracting.com; kelly@hkrbuilders.com; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'maura' <mgatensby@aibc.ca>; ehayes@edgec.ca; christian@zebx.org; toby.lau@bchydro.com; Tanya.Rumak@fortisbc.com
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: Meeting invite: BC Energy Step Code Metrics Report Update Steering Committee

Hello, everyone:

You are receiving this message either as a member of a Subcommittee of the BC Energy Step Code Council, or because a subcommittee member recommended you as a source of expertise.

One major deliverable of the Part 3 and Part 9 Non-Residential Subcommittee includes an update to the BC Energy Step Code Metrics Research Report (PDF, 4.4 MB), which evaluates the technical, economic, and environmental implications of the BC Energy Step Code on Part 3 and Part 9 buildings. We are seeking your expertise to update this report.

Scope of Work

To meet CleanBC objectives, the Province is proposing changes to the BC Building Code in 2022, which includes a 20% improvement in energy efficiency over the current base code requirements and evaluation of overheating risks for both Part 9 and Part 3 buildings using future climate files. In anticipation of these upcoming changes, we wish to form a Steering Committee to guide the process of retaining a contractor to both update the Metrics Research Report and provide technical analysis regarding how the 20% baseline improvement aligns with the existing Steps within the BC Energy Step Code for various building archetypes. We anticipate that the steering committee will incorporate industry professionals, representatives from several levels of government, developers, service organizations, professional associations, utilities, and Crown corporations to provide guidance and expertise.

If you or a delegate can contribute to this work, please fill out this Metrics Report Doodle poll with your availability. You don't have to attend every meeting, but we want enough input from a broad range of sectors at each meeting to ensure success.

The kick-off meeting for the Metrics Report Steering Committee will:

- Consider the proposed scope of the Metrics Report Update and 20%-better analysis from the Building and Safety Standards Branch (BSSB)

- Clarify roles and expectations and answer questions
- Determine our meeting frequency and meeting dates over the summer (ideally a standing time)
- Discuss contracting and resourcing needs
- Introduce and invite participants to Microsoft Teams

If you believe there are additional qualified people who can help the steering committee, please email me, Scott Williams (Senior Energy Codes Administrator), and Norm Connolly and Toby Lau (Part 3 and Part 9 Non-Residential Subcommittee co-chairs), who can speak with the candidate for their suitability.

For your reference, we are contacting the following people:

Industry
Jeff Fisher, UDI-Pacific
Representative TBD, UDI-Capital Region
Representative TBD, UDI-Okanagan
Dave Ramslie, Concert Properties

Crown Corporation
Wilma Leung and Remi Charron, BC Housing

Local and federal governments
Greg McCall and Patrick Enright, City of Vancouver
Iain MacDonald, National Research Council
Norm Connolly, Sepehr Foroushani and Nicholas Heap, City of Richmond
Maya Chorobik and Laura Sampliner, Local Government Peer Network

Part 9 buildings
Bob Deeks, Joe Hart, Vanessa Joehl and Kelly Reid, Canadian Home Builders' Association (various)
Mark Bernhardt, Bernhardt Contracting

Associations and industry hubs
Harshan Radhakrishnan, Engineers and Geoscientists BC (EGBC)
Maura Gatensby, Architectural Institute of British Columbia (AIBC)
Eoghan Hayes, International Building Performance Simulation Association (IBPSA-Canada)
Christian Cianfrone, Vancouver Zero Emissions Building Exchange (ZEBx)

Utilities
Toby Lau, BC Hydro
Tanya Rumak, FortisBC

Thank you very much. Please contact me if you have additional questions.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

COVID and construction

From: May, Zachary OHCS:EX
To: Johnson, Molly MAH:EX <Molly.Johnson@gov.bc.ca>
Sent: July 22, 2020 5:05:44 PM PDT
Attachments: image001.jpg

Minutes from our June 25th Energy Step Code Council meeting:

2. **COVID-19 Check-in**

Zachary May sought Council input on what data should be tracked as the Province plans an economic recovery strategy.

Discussion:

- Builders report increasing activity in Metro Vancouver and the North. BC Hydro has returned to business as usual re: connections. Banks continue to be slower than normal with more demand.

- BOMA focused on operational recovery and safety, would have preferred to be included in consultation in rental plan. They hope for faster development permits, Vancouver moving to online systems which is speeding it up. Members aren't spending and don't have access to capital. Consider tying future funding to energy efficiency or resiliency. Increasing incentives for upgrades or lower carbon energy systems, good chance.

- UDI appreciates that construction stayed open. Launching of projects, particularly large ones, has slowed. They have analysis to share as it was part of their pre-budget submission. Would hope for some COVID changes (virtual public hearings, skipping public hearings) to stay.

- HAVAN reminded the Council that the DAPR report makes some of these recommendations. Energy retrofits could achieve economic stimulus and efficiency goals.

- No additional protocols or measures expected from the Province regarding construction, with most internal discussions around economic recovery and the unique value of construction sector. Bea Bains said additional safety equipment was an unanticipated cost, and help may be required there, and issue Zac said has been raised.

- CHBA BC and UDI have heard from members that CERB makes it hard to find labourers as support programs can pay the same or better.

- UDI found recent provincial announcement on strata insurance reforms very interesting, including that insurance for newer buildings is more expensive than older buildings, which is unusual. Insurers are apparently also concerned about six-storey wood frame, which may be concerning given 12-storey mass timber. Zac said there was a new MAH division on mass timber implementation.

- Maya Chorobik of the LGPN said LGs worry about budget uncertainties or property tax deferrals due to COVID. They are just starting to re-hire staff, and they continue to have concerns.

- Toby Lau said BC Hydro surveyed Community Energy Managers and Building Energy Managers on the impact on building permit applications and delays. Effect on LGs vary but they report about a 25-30% reduction in residential and commercial permit applications

- Megan Lohmann reports many building applications, significant interest from Alberta residents to building in the southeast of B.C., quick turnaround on sales of existing homes. Some suppliers report higher demand than before in trim, paint etc. Wonder how to take this opportunity to include energy efficiency as part of home improvement.

- Training for the EnerGuide Rating System, provided by Yardstick, was closed due to COVID but re-opening again. Chris Frye encourages anyone with EA challenges to contact NRCan.

- BC Housing has a monthly new housing registry report, with a COVID addendum published every two weeks.

- Joe Hart of CHBA BC encourages Province to implement findings from DAPR. A new Associate Deputy Minister, Silas Brownsey, will oversee DAPR.

- Harshan from EGBC said Susan McDougall from Focal Engineering is doing training on the Part 3 Energy Design Report. There are also upcoming webinars for Part 9 training. The EGBC AGM will happen virtually.

- For info: Development Approvals Process Report online link: https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/local-governments/planning-land-use/dapr_2019_report.pdf

Best,

Zachary D. May, MBA
Acting Executive Director
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



RE: GHGi for buildings

From: May, Zachary OHCS:EX
To: Finkelstein, Ben ENV:EX <Ben.Finkelstein@gov.bc.ca>
Cc: Koski, Chris ENV:EX <Chris.Koski@gov.bc.ca>, Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>, Kaye, Erik ENV:EX <Erik.Kaye@gov.bc.ca>
Sent: July 28, 2020 9:39:22 PM PDT
Attachments: image001.jpg, image002.jpg

1. When will this work be public knowledge as we are seeing the request for GHGi coming up more and more in letters to the Minister?

   We have also received letters, most recently from Metro Vancouver. We have announced that we're moving forward on this issue at the Step Code Council meeting in June, but we have been delaying launching external consultation until we are able to brief up high enough to get the ok to proceed. Briefings have been hard to We could hear back in the next few weeks, or it could take until September if the Minister needs to weigh in.

   Are there any timing sensitivities from a CAS perspective we should know about? I was hoping to have this underway well before UBCM, but not sure if we will be able to pull that off if we're delayed pulling together external stakeholders into September.

2. Will Step Code Council, supported by BC Hydro, be engaging on this with industry and local governments, like in the past?

   Yes. The plan is to develop targets/steps, and a voluntary implementation approach through the Energy Step Code Council. The council has unanimously supported working on this issue. Fortis, UDI, and CHBA BC support working on this issue so long as it's through the council and led by BSSB, so there's hope for a positive outcome that everyone can support.

Happy to discuss further. I'm around the rest of this week and off the first two weeks of August.

Best,
Zachary D. May, MBA
Acting Executive Director
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 TOP WORK UNIT AWARD

From: Kaye, Erik ENV:EX <Erik.Kaye@gov.bc.ca>
Sent: July 28, 2020 4:44 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Koski, Chris ENV:EX <Chris.Koski@gov.bc.ca>; Finkelstein, Ben ENV:EX <Ben.Finkelstein@gov.bc.ca>; Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Subject: Fw: GHGi for buildings

Hi Zach,

As per our discussion this afternoon, just wanted to confirm that I've canvassed the Clean Government buildings team at CAS and we all agree your GHGi initiative is aligned with our CleanBC objectives and is not getting ahead of our policy timelines.

Ben Finkelstein has a few questions for you, see his email below - could you please respond directly and copy me and Chris Koski? Thanks a buch.

Cheers,

Erik

From: Finkelstein, Ben ENV:EX
Sent: Monday, July 27, 2020 2:24 PM
To: Kaye, Erik ENV:EX; Hop Wo, Hilary ENV:EX
Cc: Koski, Chris ENV:EX
Subject: RE: GHGi for buildings

Thanks Erik,

As we know local governments are keen to see an intensity metric as part of step code as are many of their stakeholders. Building industry will likely have concerns but that can be remedied by early engagement which the Step Code Council is good at.

Good to see this as it looks to be ahead of schedule. Questions for Zack and Committee;

1. When will this work be public knowledge as we are seeing the request for GHGi coming up more and more in letters to the Minister?
2. Will Step Code Council, supported by BC Hydro, be engaging on this with industry and local governments, like in the past?

Ben

From: May, Zachary OHCS:EX
Sent: Wednesday, July 22, 2020 4:06 PM
To: Kaye, Erik ENV:EX; Muncaster, Katherine EMPR:EX
Cc: Sandham, Kylie OHCS:EX
Subject: GHGi for buildings

Hi Erik and Katherine,

We are in the process of briefing up on GHGi requirements for buildings. Our ADM wanted to confirm that we are supporting CleanBC policy developed at CAS, not charting our own course. The key concern is establishing steps or tiers for GHG performance in buildings prior to CAS releasing specific sectoral targets or goals. Right now CleanBC only commits to energy efficiency requirements in the Code, so we're trying to make sure we don't get ahead of government policy at CAS or EMPR here.

Our plan is to accomplish the following by spring 2021 (if all goes well):

Establish a definition of GHGi for application in buildings (the working group we already have kicked off)

Establish tiered or stepped performance outcomes, in consultation with the Energy Step Code

Establish a voluntary adoption process for local governments to use the tiered provincial GHG requirements rather than locally developed policies

We are not planning to establish minimum GHG performance requirements in the baseline BC Building Code for 2022, just voluntary tiers that local governments would be able to use.

Hoping to get a response from each of you in the next week about whether our planned work on GHGi is aligned with CAS and EMPR policies or if we are charging ahead in any way. I think I know the answer but would like to check that assumption.

Best,

Zachary D. May, MBA

Acting Executive Director

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 TOP WORK UNIT AWARD

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council
Part 3/Part 9 (Non-residential) Subcommittee
Metrics Research Report Update Steering Committee
Meeting #1: Kick-off Meeting

MEETING NOTES

Date: Thursday July 30, 2020 | **Time:** 9:00 a.m. - 10:30 a.m. | Teleconference Meeting
Steering Committee Chair: Scott Williams, Building and Safety Standards Branch
Steering Committee Members Participating:

Associations and Industry Hubs
Harshan Radhakrishnan, EGBC
Maura Gatensby, AIBC
Eoghan Hayes, IBPSA-Canada
Christian Cianfrone, ZEBx

Crown Corporation
Wilma Leung and Remi Charron, BC Housing

Industry
Jeff Fisher, UDI-Pacific
Nicholas Standeven, UDI-Capital Region (Abstract Developments)

Local and Federal Governments
Greg McCall, City of Vancouver
Norm Connolly, Sepehr Foroushani and Nicholas Heap, City of Richmond (and Part 9 subcommittee representatives)
Laura Sampliner, Local Government Peer Network

Part 9 Buildings
Bob Deeks, Joe Hart, Vanessa Joehl, Pauline Rupp, Canadian Home Builders' Association
Mark Bernhardt, Bernhardt Contracting

Utilities
Toby Lau, BC Hydro
Tanya Rumak and Pete Koepfgen, FortisBC

Building and Safety Standards Branch
Scott Williams, Hugo Wong, Dale Andersson

Regrets: Dave Ramslie, Concert Properties; Zachary May, BSSB; Maya Chorobik, CEA; Iain MacDonald, National Research Council; Patrick Enright, City of Vancouver; Representative TBD, UDI-Okanagan; Kelly Reid, Canadian Home Builders' Association

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ACTION ITEMS
- BSSB - to book Meeting #2 of Steering Committee for August 26, 2020
- BSSB - to prepare more detailed scope of work for the 2020 Metrics update analysis based on feedback received for discussion August 26
- BSSB - to follow-up on district energy systems and previous Energy Step Code Council work on this issue
- Harshan Radhakrishnan/EGBC - to share a video link about retrofitting DE systems

NOTES
1. **Steering Committee Role and Scope of Work:** Scott Williams provided an overview of the Steering Committee's role and scope of work. See draft Scope of Work provided with the meeting agenda and included below as an Appendix (for reference).

2. **General Discussion and Feedback – the following points were raised:**
   - BC Hydro has retained Morrison Hershfield to undertake analysis of ASHRAE 90.1 – this work may assist with the 20% analysis
   - FortisBC is conducting a Codes compliance study for Part 3/Part 9 they can share – this version will address the Step Code (previous versions didn't as it wasn't in the Code at the time)
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- Archetypes for Part 9 – 2018 Metrics Report had six
  - What percent of buildings do the 6 archetypes represent? Is there a need for more in the 2020 analysis?
  - Building foot print versus vertical ratio surface area to floor space – important considerations
  - Should/can more archetypes be included? NRCan has analysis of 240 archetypes
  - Previous reports did many studies of single archetypes – to address 20% better, do we need a broader approach?
  - Should the selected archetypes vary by climate zone?
  - Archetypes are 'goal posts' or reasonable representations – not meant to represent everything in between or every possibility – need to consider immense work involved in adding more
  - Need to consider adding very small home archetype – e.g. laneway homes – wasn't included in 2018
  - Keeping to the existing six archetypes is easy as we have the data – adding new archetypes increases the work
  - In current market, smaller homes can be more affordable – need to include a small home that builders can achieve = important to have this included in the study
- Archetypes for Part 3 – 2018 Metrics report had five
  - Consider adding Industrial F3 occupancies – can be many things – currently a loophole to circumvent Step Code requirements – would be good to include this archetype
- Cost analysis
  - Previous reports looked at cheapest option – this may be a bottom outlier – consider including an average cost (such as average of lowest 10 options or something similar)
  - Need to update the costing data used to reflect current costs – e.g., some of the assumptions are out of date – e.g., EA costs, NPV 3% vs 6%-7% (past analysis likely used costing values from 2016-2017 – will need to update)
- Reference House Approach
  - Reference building approach can negate passive approaches
  - Good ways to manage and deliver results – remember we design for many reasons (e.g., comfort of occupants, social reasons) not just energy efficiency and GHG reductions
- Sliding Scale TEDI/Part 9
  - Challenges of measurement with relative targets and variable HDD
- District Energy Systems
  - Challenges of incentives to connect to high-carbon systems – does this defeat goals of Step Code?
  - If buildings are more energy efficient, what is role of DE Systems?
- Data
  - Value of obtaining utility data or other data for assessment, not relying only on modelling
  - Switching approach from simulation to data-based study - many challenges in trying a data-based approach – some local govts have data (for Part 9) as would NRCan – maybe not as much for Part 3
  - Data from Portfolio Manager?
  - Hybrid of modelling and operational data could be considered for part 9
  - In future, data will be available from the BeRT tool (Building Energy Requirements Tool)
  - Commissioning as a code requirement and submission of operational data
- Overheating Analysis – Part 3
  - Recent UBC study on overheating in MURBS – available for high rise but not for low rise
  - Involve Trevor Murdock/UVic in future climate files (BSSB is already in contact with him – he is part of the Part 3 Overheating Working Group)
  - Value in having two independent studies
- Overheating Analysis Part 9



    - HOT2000 – is this closed to new climate files?
- Running Scenarios
    - Will Steering Committee be able to see the options selected in each scenario to see if they 'will fly in the real world'
- Timeline for the project (late July to fall) is very optimistic

3. **Next Meeting of the Steering Committee: August 25, 2020 to review a more detailed scope of work based on the discussion today.**

APPENDIX TO THE MINUTES – DRAFT SCOPE OF WORK FOR THE STEERING COMMITTEE PROVIDED WITH THE MEETING AGENDA

ROLE OF STEERING COMMITTEE: Provide advice to guide an updated analysis of the 2018 Metrics Research Report (Metrics Report), and an analysis of 20%-better energy efficiency, to help prepare for and determine the energy-efficiency requirements to be included in the 2022 BC Building Code.

TIME FRAME: Late July 2020 through to Fall 2020

SCOPING THE PROPOSED CHANGES: Metrics Report Update and 20% Better Analysis

Background
There are number of proposed changes to the BC Building Code in 2022. To analyze potential impacts, the Building and Safety Standards Branch (BSSB) is looking to update the Metrics Report based on the following proposed changes:

1. 20% baseline improvement in energy efficiency for both Part 9 and Part 3 buildings from current BC Building Code requirements
2. Analysis of overheating risks using future-shifted climate data

The updated Metrics Report analysis will also reflect the changes to the BC Energy Step Code metrics per Revision 2 of the 2018 BC Building Code.

This Steering Committee will help guide the process of identifying the required modifications needed to the Metrics Report and define the scope of work for a contractor to execute the modifications; this work will also include additional analysis regarding 20% better and how this is to be best represented within the current Step Code structure.

METRICS REPORT: Updates to include:

1. **BCBC 2018 Revision 2 changes**
    a. Part 9
        - TEDI adjusted
        - %-better envelope
    b. Part 3
        - Climate zone analysis outside of Climate Zone 4

2. **Future Climate Files and Overheating**
    a. Additional analysis to be conducted using future shifted weather files - CWEC 2016 to 2050 for overheating analysis. Limited data set available on Pacific Climate Impacts Consortium's (PCIC) website and does not represent all locations listed in the BC Building Code; however, all climate zones appear to be represented.

b. Associated changes to design temperatures are still to be determined. Work currently being done with the Part 3 – Overheating Risk Working Group will help define this, as well as explore peak internal temperatures.
c. Overheating analysis to be per the City of Vancouver Energy Modelling Guidelines – ASHRAE 55-2010 for Part 3 buildings.
d. Given limited means of calculating overheating for Part 9, consensus is required as to how we are to instruct a contractor to analyze. The Part 9 Overheating Risk Working Group will help to inform this discussion.
e. Based on overheating analysis - costs associated with cooling systems for both Part 3 and Part 9 to be included in the updated report.

3. Potential to Expand Building Archetypes
    a. Focus to be on most impactful archetypes. Additional archetypes could be considered based on Steering Committee recommendations. Potential to expand scope for consultant, which will be affected by cost and timing.

4. Sections to be Potentially Omitted from the Revised Report
    a. Such as section comparing Step Code to City of Vancouver ZEBP– to be discussed further with Steering Committee.

20% BETTER ANALYSIS: Analysis to include:

1. 20% Baseline - Conduct analysis to verify where 20% better baseline improvement lines up with the Steps within the Step Code.

2. Focus on C, D and E Occupancies - (hotel/motel, other residential, office and mercantile) which have Step Code requirements as outlined in Part 10 of the BCBC.

3. NECB 2015 Baseline - For 20% improvement, analysis to assume NECB 2015 as a baseline (i.e. Step 1) for each archetype.

4. Appropriate Modifications - Suggest appropriate modifications to the Steps as needed to roughly line up with 20% better (do not want lowest step to be less than the 20% threshold; steps may need to be modified accordingly).

5. Cost Analysis - Provide cost analysis pertaining to 20% better to be fed into the Metrics Report based on proposed changes to the Step Code metrics. Analysis to include costing impacts of applying proposed changes to the BC Building Code and to understand the cost of implementing these changes in conjunction with the Step Code for different archetypes across multiple climate zones across BC. Costing analysis is to follow what has been outlined in the 2018 Metrics Research Full Report Update.

STEERING COMMITTEE CONTACTS

- Chair: Scott Williams, Senior Energy Codes Administrator, BSSB - Scott.B.Williams@gov.bc.ca
- Support: Dale Andersson, Senior Policy Advisor, BSSB – Dale.Andersson@gov.bc.ca

ORIGINAL METRICS RESEARCH REPORTS – FOR REFERENCE

The Metrics Research Report is a comprehensive exploration of the energy, emissions and economic impacts of the BC Energy Step Code. It was commissioned by BC Housing in partnership with BC Hydro, the B.C. Building and Safety Standards Branch, the City of Vancouver, and Natural Resources Canada. It was originally published in 2017 and updated in 2018.

2018 Edition



- 2018 Metrics Research Full Report (PDF, 4.4MB)

2017 Editions

- 2017 Metrics Research Summary Report (PDF, 2MB)
- 2017 Metrics Research Full Report (PDF, 3MB)

Step Code Metrics Report Update Steering Committee kick-off

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	pauline@chbabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, SForoushani@richmond.ca, christian@zebx.org, gregory.mccall@vancouver.ca, NHeap@richmond.ca, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, maura <mgatensby@aibc.ca>, toby.lau@bchydro.com, wileung@bchousing.org, rcharron@bchousing.org, lsampliner@portmoody.ca, mark@bernhardtcontracting.com, reception@concertproperties.com, jfisher@udi.org, udiokanagan@udi.org, Enright, Patrick <Patrick.Enright@vancouver.ca>, Iain.Macdonald@nrc-cnrc.gc.ca, NConnolly@richmond.ca, mchorobik@communityenergy.bc.ca, bob@rdcfinehomes.com, joe.iconhomes@shaw.ca, vanessa@chbabc.org, kelly@hkrbuilders.com, ehayes@edgec.ca, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Tanya.Rumak@fortisbc.com, Pete.Koepfgen@fortisbc.com, Nicholas Standeven <nstandeven@abstractdevelopments.com>
Cc:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent:	July 30, 2020 4:53:38 PM PDT
Attachments:	Metrics SC Notes 2020-07-30 v01.pdf, Metrics Steering Co Meeting 1 2020-07-30.pdf

Hello, everyone:

Attached are notes and a slide deck from this morning's meeting. Thanks for your participation this morning. The next meeting is Wed. Aug 26 from 9-10:30, and you should have already received a calendar invitation.

If you wish to discuss some of the topics in depth before the second meeting, please feel free to post inside our MS Teams channel. It can help us all build a shared understanding of the problems and potential solutions.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY STEPCODE

BUILDING BEYOND THE STANDARD

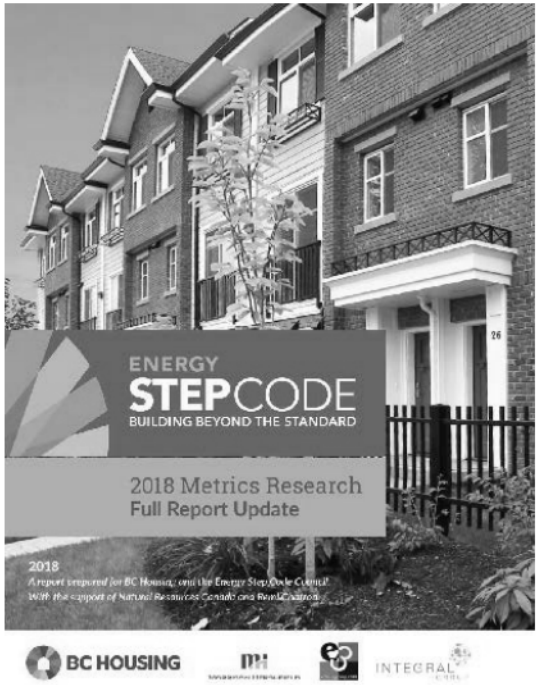
Scott Williams P.Eng
Senior Energy Codes Administrator - BSSB
Province of British Columbia

Presentation to:
Metrics Research Report Update Steering Committee
July 30, 2020

Metrics Research Report Update Steering Committee

ROLE OF STEERING COMMITTEE

Provide advice to guide an updated analysis of the 2018 Metrics Research Report (Metrics Report), and an analysis of 20%-better energy efficiency, to help prepare for and determine the energy-efficiency requirements to be included in the 2022 BC Building Code.



TIME FRAME: Late July 2020 through to Fall 2020

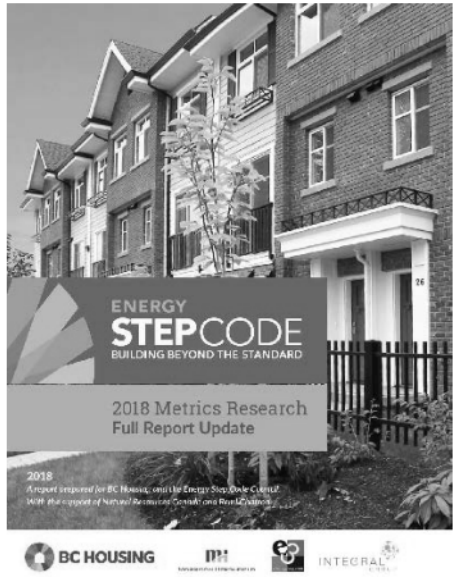
SCOPING THE PROPOSED CHANGES:

Metrics Report Update and 20% Better Analysis

Metrics Research Report Update Steering Committee

ORIGINAL METRICS RESEARCH REPORTS

The Metrics Research Report is a comprehensive exploration of the energy, emissions and economic impacts of the BC Energy Step Code. It was commissioned by BC Housing in partnership with BC Hydro, the B.C. Building and Safety Standards Branch, the City of Vancouver, and Natural Resources Canada. It was originally published in 2017 and updated in 2018.



2018 Edition

2018 Metrics Research Full Report (PDF, 4.4MB)

2017 Editions

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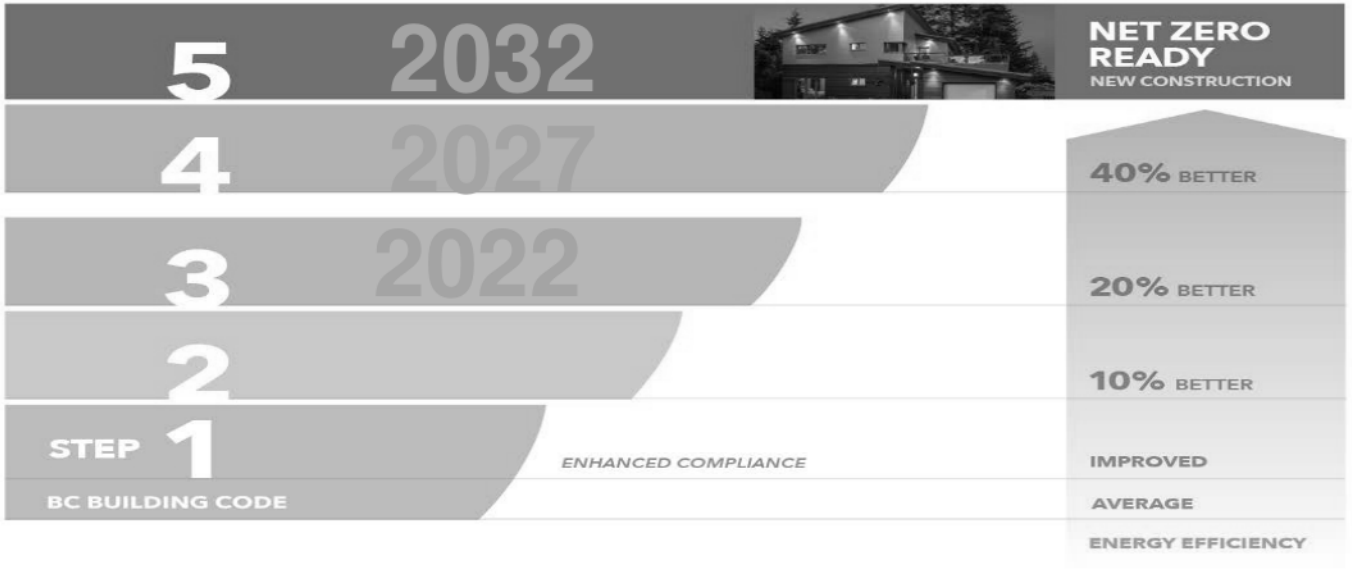
2017 Metrics Research Full Report (PDF, 3MB)

CleanBC – Better Buildings



New Buildings
2022 – 20% improvement
2027 – 40% improvement
2032 – Net Zero Energy Ready



BACKGROUND TO THE NEW ANALYSIS

- A **number of proposed changes** to BC Building Code 2022
- BSSB seeking to **analyze potential impacts** through an updated Metrics Report based on the following proposed changes:
    - **20% baseline improvement in energy efficiency** for both Part 9 and Part 3 buildings from current BC Building Code requirements
    - Analysis of **overheating risks using future-shifted climate data**
- Steering Committee – to **help guide the process of identifying the required modifications** needed to the Metrics Report and **defining the scope of work** for a contractor to execute the modifications

Metrics Research Report Update Steering Committee

METRICS REPORT: Updates to include:

1. BCBC 2018 Revision 2 changes

- **Part 9**
  - TEDI adjusted
  - %-better envelope
- **Part 3**
  - Climate zone analysis outside of Climate Zone 4

Metrics Research Report Update Steering Committee

METRICS REPORT: Updates to include:

2. Future Climate Files and Overheating

- **Future shifted weather files** - CWEC 2016 to 2050 for overheating analysis
  - Data set available from PCIC - does not represent all locations listed in BCBC but all climate zones are represented.

- Associated **changes to design temperatures are still to be determined** - Part 3 – Overheating Risk Working Group will help define this, as well as explore peak internal temperatures.

- Overheating analysis to be **per the City of Vancouver Energy Modelling Guidelines** – ASHRAE 55-2010 for Part 3 buildings.

- Given limited means of calculating overheating for Part 9, **consensus required** to how we instruct contractor to analyze - Part 9 Overheating Risk Working Group will help

- Based on overheating analysis - **costs associated with cooling systems for both Part 3 and Part 9** to be included

Metrics Research Report Update Steering Committee

METRICS REPORT: Updates to include:

3. Potential to Expand Building Archetypes

- Focus to be on most impactful archetypes
- Additional archetypes could be considered based on Steering Committee recommendations
- Potential to expand scope for consultant affected by cost and timing

Metrics Research Report Update Steering Committee

2018 Metrics Report Archetypes – Part 3 Buildings*

ARCHETYPE	DETAILS
Low-Rise MURB	Variable characteristics to represent the range of MURBs in the marketplace (see Section 2.2.3 for more detail), 90% suites, 10% common area
High-Rise MURB	Variable characteristics to represent the range of MURBs in the marketplace (see Section 2.2.3 for more detail), 90% suites, 10% common area
Hotel	Market, 9,520 m2, 10 storeys, 500 people
Commercial Office	Market, 18,200m2, 10 storeys, 790 people, 155 parking spaces
Retail (big box) Market	Market, 4,500m2, 1 storey, 150 people

*Page 4, 2018 Metrics Report

Metrics Research Report Update Steering Committee

2018 Metrics Report Archetypes – Part 9 Buildings*

ARCHETYPE	DETAILS
MURB (10 units)	Market, 1,654m2, 1,780ft2/unit, 3 storeys over underground parkade
Row House (6 units)	Market, 957m2, 1,720ft2/unit, 3 storeys over underground parkade
Quadplex	Market, 513m2, 1,382ft2/unit, 3 storeys over underground parkade
Large SFD	Market, 511m2, 5,500ft2, 2 storeys with basement
Medium SFD	Market, 237m2, 2,551ft2, 2 storeys with basement
Small SFD	Market, 102m2, 1,098ft2, single storey on heated crawlspace

*Page 13, 2018 Metrics Report

Metrics Research Report Update Steering Committee

METRICS REPORT: Updates to include:

4. Sections to be Potentially Omitted from the Revised Report

- Such as section 6.4.3 comparing Step Code to City of Vancouver ZEBP
- For discussion with Steering Committee

Metrics Research Report Update Steering Committee

METRICS REPORT: 20% BETTER ANALYSIS - Updates to include:

1. **20% Baseline** - Conduct analysis to verify where 20% better baseline improvement lines up with the Steps within the Step Code

2. **Focus on C, D and E Occupancies** - (hotel/motel, other residential, office and mercantile) which have Step Code requirements as outlined in Part 10 of the BCBC

3. **NECB 2015 Baseline** - For 20% improvement, analysis to assume NECB 2015 as a baseline (i.e. Step 1) for each archetype

Metrics Research Report Update Steering Committee

METRICS REPORT: 20% BETTER ANALYSIS - Updates to include:

4. **Appropriate Modifications** - Suggest appropriate modifications to the Steps as needed to roughly line up with 20% better (do not want lowest step to be less than the 20% threshold; steps may need to be modified accordingly)

5. **Cost Analysis** - Provide cost analysis pertaining to 20% better to be fed into the Metrics Report based on proposed changes to the Step Code metrics
   - Analysis to include costing impacts of applying proposed changes to the BC Building Code and to understand the cost of implementing these changes in conjunction with the Step Code for different archetypes across multiple climate zones across B.C.
   - Costing analysis is to follow what has been outlined in the 2018 Metrics Research Full Report Update

2018 Metrics Analysis: What did we do? Do we want to do it again?



I swear if my memory was any worse, I could plan my own surprise party.

Quick summary ahead!

2018 Metrics Analysis – SUMMARY

- Study included Part 3 and Part 9 Buildings
- BC Energy Step Code 'targets'/requirements: BCBC 2018 Rev 1 adoption Dec. 10, 2018
- All applicable Climate Zones
- Part 3 buildings - 5 archetypes
- Part 9 buildings - 6 archetypes
- Complex modelling needed – see Section 2 on modelling and costing
- Analysis of metrics, costs and other elements specific to Part 3 and Part 9

2018 Metrics Analysis - Report Section 3.1: Part 3 Buildings Results*

- 3.1.1 Incremental Capital Cost
- 3.1.2 Net Present Value & Carbon Abatement Costs
- 3.1.3 Appropriateness of Metrics and Targets
- 3.1.4 Applying Part 3 Targets to Part 9 Non-Residential Buildings
- 3.1.5 District Energy and Waste Heat

* Starting page 26

2018 Metrics Analysis - Report Section 3.2: Part 9 Buildings Results*

- 3.2.1 Incremental Capital Cost
- 3.2.2 Net Present Value & Carbon Abatement Costs
- 3.2.3 Sensitivity Analysis on NVP Discount Rate
- 3.2.4 Achieving Higher Building Performance in Colder Climates
- 3.2.5 Window to Wall Ratios
- 3.2.6 Equity and Affordability
- 3.2.7 Unintentionally Increasing GHG Emissions
- 3.2.8 Appropriateness of Part 9 Targets for MURBS
- 3.2.9 Typical Energy Conservation Measures

* Starting page 26

2018 Metrics Analysis – Other Analysis

Section 5 – Building Policy Interface

- 5.1 Part 9 R-Values
- 5.2 Ventilation Requirements
  - 5.2.1 The Impact of Different Ventilation Standards on Part 3 Step Code Targets
  - 5.2.2 The Impact of Ventilation Assumptions on Part 9 Modelling Results

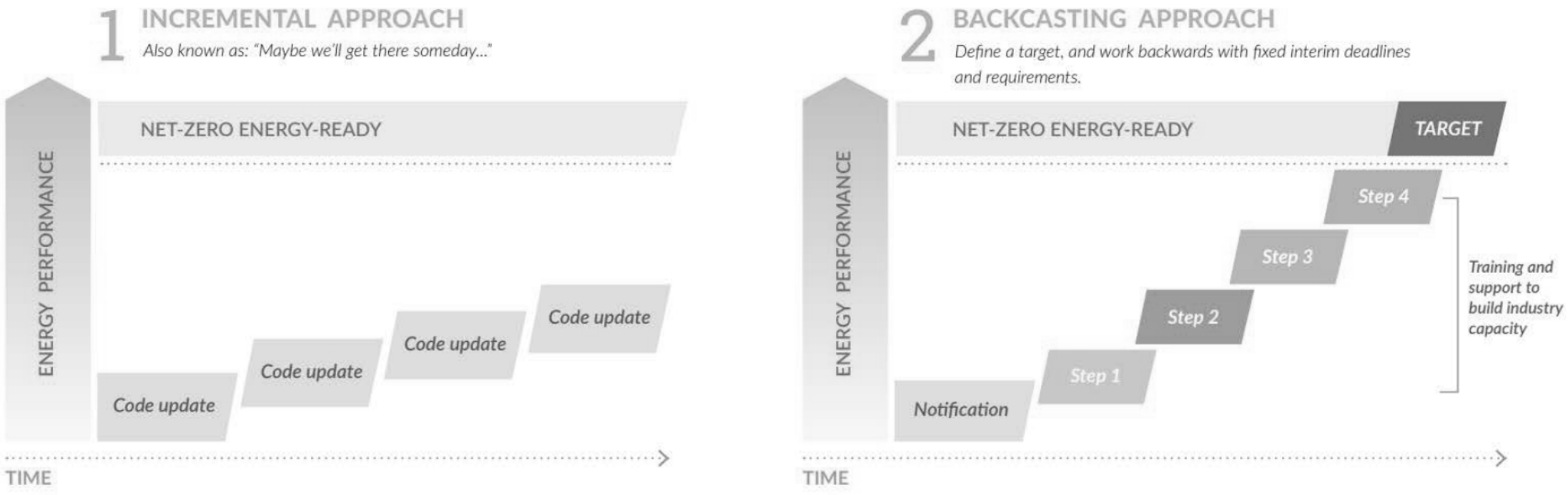
Starting page 61

Metrics Research Report Update Steering Committee

General Discussion and Feedback

- Comments
- Concerns
- Advice
- Additional analysis/information to be captured
- etc

Strategic Market Transformation



The Power of Backcasting: Traditional code development will not bring a jurisdiction up to a net-zero energy-ready performance in a timely manner.

RE: potential P9 co-chairs

From: Bob Deeks <bdeeks@rdcfinehomes.com>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, robyn.wark@bchydro.com
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: August 5, 2020 1:13:10 PM PDT
Attachments: image001.png, image002.jpg, image003.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,
Sorry missed this earlier. s.22
Why can Mark not continue on?
Cheers,

Bob Deeks
President – Certified Housing Professional

RDC FINE HOMES | Healthy Homes. Happy Families. PIQUE BEST OF WHISTLER 2018 PIQUE BEST OF WHISTLER 2019

Cell: 604.967.1142 **Office:** 604.932.3618 **Email:** bob@rdcfinehomes.com
203-1390 Alpha Lake Road, Whistler, BC V8E 0H9
www.rdcfinehomes.com

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 28, 2020 8:38 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Bob Deeks <bdeeks@rdcfinehomes.com>; robyn.wark@bchydro.com
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: FW: potential P9 co-chairs

Hello Zac, Bob and Robyn,

As you know, Mark Sakai has resigned from the P9 subcommittee co-chair role due to his change of employer. We haven't prioritized finding a new co-chair given other more urgent work items but now would be a good time to start thinking.

Before leaving, Mark suggested s.22 Nick has suggestions below.

Do you have any thoughts on who you'd like to be Nick's co-chair?

Hugo

From: Heap,Nicholas <NHeap@richmond.ca>
Sent: July 27, 2020 6:07 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: potential P9 co-chairs

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Hugo:

I don't know[s.22] so that wasn't me…

s.22

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
[Note: working regular hours off-site for duration of COVID-19 emergency]
T: 604 276-4267 | C: 604 783-8050

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From: Wong, Hugo OHCS:EX [mailto:Hugo.Wong@gov.bc.ca]
Sent: Monday, 27 July 2020 16:48
To: Heap,Nicholas
Subject: potential P9 co-chairs

Hi Nick,

I know you floated a name for a replacement for Mark a while back. Was it [s.22] ? Were there any other candidates you think of?

I'm going to prepare a pitch for Zac, Robyn, and Bob, and so if [s.22] your choice, maybe 1-2 bullets why he's a good choice would be good.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Emergency Program Act Modernization

From:	Cassandra McColman <cmccolman@udi.org>
To:	PSSG.Minister@gov.bc.ca, Minister, PSSG PSSG:EX <PSSG.Minister@gov.bc.ca>
Cc:	EmergencyProgramAct@gov.bc.ca, Lori.Halls@gov.bc.ca, Anne McMullin <AMcMullin@udi.org>, Jeff Fisher <jfisher@udi.org>, Marissa Chan-Kent <mchan-kent@udi.org>, Emergency Program Act EMBC:EX <EmergencyProgramAct@gov.bc.ca>
Sent:	January 31, 2020 2:44:12 PM PST
Attachments:	image001.jpg, image003.jpg, UDI Letter - Emergency Program Act Modernization_Jan.2020.pdf, image002.jpg

Dear Minister,

On behalf of Anne McMullin, President and CEO of the Urban Development Institute (UDI), we respectfully submit our comments in response to the Emergency Management Legislation Discussion Paper.

If you have further questions regarding this submission, please don't hesitate to contact us.

Regards,

Cassandra McColman | Policy and Research Coordinator
Urban Development Institute
cmccolman@udi.org Direct: 604.661.3032
udi.bc.ca



RE: School overheating images

From: May, Zachary OHCS:EX
To: Eoghan Hayes <ehayes@edgec.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: jfisher@udi.org, McCall, Gregory <Gregory.McCall@vancouver.ca>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Sent: August 26, 2020 10:41:18 AM PDT
Attachments: image001.png, image002.png

1. Good catch on the 62.2 – I did mean 62.1. The next edition of the code is likely to use the 2016 version.
2. Interesting comments on the gaps that remain in the code regarding air exchanges. Hopefully further work on overheating risks will help us develop national and BC standards that manage this comfort and occupant health issue.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Eoghan Hayes <ehayes@edgec.ca>
Sent: August 26, 2020 10:37 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: jfisher@udi.org; McCall, Gregory <Gregory.McCall@vancouver.ca>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Subject: RE: School overheating images

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good question,

62.2 is a ventilation standard specific to residential buildings, this is a school so this standard would not apply here. 62.1-2001 w/o addendum N would apply.

62.1 w/o addendum N is a good standard in my opinion as it has higher ventilation rates then more recent versions of the standard. (Greg can fill you in on the history of why they stuck with this version of the standard as opposed to more recent versions). While the 62 standards address ventilation
minimum rates for occupants to breath it does not address air circulating in the space. The designer on the project did meet code minimums for ventilation but there is no code or standard for air circulation in the space, just ventilation.

The school board have now adapted our recommendation of ensuring all classrooms have 6 air changes per hour minimum in all classrooms. About 1.3 air changes of the 6 would be from ventilation air (outside air) the remainder would be from return circulating air in the space.

Cheers
E

Best regards,
Eoghan Hayes, P.Eng, BEMP, RESET AP , LEED AP BD&C
Managing Director
+1 (604) 338 1063 | www.edgesustainability.com
The Brickworks Building
304–1228 Hamilton St., Vancouver BC, V6B 6L2



From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: August 26, 2020 10:18 AM
To: Eoghan Hayes <ehayes@edgec.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: jfisher@udi.org; McCall, Gregory <Gregory.McCall@vancouver.ca>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Subject: RE: School overheating images

Hi Eoghan,

Do you know if the update to ASHRAE 62.2(2016) will address this at all? This sounds like a minimum code issue, not just Energy Step Code. Thanks for sharing.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Eoghan Hayes <ehayes@edgec.ca>
Sent: August 26, 2020 10:14 AM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: jfisher@udi.org; McCall, Gregory <Gregory.McCall@vancouver.ca>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Subject: School overheating images

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

As mentioned on the call today,

The school has excellent solar shading on the exterior south exposure.

Images taken at 10 am on September 10th 2018. Note this is surface temperature

Edge were brought in to do a full thermal analysis and come up with solutions to get reduce the inside temperatures. We explored

- Night cooling,
- Adding cooling to the existing HRV ducting (Limited to 16°C) as the existing ducting was not insulated
- Adding full cooling to the HRV to 12°C with insulating the ducting.
- Full mechanical cooling

The only solution especially with doing to analysis with future weather files was to add full mechanical cooling to the building.

Also the air movement in the space was very low, leading to a very stuffy classroom as the air circulating was for ventilation only, about 1.2 Air changes per hour. Typically you want about 6 air changes per hour in a space.



Figure 1



Figure 2

Conclusion: If we are going to mandate good envelopes and HRV's for schools in certain climate zones in BC we likely need some form of cooling to ensure the above situation does not occur again.

Cheers
E
Best regards,
Eoghan Hayes, P.Eng, BEMP, RESET AP , LEED AP BD&C
Managing Director
+1 (604) 338 1063 | www.edgesustainability.com
The Brickworks Building
304–1228 Hamilton St., Vancouver BC, V6B 6L2

edge airsset autodwell

Metrics Report Update Steering Committee -Notes from Meeting #2 August 26, 2020

From:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To:	pauline@chbabc.org, SForoushani@richmond.ca, Gregory.McCall@vancouver.ca, Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>, MGatensby@aibc.ca, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, Toby.Lau@bchydro.com, Iain.Macdonald@nrc-cnrc.gc.ca, NConnolly@richmond.ca, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, bob@rdcfinehomes.com, joe.iconhomes@shaw.ca, vanessa@chbabc.org, kelly@hkrbuilders.com, ehayes@edgec.ca, Tanya.Rumak@fortisbc.com, Pete.Koepfgen@fortisbc.com, Wilma Leung wileung@bchousing.org <wileung@bchousing.org>, Remi Charron <rcharron@bchousing.org>, lsampliner@portmoody.ca, mark@bernhardtcontracting.com, Jeff Fisher <jfisher@udi.org>, udiokanagan@udi.org, patrick.enright@vancouver.ca, nstandeven@abstractdevelopments.com
Cc:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent:	August 27, 2020 12:17:30 PM PDT
Attachments:	Metrics SC Notes 2020-08-26.docx

Hello Steering Committee members,

Please find attached notes from yesterday's meeting.

Teams Access - All members of this Steering Committee should already have received an invitation to join the Metrics Report Teams channel, where members can discuss issues between meetings or post follow-up comments to the meeting notes, instead of sending reply all emails. If you have not received an invitation, please email hugo.wong@gov.bc.ca. For a Teams demo, visit https://teamsdemo.office.com/#/

More to come soon. Thank you.

Kind regards,

DALE ANDERSSON, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Office: 778-974-3903 | Mobile: 778-679-9653
Email: Dale.Andersson@gov.bc.ca

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council
Part 3/Part 9 (Non-residential) Subcommittee
Metrics Research Report Update Steering Committee
Meeting #2
MEETING NOTES

Date: Wednesday August 26, 2020 | **Time:** 9:00 a.m. - 10:30 a.m.
Steering Committee Chair: Scott Williams, Building and Safety Standards Branch
Microsoft Teams Meeting

Steering Committee Members Participating

Associations and Industry Hubs
Harshan Radhakrishnan, EGBC
Maura Gatensby, AIBC
Eoghan Hayes, IBPSA-Canada

Crown Corporation
Regrets

Industry
Jeff Fisher, UDI-Pacific
Nicholas Standeven, UDI-Capital Region (Abstract Developments)

Local and Federal Governments
Greg McCall, City of Vancouver
Norm Connolly, Sepehr Foroushani and Nicholas Heap, City of Richmond (and Part 9 subcommittee representatives)
Iain MacDonald, National Research Council
Laura Sampliner, Port Moody and Local Government Peer Network

Part 9 Buildings
Bob Deeks, Joe Hart, Pauline Rupp, Canadian Home Builders' Association
Mark Bernhardt, Bernhardt Contracting

Utilities
Toby Lau, BC Hydro
Tanya Rumak and Pete Koepfgen, FortisBC

Building and Safety Standards Branch
Scott Williams, Hugo Wong, Dale Andersson, Zachary May

Regrets: Wilma Leung and Remi Charron, BC Housing; Vanessa Joehl, CHBA BC; Maya Chorobik, CEA Local Govt. Peer Network; Patrick Enright, City of Vancouver; Representative TBD, UDI-Okanagan; Kelly Reid, Canadian Home Builders' Association; Christian Cianfrone, ZEBx

~~~~~~~~~~~~

ACTION ITEMS

- BSSB - to book Meeting #3 of Steering Committee in about three weeks (Sept. 16 TBC)
- BSSB - to provide detailed scope of work for the 2020 Metrics update analysis for Steering Committee review
- BSSB – to provide info on how to access Teams for the Steering Committee

NOTES

1. **New Member:** Iain MacDonald, Natural Resources Canada.
2. **Concurrent Work:** Scott noted ongoing work supporting and supplementing the metrics update:
    - BC Hydro analysis of ASHRAE 90.1 and changes since 2016 – expected this fall
    - NRCan (Ian MacDonald) work on NECB and changes comparing 2020 to 2015 - ongoing
    - Step Code Working Groups for Part 9: Unique Building Types, and 20% Better Analysis
    - Part 3 and Part 9 Overheating Risk Analysis Working Groups
3. **Metrics Update: Archetypes Part 9 Discussion**
    - Meeting #1 the group expressed interest in smaller homes; current smallest SFH in metrics report about 1000 sq ft – what might work for smaller? Slab or with basement?
~~~~~~~~~~~~

- Suggestion to include homes in range of 500 sq ft/laneway homes
- Suggestion to align sizes with current Code requirements as outlined for MEUI Table 9.36.6.3-G
- Surface area may be more important that sq footage (cubes are rare, and larger custom homes may have surface area 350% higher than sq ft) – could each archetype have 2-3 different surface area factors with surface area of cube as baseline i.e., 150%, 300%. Spec homes have typically 150% more surface area than cubes. Larger homes typically have more surface area and higher form factors - could start with 300% for these types of homes
- NRCan has done analysis showing heated volume is actually the more important characteristic of the building than sq ft when analyzing small homes. Regarding airtightness and ACH, heated volume is most important.
- Consider future temps and that warming will be more pronounced in north and will likely need AC – what archetypes help achieve this affordably?
- Need resources to do credible examples when do updated analysis

4. Metrics Update: Archetypes Part 3 Discussion
   - Group F Occupancies
     - Despite interest in Group F occupancies, Scott proposed leaving this to the Part 3/9 Subcommittee as this is in their workplan and first step is to develop metrics for these occupancies
     - Concern there is a loophole for Group F that is being used either intentionally or not (e.g., when building under construction, tenant may not be known). Building constructed to Group F requirements but then occupancy changes based on tenancy and may no longer meet Part 10 requirements
     - Possibility to amend BCBC in the interim, to provide guidance on how to go from Group F to Group C residential?
     - 2022 Code may be adopted in two phases – would like to focus on more urgent issues now, and leave others for later but still prior to 2022
     - Group F occupancies – should involve NAIOP (Commercial Real Estate Association Development Association - https://www.naiop.org
     - Group F could be similar to how fire safety treated – fire separations built for 'worst case' to support the building over its lifetime – could do for building envelope as well
     - Future temperatures – include archetypes that support better cooling/passive cooling over the life of the building
   - 'Public Sector' Archetypes
     - Step 1 in BCBC – don't intend to add more at this point – use makes determining metrics complex – further study ongoing – provincial public buildings have other requirements (e.g., higher than code)
     - Helps private sector if public sector leads the way – doing only Step 1 doesn't look good
     - For provincial buildings – energy efficiency requirements often established during the procurement process i.e., LEED Gold
     - Cases of overheating in schools now when designed without cooling.
     - Talking of 'public sector' is confusing - code doesn't refer to 'public sector' – schools and care facilities can be private so still need metrics for these occupancies – use code language - assembly, care – the As and Bs etc.
     - Could there be a province wide requirement for all public sector buildings as opposed to being adopted by municipalities?
     - Private sector is willing to move forward but public sector is somewhat lagging.
     - Care facilities without treatment (Group B3 occupancy) so could have same step level as Group C. Further analysis is ongoing to define metrics for 'public sector' archetypes and will be looked at in more detail in 2021.
5. Metrics Update: Overheating Risk Analysis
   - Two Working Groups to address this – it's a complex issue
   - Participants noted this needs to be included for BCBC 2022

- For Part 9, issue is less future climate data availability and more limitations of H2K software; for Part 3, have ASHRAE 55 – but for Part 9/EAs and scope of work and fees would have significant impact. Might need separate plug-in calculator
- BSSB is proposing to remove overheating risk for Part 9 buildings from the scope of work for the Metrics Report update given complexities in analysing
- As opposed to omitting from the update, suggestions of conducting a sensitivity analysis using data from the lower mainland, which could help to inform overheating risk as associated costs. Not all architypes need to be included, nor all climate zones
- CWEEDS could help with analysis. Can use other data sources other than PCIC
- Given lack of flexibilty in HOT2000, could require that solar gain values be reported along with prescriptive solar heat gain coefficients (SHGC) for windows
- Bob noted in his 10+ years of building Step 3 and 4 homes, almost all homes have overheating problems even with correct/triple pane glazing – he strongly recommends cooling to his clients – need to seriously consider this in more airtight homes especially given climate change. Low SHGC windows without proper shading can still be an issue.

6. Metrics Update: Data Analysis
    - Propose sticking with analysis of building design, not operation
    - Building operations analysis will be possible with BeRT – Building Energy Requirements Tool
7. Metrics Update: Costing
    - Due to time, deferred for discussion at next meeting – earlier suggestion to consider other low cost options (e.g., average of lowest 10) rather than just lowest cost option
8. Microsoft Teams – is available for online collaboration. BSSB to send info on accessing.

BM4EAC - Zero Emission Buildings Retrofit Strategy Steering Committee

From: Lee, Winnie <Winnie.Lee@vancouver.ca>
To: Jessica Williams <jessica@zebx.org>, Conor.Reynolds@metrovancouver.org, peter.russell@richmond.ca, JOwen@surrey.ca, Robyn.Wark@bchydro.co, dstathonikos@boma.bc.ca, kbarbero@mcabc.org,s.22 Christine@harbourgreene.ca, mark@havan.ca, asutherland@ibc.ca, tony@choa.bc.ca, lworth@bcpiac.com, davidh@landlordbc.ca, s.22 May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>, sYano@davidsuzuki.org, Brent.Graham@fortisbc.com, jfisher@udi.org, Christian@zebx.org, aschatz@cagbc.org, bmackinnon@bchousing.org, Karen Tam Wu <karentw@pembina.org>
Cc: Pander, Sean <sean.pander@vancouver.ca>, Lang, Micah <Micah.Lang@vancouver.ca>, Mitchell, Amanda <Amanda.Mitchell@vancouver.ca>
Sent: September 1, 2020 3:34:54 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Everyone,

Thank you for joining our first Vancouver's Climate Emergency Big Move 4 External Advisory Committee (BM4EAC for short) for Zero Emissions Buildings back in June. This is an overview and opportunity to provide feedback on Vancouver's Zero Emissions Building Retrofit Strategy:

A ten year strategy to reduce emissions from existing buildings in Vancouver by 50% by 2030 and establish a clear trajectory for all buildings in Vancouver to be zero emissions before 2050. This strategy reflects the feedback of the Committee from the first meeting in June, subsequent meetings with smaller groups focused on specific building types or topics, and insights gathered as part of the Building Electrification Roadmap process.

It will speak to recommended future regulatory requirements, capacity building programs, and the work needed to begin removing barriers to widespread, deep emissions reductions in Vancouver homes and workplaces.

Please let me know if you are unable to attend this upcoming meeting in September.
——
The City of Vancouver is inviting you to a scheduled Zoom meeting.

Topic: BM4EAC Zero Emission Buildings Retrofit Strategy Steering Committee
Time: **Sep 21, 2020 01:30 – 4:00PM Vancouver**
Join Zoom Meeting
s.15

Cheers,

WINNIE LEE | **Planning Assistant III**
Planning, Urban Design and Sustainability | City of Vancouver
604.871.6577 | winnie.lee@vancouver.ca

Acknowledging the unceded homelands of the Musqueam, Squamish and Tsleil-Waututh nations

FW: Part 3 Energy Code Compliance Survey - Survey Questions for Stakeholder Review - Compiled Survey Feedback

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: September 2, 2020 9:47:25 AM PDT
Attachments: 2020 09 02 Part 3 Energy Compliance Survey Stakeholder Feedback_summary slides.pdf, image001.jpg, image003.jpg, 22545.000 Master Survey Comments From Stakeholders.pdf

Zac – as mentioned, this is Fortis's Part 3 compliance study.

Scott – I've saved this email and docs to the LAN for reference.

From: Christy Love <clove@rdh.com>
Sent: September 2, 2020 9:02 AM
To: Lau, Toby <Toby.Lau@bchydro.com>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; dbridge@coquitlam.ca; schipper@chilliwack.ca; rob.lawrance@nanaimo.ca; Zara Rockwell <zrockwell@lakecountry.bc.ca>; MGatensby@aibc.ca; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'Catherine Ernst' <catherine.ernst@boabc.org>; jere@orchardswalk.com; Susan MacDougall <susan@focaleng.com>; Riley Beise <riley@focaleng.com>; ccullen@teamconstruction.ca; shawn@quadrahomes.com; rick.bortolussi@tlhousingsolutions.ca; jfisher@udi.org
Cc: Bains, Bea <Bea.Bains@fortisbc.com>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>; Alex Janusz <ajanusz@rdh.com>; Sarah Bozoian <sbozoian@rdh.com>; James Boak <jboak@rdh.com>
Subject: RE: Part 3 Energy Code Compliance Survey - Survey Questions for Stakeholder Review - Compiled Survey Feedback

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning everyone,

Thank you all for providing such insightful feedback on the Part 3 survey. I've attached the compiled comments in advance of our discussion this afternoon, along with draft slides to guide the discussion.

Best Regards.
Christy

Christy Love | P.Eng., CPHC

RDH Building Science Inc.
T 250 479 1110 x 104 | C 250 818 6824

I am working from home at this time. Email is probably the best way to reach me.
Questions about COVID-19 and RDH? Click here to learn more.

From: Christy Love
Sent: August 14, 2020 1:33 PM
To: Lau, Toby <Toby.Lau@bchydro.com>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; dbridge@coquitlam.ca; schipper@chilliwack.ca; rob.lawrance@nanaimo.ca; Zara Rockwell <zrockwell@lakecountry.bc.ca>; MGatensby@aibc.ca; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'Catherine Ernst' <catherine.ernst@boabc.org>; jere@orchardswalk.com; Susan MacDougall <susan@focaleng.com>; Riley Beise <riley@focaleng.com>; ccullen@teamconstruction.ca; shawn@quadrahomes.com
Cc: Bains, Bea <Bea.Bains@fortisbc.com>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>; Alex Janusz <ajanusz@rdh.com>; Sarah Bozoian <sbozoian@rdh.com>; James Boak <jboak@rdh.com>
Subject: Part 3 Energy Code Compliance Survey - Survey Questions for Stakeholder Review

All,

Thank you to all of you who attended our stakeholder kick-off yesterday (for those who missed it, I've attached the summary slides for reference).

As discussed, please find attached the following:

- html file that shows the survey flow/organization
- Word document of exact question wording
- I encourage you to review these side by side so you can see how the questions fit into the overall survey

The files are also available via OneDrive, here:
https://irdh-my.sharepoint.com/:f:/r/personal/clove_rdh_com/Documents/22545.000%20Survey?csf=1&web=1&e=kxQHh1

The ask: Please review and provide comments on the content, wording and/or organization of questions. As discussed in our kick-off, the Word document indicates where content as changed since the 2015 survey. We will be limited in how much we can change the previous questions given that we want to compare results since the previous survey.

You are welcome to add comments directly to the OneDrive file; to track changes and send a marked up Word document, or add key comments in an email.

Timeline: we request that all comments from this initial review be sent back to me by **Friday August 28**. We will set up a meeting with the group to discuss any major comments.

I am available if you have questions as you dive in.

Thank you for being part of this process!

Best Regards,
Christy

Christy Love | P.Eng., CPHC
Principal, Vancouver Island Regional Manager

I am working from home at this time. Email is probably the best way to reach me.
Questions about COVID-19 and RDH? Click here to learn more.

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SEPTEMBER 2, 2020

2020 Part 3 Energy Code Compliance Survey – Stakeholder Feedback Discussion

Pete Koepfgen, FortisBC
Christy Love, Alex Janusz, James Boak, Sarah Bozoian – RDH Building Science

RDH

Agenda

- 2:00: Welcome and intro of new participants
- 2:05: Review of major comments received
- 3:00: Review of any other comments not previously submitted
- 3:20: Next steps and schedule update
- 3:30: Closure

RDH

Background – Stakeholder Role

- Survey design:
  - Are we asking the right questions (note limitations)?
  - Are they asked in the most clear way?
  - Are we missing any questions?
- Survey distribution:
  - Assist with circulation via member organizations
- Respond to survey
- Participate in focus group?
- Develop/implement actions based on results?

RDH

Comments Received

- Clarity comments
  - How long will survey take; can it be completed in multiple sittings – provide in intro/preamble
  - Part 9 – what is in/out?
    - Non-residential buildings > 300 , 600 m2 need to follow NECB
  - Q3A: Align building type options with major BCBC occupancy groups, ie:
    - Group A, assembly occupancies
    - Group B, care, treatment or detention occupancies
    - Group C, residential occupancies
    - Group D, business and personal services occupancies
    - Group E, mercantile occupancies
    - (Group F, N/A)
  - Q3-6 – combine redundant questions
  - Clarify re: major renovations: “major renovations that are required to meet energy code requirements”

RDH

Comments Received

- Scope comments
  - Include VBBL as a line item – enable respondents to rate compliance by compliance path
    - Indicate percentage buildings following each path
  - Is it useful to ask perceptions about building industry in general vs individual's own projects?
  - Q7, Q16/20: Is it useful to provide responses that would imply negligence/lack of adherence to fundamental obligation?.
    - a) Q7 asks building officials whether policy is enforced implicitly or explicitly -

      Would it not be better to ask about how it is enforced (directly, by staff, vs. indirectly, by consultants) or about the resources are allocated.
    - b) Q16/Q20 has a response that indicates that professionals are operating to avoid consequences, rather than in accordance with professional ethics.
  - Q13: Should we be asking whether building "strictly meet all requirements", or whether they "Substantially comply in all material respects".
  - Q4a: Survey asks for projects respondents have worked on over the past 2 years – extend this?
  - Q6a/11: clarify – requirements could be BC Housing which could be > than municipal requirements.
    - Passive House is also a compliance path (e.g. for rezoning in City of Vancouver – include as an option?

RDH

Comments Received

- Scope comments
  - Q21: Suggestions to add to question in blue. **Previous surveys indicated support for several measures that are now in place with the BC Energy Step Code. How effective do you believe the following measures have been in improving energy code compliance?**

Implemented Measure	Effectiveness
City of Vancouver Energy Modeling Guidelines Version 2.0	
Building Envelope Thermal Bridging Guide	
Illustrated Guide – Achieving Air-tightness	
AIBC EGBC Whole Building Energy Modelling Guideline	
Step Code website	
live courses or demos	
Part 3 Energy Design Report (beta)	
Design Guide Supplement on Overheating and Air Quality	
Guide to Low Thermal Energy Demand for Large Buildings	
Step Code Builder Guide	
Design Guide and Supplement – available at https://energystepcode.ca/for-industry/	
https://energystepcode.ca/incentive-programs/	
add seminars/webinars	
municipal info sessions	
municipal support/assistance	
Other design guides and handbooks	
Other (please specify)	

RDH

Comments Received

- Scope comments
  - Q22: Suggestions to add to question in blue: **What more do you believe would make it easier to meet the BC Energy Step Code?**

Implemented Measure	Effectiveness
More/cheaper product options	
In-person education and training opportunities	
Additional learning resources, such as videos, online courses, case studies and guides	
Real-time support / help desk	
Checklists like the step code compliance reporting form	
Live workshops and demos	
General break down to more DESIGN resources vs more REVIEW/CONSTRUCTION resources	
Local government policies	
Cost-benefit analysis tools	
Compliance tools	
Other (please specify): _____	

RDH

Timing, Next Steps

- Survey update based on comments received and today's discussion
  - Complete by Sept 8
- Signoff by project partners
  - Complete by Sept 15
- Coding/formatting/testing of online survey
  - Sept 16-29
  - A couple stakeholders to test/vet final version?
- Targeted survey launch: Sept 30
  - Stakeholders to assist with distribution

RDH

Discussion + Questions

Learn more at
rdh.com

RDH Building Science

@RDHBuildings

RDH

Page 380 of 402 to/à Page 394 of 402

Withheld pursuant to/removed as

s.13

GHGi for buildings

From: Aharonian, Dave ENV:EX <Dave.Aharonian@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 2, 2020 1:57:35 PM PDT
Attachments: image003.jpg

Hi Zach,

Re. the note below you sent to Ben a while back, is there any update on question 1 since then? We have a couple of UBCM meeting requests that any new information would help with.

Thank you!
Dave

Dave Aharonian (he/him) Senior Policy Analyst
Climate Partnerships & Engagement (Local Governments, Adaptation)
BC Climate Action Secretariat
Ministry of Environment and Climate Change Strategy
778 974 5658

From: Finkelstein, Ben ENV:EX
Sent: July 29, 2020 8:30 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Aharonian, Dave ENV:EX <Dave.Aharonian@gov.bc.ca>
Subject: RE: GHGi for buildings

Thanks Zac,

This is very helpful and good to hear. Nothing urgent currently but will reach out for updates when/if we get other requests for information.

Ben

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 28, 2020 9:39 PM
To: Finkelstein, Ben ENV:EX <Ben.Finkelstein@gov.bc.ca>
Cc: Koski, Chris ENV:EX <Chris.Koski@gov.bc.ca>; Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>; Kaye, Erik ENV:EX <Erik.Kaye@gov.bc.ca>
Subject: RE: GHGi for buildings

1. When will this work be public knowledge as we are seeing the request for GHGi coming up more and more in letters to the Minister?

   We have also received letters, most recently from Metro Vancouver. We have announced that we're moving forward on this issue at the Step Code Council meeting in June, but we have been delaying launching external consultation until we are able to brief up high enough to get the ok to proceed. Briefings have been hard to We could hear back in the next few weeks, or it could take until September if the Minister needs to weigh in.

   Are there any timing sensitivities from a CAS perspective we should know about? I was hoping to have this underway well before UBCM, but not sure if we will be able to pull that off if we're delayed pulling together external stakeholders into September.

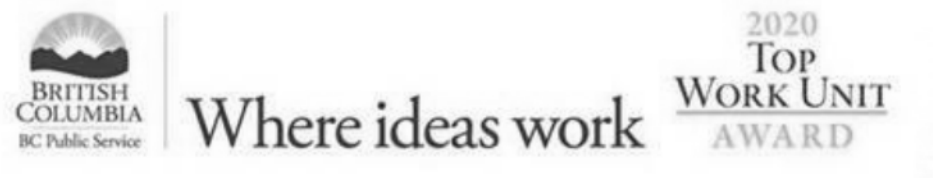
2. Will Step Code Council, supported by BC Hydro, be engaging on this with industry and local governments, like in the past?

Yes. The plan is to develop targets/steps, and a voluntary implementation approach through the Energy Step Code Council. The council has unanimously supported working on this issue. Fortis, UDI, and CHBA BC support working on this issue so long as it's through the council and led by BSSB, so there's hope for a positive outcome that everyone can support.

Happy to discuss further. I'm around the rest of this week and off the first two weeks of August.

Best,

Zachary D. May, MBA
Acting Executive Director
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



May 5

May 5, 2020 2:44 PM



ER Engagem...



Jobs analysis a...



notes from May ESCC...



Framework Concept V3

Agenda:

1. Questions on Transition Plan (with Cimarron)
2. Plans for Executive Briefing tomorrow (with Cimarron)
3. Key points to present from ED input (Zac)
4. Overall Workplan (Andrew) – see attached.
5. Engagement plan (Zac)
6. Content for powerpoint (if any) and speaking points for three of us (all)

Greetings both,

Adding to Jessica's points, I would add the Greg Steves gave us feedback that we will need to engage stakeholders soon. My comments/edits to the engagement plan document were evidently broader than engagement alone, as it is now time to start mapping out our workplan as well.

From a project management standpoint, I suggest the following framework:

- Initial information gathering (complete)
- Define preliminary objectives and scope (complete, in Concept paper)
- Early engagement with key influencers (complete, with EDs)
- Prepare Charter, prepare preliminary work and communications plans (in the 2nd document that Aura prepared)
- Present preliminary information (Friday)
- Confirm objectives, scope, and pitch preliminary workplan and communications plan with Executive (potentially on Friday)
- Revise work and communications plans
- Execution of work plan

I suggest we have three layers of engagement for each of our project components:

1. Internal, with MAH EDs and Executive
2. Other internal stakeholders (including Crowns) such as BC Housing, FLNRORD, JEDC, Finance, MEMPR, BC Hydro

3. External stakeholders (UDI, CHBA, UBCM, etc.)

I suggest we use similar materials for each of the three layers of engagement for each of the project components. Here is some early thinking on the components (this is evolving, but hopefully we can lock it down soon):

a) Problem definition, data gathering and opportunity identification phase. Key product: Concept Paper (complete)
b) Differentiation of transition versus recovery initiatives. We could prepare a table that illustrates transition versus recovery actions for each of the sectors we identified in the table of the concept paper. The two are evidently linked. We could review the materials from today's announcement by the Premier as a key source of information, and the paper that Cimarron was working on.
c) Confirmation of "recovery" opportunities (to make sure nothing was missed), brainstorm on "long-term paradigm-shifts" for each of them (in other words, we are limiting discussion to those opportunities that could facilitate a pivot to a "new normal"), and method for analyzing impacts and prioritizing opportunities. Evidently DAPR will surface to the top of priorities, along with innovation in building design.
d) Draft "plan", outlining recommended actions, pros and cons and impacts.

So far, we have completed (1)(a). We are already summarizing results from EDs as a basis for pitching this to MAH Executive. However, before we meet with people externally, we will want to confirm some points with key government Branches and Crown Corporations such as BC Housing. We can use the same Concept Paper to meet with them.

For discussion tomorrow afternoon.

Cheers,
Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

Concept Paper:

MAH Framework for COVID-19 Community and Economic Recovery

Commented [BJM1]: NOTE:EDs are requested to provide feedback on the proposed approach and to complete Table 1 to the best of their ability

Context

Across BC the impacts of COVID-19 are significant, with variable effects on individual sectors and individuals. Many components of the **economy** have been hit particularly hard and in parallel, the social fabric of BC's **communities** will also require supports to transition and strengthen post COVID-19.

BC's successful recovery from COVID-19 will require action across multiple sectors, with the province needing to take on a significant role with both financial and policy supports for economic recovery. At the same time, some emergent business practices and social activities caused by public health restrictions are having positive impacts on the **environment** and quality of life; efforts to maintain these should be a consideration or lens that is layered onto recovery actions. Furthermore, building the **resilience** of BC communities to withstand and manage for future anticipated chronic stresses (e.g. potential future iterations of the COVID-19 pandemic) and acute shock emergencies (e.g. extreme weather events) will be key to our long-term well being and economy.

The success of MAH's recovery planning will depend on alignment with related Ministry and government priorities, effective use of available data, and meaningful engagement with stakeholders. Recovery planning will be coordinated with MAH transition planning, as well as priorities identified by the Premier's Task Force on Economic Recovery. MAH's draft strategic plan and the Province's Economic Plan 2019-2020 will also serve as foundational documents that inform key strategic outcomes the recovery plan will support.

Further work is required to gather relevant data and stakeholder input related to the impacts and opportunities created by COVID-19, before a recovery strategy or specific actions can be recommended. The Ministry of Municipal Affairs and Housing (MAH) is actively engaging with stakeholders across all levels of government, industry and professional organizations, crown corporations and regulatory agencies, as well as the not-for-profit sector, to identify impacts from COVID-19 and support measures to help the economy and communities thrive both now and through recovery. Through this process, new challenges and opportunities are being identified as the economic and social impacts of COVID-19 continue to evolve.

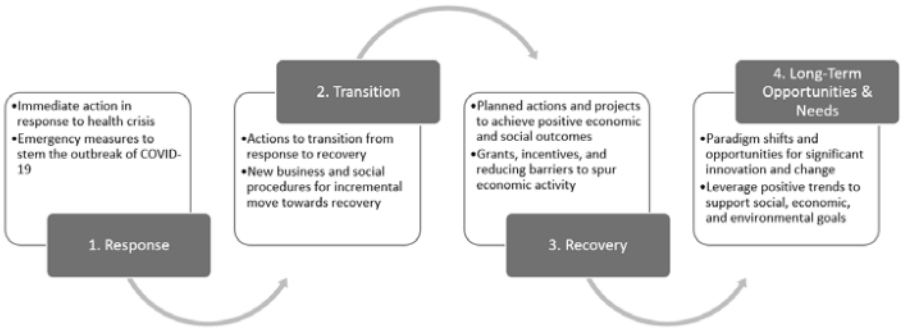
While the impacts present unprecedented challenges, there are also signs of emerging innovation and new opportunities, providing some fodder for a paradigm shift toward a more resilient economy and communities. For example, MAH partners and all sectors of the economy are finding new ways to conduct business online. This has resulted in virtually the elimination of lengthy commuting which has freed up time for workers to spend time on other parts of their lives, as well as significant reductions in environmental impacts. In addition, collaboration between communities and the Province to address chronic issues that have become acute emergencies, such as homelessness and poverty has increased significantly.

Taking Action

Within its scope of authority, MAH has responsibility for, or core engagement with, a number of sectors that have a critical role in BC's economic and social recovery. These include:

- Local governments, who are responsible for infrastructure and service delivery to BC communities and who influence the social fabric. They are expected to be recipients of federal and provincial infrastructure and stimulus funding.
- The housing sector, including security of tenure, affordable market housing, and the provision of social/supportive housing, which are fundamental to the health and wellbeing of BC residents and will be key to the successful transition of vulnerable populations from the current response state.
- Land development, buildings and new housing, which provides significant financial investment into the provincial economy and are important foundations for community resilience and carbon mitigation. The total investment in building construction was $32billion in 2019.
- Public transit (MAH responsibility for TransLink in Metro Vancouver), which has a critical role in leveraging senior government investment in affordable housing and sustainable land use; facilitating economic development; and reducing our carbon footprint.
- Non-profits who further enhance our BC's social fabric, public safety, environmental protection, and other priorities, supported by Community Gaming Grants.
- Indigenous communities who have Aboriginal Title and influence over land and resource development and provide similar or emerging governance and services as LGs across all regions of the province, including housing.

Within these areas, and consistent with its strategic plan[1], MAH has significant levers that it can bring to bear across the four recovery phases: (1) response; (2) transition; (3) recovery; (4) long-term opportunities and needs. The levers include direct investment, policy shifts, legislative and regulatory change, governance, and education/outreach.



[1] Specific actions will be organized at a high level around the MAH strategic objectives for the outward facing goal #1 of helping communities thrive: Communities are well planned for today & tomorrow; Communities are supported to build capacity & be well governed; Housing is affordable, available & secure; The built environment & technical systems are safe & sustainable

Commented [FRAM2]: Something to consider is environment scans of these sectors and drivers at the appropriate time of current and projected

Commented [BJM3]: Per Marijke's comments, we might want to blow out the LG section a little and roll land development into that section (or at least acknowledge)

Commented [FRAM4]: This is an area where PAS may play a role along with tax policy through tax and assessment policy

MAH has been implementing numerous initiatives as part of the COVID *Response* phase, including changes to the local government tax regime led by LGD and Finance that reduced most commercial property taxes by an average of 25%, providing up to $700 million in relief, and CGG branch $3-million emergency grant from the Community Gaming Grants program to Food Banks British Columbia. Actions identified to advance BC's successful recovery will support both near- and mid-term action related to phases 2 and 3: *Transition and Recovery*.

Transition and Recovery Actions (Phases 2 and 3)

Transition and recovery actions will include **profiling or expansion of existing initiatives** to focus on economic and community recovery, along with the **identification of new opportunities**.

Key issues resulting from COVID-19 are identified in table 1 below, along with the critical **outcome objectives** that will support transition and recovery (phases 2 and 3). These included active, planned and proposed initiatives in MAH. They cover the full spectrum of MAH "levers".

For subsequent phases of work, the tables included in Appendix A will identify the specific activities necessary to support the achievement of the identified outcome objectives, including key linkages to the MAH Strategic Plan.

Paradigm Shift (Phase 4)

MAH is also identifying fundamental trends and opportunities for change in industry, governments, and society to support phase 4. While some changes from COVID-19 are temporary, other changes will be much longer lasting and may reshape the way we engage with our communities and the built environment. MAH is working to identify and incorporate these changes into Ministry activities, with the goal of supporting a positive transition and leverage these changes to support goals in the Ministry's strategic plan, where possible. At a very general level these paradigm shifts may include:

- Greater focus on preparation, resilience and adaptation in the built environment and society for a range of acute shocks (earthquake, dangerous climate change) and chronic stresses (housing security), aligned with the *Emergency Program Act* Modernization
- Blending of social, economic and environmental policy to co-optimize efforts and achieve multiple co-benefits, including CleanBC, DRIPA, accessibility and homelessness reduction
- Appetite for innovation in all sectors of the economy
- Changes to business models and financial security
- Increased use of technology and associated "new infrastructure" needs (e.g., broadband)
- Changing nature of work and geographic distribution of employment
- Changes to transportation infrastructure use and patterns

Next Steps:

- Stakeholder engagement strategy to gather information to inform recovery planning and establish key information networks to validate recovery plans and monitor implementation outcomes
    - See engagement plan

Commented [FRAM5]: Minot point, but I believe this is school taxes (i.e. MFIN) , so LGD's role was probably minimal so maybe want to rephrase

Commented [BJM6]: NOTE: EDs are requested to please identify major areas of 'normal' activity / authority, key associated challenges arising from CODIV-19, and critical outcome objectives for transition and recovery, in the table below

Commented [BJM7]: NOTE: EDs are requested to please identify major areas of normal activity, key issues within them arising from CODIV-19, and critical outcome objectives for their recovery in the table below

    - Economic analysis
    - Stakeholder input
- Coordination with MAH transition planning process to ensure that engagement and planning are complimentary
- Establish draft strategic outcomes to guide action planning
    - (based on Ministry and stakeholder input, MAH strat plan, economic plan, transition planning, and PJH Task force)

RE: FYI - UDI Call on WWHR today at 10

From: May, Zachary OHCS:EX
To: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Sent: September 11, 2020 8:47:10 AM PDT

No concerns. Please loop in Nicole. She may want to join and include any feedback we receive in upcoming briefing notes and discussions

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Sent: September 11, 2020 8:43 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FYI - UDI Call on WWHR today at 10

Hi Zac,

This is just an FYI that Cassandra from UDI asked for a phone call with me to discuss the WWHR – didn't say what about. Sounds like they just have some questions.

Let me know if you have concerns about me taking this call.

KYLIE SANDHAM, MPA, PMP, MCIP/RPP | **Policy Analyst**

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Email: Kylie.Sandham@gov.bc.ca
TEL: 250-213-6502

From: Cassandra McColman <cmccolman@udi.org>
Sent: September 15, 2020 5:54 PM
To: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: Alterations to Existing Buildings Project – Fall 2019 Stakeholder Consultation Report

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Kylie,

I hope you're getting some relief from the smoke on the Island now. I wanted to reach out to thank you for the call with Jeff and I on Friday. As we discussed, our members remain concerned that any proposed policy options would need to account for situations where buildings are likely to be redeveloped in the near future, and provide flexibility for building owners. This is particularly important in instances where there is a land-use change determined by the municipality or other external factors (ie. transit infrastructure) that would impact an owner's decision on renovation or redevelopment.

Other topics that we are looking to be addressed through the proposed policy options will be the treatment of purpose-built rental buildings under the Alterations Code, including how upgrades would be funded, should they be required. As well as leadership in implementation by the broader public sector.

We also appreciated the opportunity to provide additional feedback on the need for capacity building in the municipal sector, not only to process additional renovation and building permit applications, but also for building officials, particularly in areas of the province outside the Lower Mainland.

We look forward to opportunities to connect with other stakeholders including municipal staff, other departments within MAH, as well as other ministries in the next round of consultation to discuss these and other topics that affect multiple sectors. Once you're able to share additional details regarding the next steps for consultation later this fall, we would be happy to review the proposed policy options and convene a group of our members for consultation.

Many thanks,
Cassandra

Cassandra McColman | Manager, Policy and Research
Urban Development Institute
cmccolman@udi.org Direct: 604.661.3032
udi.bc.ca

FW: UDI/CHBA Letter - August 20 BCFSA Consultation Session on Strata Property Insurance in British Columbia

From: May, Zachary OHCS:EX
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: September 16, 2020 3:28:49 PM PDT
Attachments: UDI-CHBA Joint Letter- August 20 BCFSA Consultation Session on Strata Property Insurance in British Columbia - September 16 2020.pdf

Not sure who else was bcc'd on this, but thought I would forward.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Marissa Chan-Kent <mchan-kent@udi.org>
Sent: September 16, 2020 11:51 AM
To: Strata Insurance FSA:EX <StrataInsurance@bcfsa.ca>; Morrison, Blair FSA:EX <Blair.Morrison@bcfsa.ca>
Cc: neil@chbabc.org; Anne McMullin <AMcMullin@udi.org>; Minister, FIN FIN:EX <FIN.Minister@gov.bc.ca>; Minister, MAH MAH:EX <MAH.Minister@gov.bc.ca>
Subject: UDI/CHBA Letter - August 20 BCFSA Consultation Session on Strata Property Insurance in British Columbia

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello,

On behalf of Anne McMullin, President and CEO of the Urban Development Institute and Neil Moody, CEO of the Canadian Home Builders' Association - British Columbia, please see attached letter regarding *August 20 BCFSA Consultation Session on Strata Property Insurance in British Columbia*.

Thank you for including our organizations in this consultation process. Please do not hesitate to get in touch if you have any questions or would like to discuss further.

Best Regards,

Marissa Chan-Kent | Director, Policy & Government Relations

Urban Development Institute
mchan-kent@udi.org
Office: 604.661.3033
Cell: 778.846.2549

udi.bc.ca

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CANADIAN HOME BUILDERS' ASSOCIATION OF BC
400 – 6400 Roberts Street
Burnaby, British Columbia V5G 4C9
T. 604.432.7112
www.chbabc.org

September 16, 2020

Blair Morrison
Chief Executive Officer
BC Financial Services Authority (BCFSA)
2800 - 555 West Hastings Street
Vancouver BC, V6B 4N6

Dear Mr. Morrison:

Re: August 20 BCFSA Consultation Session on Strata Property Insurance in British Columbia

We would like to thank the BCFSA for involving the Canadian Home Builders' Association of British Columbia (CHBA BC) and the Urban Development Institute (UDI) in the August 20 consultation on rapidly increasing strata property insurance rates in British Columbia. We have several issues, many of which were discussed on the August 20th call, as well as other recommendations for the BCFSA on this critical issue.

Both CHBA BC and UDI were disappointed that we were not involved in the earlier consultation that led to the June 16 *BC Strata Property Insurance Market – Interim Findings* letter to the Hon. Carole James, Minister of Finance and Deputy Premier. We represent builders who provide new multi-family strata homes to British Columbians, and as noted in the letter, "*Strata insurers are now appearing to be more reluctant to insure new buildings less than five-years old*." The increasing strata insurance premiums are also adding to the strata fees, which undermines affordability for new homebuyers. Our members have to disclose strata fees, so reducing insurance costs is important to them.

Having stated this, we recognize that the BCFSA is still at a preliminary stage, as the data provided at the August 20 session was limited and no recommended policies or regulatory changes were proposed. Staff noted that the data they had been provided by insurers was only 6,000 properties in the early part of 2020. Staff indicated the data was limited to a small group of affected properties and collected at an earlier point in time. Before any proposed actions are provided to the Province, more recent and comprehensive data is needed, so we can confidently assess what the best options are to mitigate rising insurance rates. In addition, there are a variety of strata residential building types and units. The data collected should be expanded beyond a simple unit-by-unit analysis to differentiate clearly between new, existing, wood-frame, concrete, low-rise and high-rise buildings. We ask that if more insurance data is provided to the BCFSA, it be shared with other stakeholders.

The sharing of information and data is critical if we are going to resolve this problem. It was noted in the June interim letter that "*Insurers are incurring losses mostly from minor claims (particularly those resulting from water damage) due to poor building maintenance practices and initial construction quality issues*." Both UDI and CHBA BC

would appreciate knowing what construction quality issues are occurring, so steps can be taken to better assess what measures are appropriate.

In addition, we need to know if there are features that are being incorporated in new buildings that are driving up insurance costs, as well as if there are features that could be incorporated in buildings to reduce insurance costs. Ideally, the approach that can be taken is there is an automatic reduction in strata insurance costs if these features are (or are not) put in new strata buildings. This is similar to the approach taken for auto insurance when anti-theft devices or automatic breaking features are installed in vehicles.

We would be wary of a one-size-fits-all regulatory approach in which actions are mandated for builders or strata corporations (e.g. building code amendments, changes to the home warranty program, additional strata maintenance fees) if they do not end up reducing insurance costs - or end up costing more than what is saved through strata insurance reductions. As mentioned above, the regulatory approach would need to take into account that there may be different solutions for the variety of strata residential building types and units.

In addition, it will be important to have follow-up sessions with stakeholders if the BCFSA is contemplating specific recommendations to Government, as we would like the opportunity to provide input on any proposals to the BCFSA, Ministry of Finance and Ministry of Municipal Affairs and Housing.

It has also been clear from our discussions with the insurance industry that many view wood-frame and tall timber construction as risky, which is, in part, increasing strata insurance rates. As the Province and local governments look at expanding the use of wood in new buildings through incentives and even mandated requirements, we recommend that the Insurance Bureau of Canada be involved in any future consultations on this issue.

In addition, we note that in the Insurance Bureau of Canada's National Commercial Insurance Task Force's Midterm Report that, "*The cost of delays in municipal permitting in BC, particularly in the Lower Mainland, is affecting insurers. Delays and backlogs in the municipal permitting process in greater Vancouver extend the time it takes to repair and rebuild properties after insured losses. Insurers must cover additional costs associated with these delays, such as additional living expenses, which can last months or even years."* They put forward a recommendation that the Province and local governments find ways to speed up municipal permitting processes. UDI and CHBA BC have long identified the delayed municipal permitting process as a key issue that has impacted the affordability of homes – beyond strata insurance rates.

Thank you again for including us in your consultations on strata insurance. Both CHBA BC and UDI want to work with the BCFSA, the Province, the insurance industry and other stakeholders to reduce insurance costs for stratas and their homeowners.

Yours sincerely,

Anne McMullin
President & CEO, UDI

Neil Moody
Chief Executive Officer, CHBA BC

C.C. Hon. Carole James, Minister of Finance and Deputy Premier
Hon. Selina Robinson, Minister of Municipal Affairs and Housing

B.C.C. Wendy Acheson, Vice President and Registrar Licensing and Consumer Services, BC Housing
Zachary May, Director Strategic Policy, Building and Safety Standards Branch
Doug Page, Director Policy and Legislation, Housing Policy Branch
Aaron Sutherland, Vice President Pacific, Insurance Bureau of Canada
Jordan Owens, Senior Account Director, Hill +Knowlton Strategies

RE: [External Email] - Poll: October Energy Step Code Council meeting date

From: May, Zachary OHCS:EX
To: Bains, Bea <Bea.Bains@fortisbc.com>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: September 17, 2020 2:44:37 PM PDT
Attachments: image001.jpg

Hi Bea,

We are still having internal discussion about next steps on GHG emissions and the Step Code and until those have concluded we will be holding off further external engagement on the topic, including at the Step Code Council. Happy to include the Pathways report in the discussion when it continues, but we're still working on when that might be. I'll let you know as soon as we are ready to move forward.

Thanks again for sharing that information with our team.

Best,
Zachary D. May, MBA
Director, Strategic Policy

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service

Where ideas work

2020 Top Work Unit Award

From: Bains, Bea <Bea.Bains@fortisbc.com>
Sent: September 17, 2020 2:25 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: FW: [External Email] - Poll: October Energy Step Code Council meeting date

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Hi Zac,
Just wanted to check to see if are all good in to include the Pathways study on the next step code council meeting agenda?

Regards Bea

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Wednesday, September 16, 2020 4:03 PM
To: msohi@boabc.org; catherine.ernst@boabc.org; sean.pander@vancouver.ca; patrick.enright@vancouver.ca; NConnolly@richmond.ca; lise.townsend@surrey.ca; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; jjung@asttbc.org; MGatensby@aibc.ca; warrenp@bccassn.com; muneesh@boma.bc.ca; bdeeks@rdcfinehomes.com; joe.iconhomes@shaw.ca; kelly@hkrbuilders.com; hradhakrishnan@egbc.ca; jfisher@udi.org; christian@zebx.org; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; robyn.wark@bchydro.com; Bains, Bea <Bea.Bains@fortisbc.com>; christine.gillis@canada.ca; christopher.frye@canada.ca; wileung@bchousing.org; Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; toby.lau@bchydro.com; NConnolly@richmond.ca; nheap@richmond.ca; mmcwilliam3@bcit.ca; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; mchorobik@communityenergy.bc.ca; lsampliner@portmoody.ca; Lisa.Mak@bchydro.com
Subject: [External Email] - Poll: October Energy Step Code Council meeting date

CAUTION: This is an external email.
Do not respond, click on links or open attachments unless you recognize the sender.

Hello, Energy Step Code Council members:

It is time for a quick check in for the fall. We would like to schedule a three-hour meeting.

Please indicate your availability using this Doodle poll: https://doodle.com/poll/739vew8q3zc25cke

Thanks very much.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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*"FortisBC" refers to the FortisBC group of companies which includes FortisBC Holdings. Inc., FortisBC Energy Inc., FortisBC Inc., FortisBC Alternative Energy Services Inc. and Fortis Generation Inc.

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FW: Poll: October Energy Step Code Council meeting date

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: September 23, 2020 8:33:59 PM PDT
FYI

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: September 23, 2020 4:58 PM
To: msohi@boabc.org; catherine.ernst@boabc.org; sean.pander@vancouver.ca; patrick.enright@vancouver.ca; NConnolly@richmond.ca; lise.townsend@surrey.ca; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; jjung@asttbc.org; MGatensby@aibc.ca; warrenp@bccassn.com; muneesh@boma.bc.ca; bdeeks@rdcfinehomes.com; joe.iconhomes@shaw.ca; kelly@hkrbuilders.com; hradhakrishnan@egbc.ca; jfisher@udi.org; christian@zebx.org; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; robyn.wark@bchydro.com; bea.bains@fortisbc.com; christine.gillis@canada.ca; christopher.frye@canada.ca; wileung@bchousing.org; Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; toby.lau@bchydro.com; NConnolly@richmond.ca; nheap@richmond.ca; mmcwilliam3@bcit.ca; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; mchorobik@communityenergy.bc.ca; lsampliner@portmoody.ca; Lisa.Mak@bchydro.com; Michaela Neuberger <michaela@zebx.org>; Diana Dilworth <diana@havan.ca>
Subject: RE: Poll: October Energy Step Code Council meeting date

Hello, everyone:

Due to the upcoming provincial election, we are postponing this meeting as there is a pause in public consultation across the public sector. We hope to provide additional information soon. Please be in touch if you have any questions.

Best,
Hugo

From: Wong, Hugo OHCS:EX
Sent: September 16, 2020 4:03 PM
To: 'msohi@boabc.org' <msohi@boabc.org>; 'catherine.ernst@boabc.org' <catherine.ernst@boabc.org>; 'sean.pander@vancouver.ca' <sean.pander@vancouver.ca>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; 'lise.townsend@surrey.ca' <lise.townsend@surrey.ca>; 'mlohmann@communityenergy.bc.ca' <mlohmann@communityenergy.bc.ca>; 'J.Madden@ubc.ca' <J.Madden@ubc.ca>; 'jjung@asttbc.org' <jjung@asttbc.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; 'warrenp@bccassn.com' <warrenp@bccassn.com>; 'muneesh@boma.bc.ca' <muneesh@boma.bc.ca>; 'bdeeks@rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; 'joe.iconhomes@shaw.ca' <joe.iconhomes@shaw.ca>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; 'hradhakrishnan@egbc.ca' <hradhakrishnan@egbc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'christian@zebx.org' <christian@zebx.org>; 'Guido.Wimmers@unbc.ca' <Guido.Wimmers@unbc.ca>; 'robyn.wark@bchydro.com' <robyn.wark@bchydro.com>; 'bea.bains@fortisbc.com' <bea.bains@fortisbc.com>; 'christine.gillis@canada.ca' <christine.gillis@canada.ca>; 'christopher.frye@canada.ca' <christopher.frye@canada.ca>; 'wileung@bchousing.org' <wileung@bchousing.org>; 'Wacker, Holly MAH:EX' <Holly.Wacker@gov.bc.ca>; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; 'toby.lau@bchydro.com' <toby.lau@bchydro.com>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; 'nheap@richmond.ca' <nheap@richmond.ca>; 'mmcwilliam3@bcit.ca' <mmcwilliam3@bcit.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'mchorobik@communityenergy.bc.ca' <mchorobik@communityenergy.bc.ca>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; 'Lisa.Mak@bchydro.com' <Lisa.Mak@bchydro.com>

Subject: Poll: October Energy Step Code Council meeting date

Hello, Energy Step Code Council members:

It is time for a quick check in for the fall. We would like to schedule a three-hour meeting.

Please indicate your availability using this Doodle poll: https://doodle.com/poll/739vew8q3zc25cke

Thanks very much.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council
Part 3/Part 9 (Non-residential) Subcommittee
Metrics Research Report Update Steering Committee
Meeting #3
MEETING NOTES

Date: Thursday November 5, 2020 | **Time:** 10:30 a.m. – 12:00 p.m.
Steering Committee Chair: Scott Williams, Building and Safety Standards Branch
Microsoft Teams Meeting

Steering Committee Members Participating

Associations and Industry Hubs
Harshan Radhakrishnan, EGBC
Maura Gatensby, AIBC
Eoghan Hayes, IBPSA-Canada

Crown Corporation
Remi Charron, BC Housing
Wilma Leung, BC Housing

Industry
Jeff Fisher, UDI-Pacific

Local and Federal Governments
Greg McCall, City of Vancouver
Norm Connolly, City of Richmond, and Part 3/9 Subcommittee Co-Chair
Sepehr Foroushani, City of Richmond
Nicholas Heap, City of Richmond (and Part 9 Subcommittee Co-chair)
Iain MacDonald, National Research Council

Part 9 Buildings
Joe Hart, Pauline Rupp, Canadian Home Builders' Association
Mark Bernhardt, Bernhardt Contracting

Utilities
Toby Lau, BC Hydro and Part 3/9 Subcommittee Co-Chair
Pete Koepfgen, FortisBC
Saleh Lavaee, FortisBC (guest)

Building and Safety Standards Branch
Scott Williams, Dale Andersson, Zachary May

Regrets: Vanessa Joehl, CHBA BC; Bob Deeks, CHBA BC; Nicholas Standeven, UDI-Capital Region (Abstract Developments); Tanya RumaK, FortisBC; Maya Chorobik, CEA and Local Govt. Peer Network; Patrick Enright, City of Vancouver; Representative TBD, UDI-Okanagan; Kelly Reid, Canadian Home Builders' Association; Laura Sampliner, Port Moody and Local Govt. Peer Network

~~~~~~~~~~~~

ROLE OF STEERING COMMITTEE: Provide advice to guide an updated analysis of the 2018 Metrics Research Report, and an analysis of 20% better, to prepare for and determine the energy-efficiency requirements to be included in the 2022 BC Building Code.

ACTION ITEMS

- BSSB – revise scope given feedback provided by Steering Committee members
- Scott – connect with Iain MacDonald re: harmonization of work and building archetypes

Discussion of the revised draft included the following points:

- General
  - Clarify analysis to be done on climate zone 4
  - Combi systems - combination of gas/electric was used in the original report and we would be using the same for the update. Issues may arise when using HTAP (Housing Technology Assessment Platform) to model combi systems given the numerous changes to HOT2000
  - What future climate files will be used? 2020 and 2050 will be used for the overheating analysis
~~~~~~~~~~~~



  - Weather files: PCIC does have data for limited locations on their website which represents all climate zones. BSSB will be in discussion with PCIC regarding the data that was provided for the City of Vancouver and how this could be applied across the province
  - Iain MacDonald/National Research Council – doing lots of Part 3 analysis that could support this work – can do more complex work – have 240 archetypes based on ERS to get contemporary geometries for all climate zones. HTAP allows for much faster analysis, so could consider expanding the analysis to consider additional Part 9 archetypes.
  - Laneway homes – can be slab on grade but some are two storeys
  - NECB Schedule G issues
  - For Part 9 analysis, the % better metrics may not be the best method to compare different archetypes and ECMs (energy conservation measures) and absolute values (TEDI/MEUI) should be used instead
- VFAR discussions
  - Cube was not baseline in the original reports (not a typical building type); better to keep to baseline used in previous reports
  - VFAR analysis may demonstrate issues with % better approach because the form of the reference case will match the form of the design case
  - VFAR – volume to floor area may be better for Part 9 or exterior surface area to floor area
  - Less impact for Part 3 than for Part 9
- Costs
  - Previous reports looked at incremental capital costs (ICC) – took lowest 'reasonable' cost not just lowest cost
  - Operating costs were part of original work (NPV) but not a major focus of report – operating costs challenging as they depend on occupant behaviour
  - ICC can be tricky too: e.g., 3% increase on $300K vs $3m home very different for buyers
  - Lowest cost average of 10 approach and Part 9 – challenges if using % better approach; may understate lowest cost average; consider doing five of each – e.g., 5 SC (absolute metrics) and 5 9.36.5 or ERS?
- Modelling Tools
  - Morrison-Hershfield used a specific modelling tool in previous reports – how to address in this iteration? (didn't use archetypes but simulated them). Some inconsistencies may arise should a different consultant undertake the work, which may present challenges with comparing with past results and analysis
  - HOT2000 weak on cooling (cooling load not reliable) but overheating for Part 9 buildings will not be included in this work
  - Possibly use different tool for Part 3 vs Part 9?
- Future studies will be able to use data from the Part 9 Energy Compliance Reports – Pre-construction and As Built (Richmond has 60 As Built reports to date)

Chat Comments Provided

- Not sure if combi-systems can be modelled in latest versions of HTAP. So may not be able to include it for new modelling.
- The scope does not restrict the analysis to H2K. This is likely good given that other tools are better at overheating/cooling.
- The impact of TEDI adjusted to HDD vs the percent better depends on climate zone and archetype.
- VFAR was high-rise, for Part 9 might be more relevant to all exterior building envelope area or building volume.



- Resource for Simulation Weather files, recommend using 2016 files if available. BC Step code to specify weather files for each location as per Table C-2 in BCBC -2018. This is important to maintain modeling simulation consistency across the province and possibly Canada using tools like Ladybug/ One Building.org as a resource for the weather files. This is a free resource for modelers to download weather files from. https://www.ladybug.tools/epwmap/
- Since we started the first Metrics Study in late 2016, the 2016 CWEC files were not available at the time, and the CWEC files available at that time were used.
- Part 3 modeling tools can be used in some Part 9 archetypes (e.g., MURBs)
- Now would be a great time to update these files to 2016 as the old weather files are based on weather data from 40 years old. The old weather files are on average 10 % cooler then the 2016 files. This impacts the overheating analysis and the TEDI and TEUI targets. is it possible to get the analysis updated using the 2016 Weather file data?
- These files were used for Pt 3 in previous Metrics Study
    - CAN_BC_Prince.George.718960_CWEC.epw
    - CAN_BC_Kamloops.718870_CWEC.epw
    - CAN_BC_Fort.St.John.719430_CWEC.epw
    - CAN_BC_Vancouver.718920_CWEC.epw

Sectoral targets

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
To: Kaye, Erik ENV:EX <Erik.Kaye@gov.bc.ca>
Sent: December 1, 2020 4:46:54 PM PST

Hi Erik,

Can you remind me who is working on sectoral targets? UDI is calling me for details.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

sectoral targets

From:	May, Zachary OHCS:EX
To:	jfisher@udi.org
Sent:	December 2, 2020 7:50:46 AM PST
Attachments:	image003.jpg

Hi Jeff,

Thanks for your phone message. I'm aware of the commitment regarding sectoral targets and have been involved in some of those discussions in the last couple years. I'm still sorting out who at CAS is leading this work after the election reorganization, but I'm confident we'll be involved as the lead on codes. I'll see if we can get an update for the Step Code meeting next week.

Best,

Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: December 1, 2020 10:00 AM
To: Wong, Hugo OHCS:EX; msohi@boabc.org; catherine.ernst@boabc.org; sean.pander@vancouver.ca; patrick.enright@vancouver.ca; NConnolly@richmond.ca; lise.townsend@surrey.ca; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; jjung@asttbc.org; MGatensby@aibc.ca; warrenp@bccassn.com; muneesh@boma.bc.ca; bdeeks@rdcfinehomes.com; joe.iconhomes@shaw.ca; kelly@hkrbuilders.com; hradhakrishnan@egbc.ca; jfisher@udi.org; XT:Wimmers, Guido CITZ:IN; robyn.wark@bchydro.com; bea.bains@fortisbc.com; christine.gillis@canada.ca; christopher.frye@canada.ca; wileung@bchousing.org; Wacker, Holly MAH:EX; Gosman, Nat EMPR:EX; May, Zachary OHCS:EX; toby.lau@bchydro.com; nheap@richmond.ca; mmcwilliam3@bcit.ca; Andersson, Dale OHCS:EX; mchorobik@communityenergy.bc.ca; lsampliner@portmoody.ca; Lisa.Mak@bchydro.com; Michaela Neuberger; Diana Dilworth
Cc: Williams, Scott B OHCS:EX; Dang, Tommy OHCS:EX
Subject: Dec. Energy Step Code Council meeting
When: December 9, 2020 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hi, everyone:

Most people chose the Dec. 9 option, so we'll go with that. Looking forward to it.

Hugo

Microsoft Teams meeting
Join on your computer or mobile app
s.15

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting

Meeting Package

Date and Time of Meeting: Thursday December 9, 2020 | Time: 1:00 to 4:00 p.m. Pacific Time
Webinar link: Click here to join the meeting
Note: There is no conventional dial-in option, but you can request a call back to join the meeting by phone.

Chair: Zachary May, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Meeting Materials

1. Agenda (revised Dec. 9, 2020)
2. Presentation slides, Capacity Building and Communications Subcommittee

Contacts if You Require Assistance

- Hugo Wong, BSSB –250-880-6418 (call or text); hugo.wong@gov.bc.ca
- Dale Andersson, BSSB – 778-679-9653 (call or text); dale.andersson@gov.bc.ca

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
1:00	Welcome and Introductions	Zachary May, ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Introductions: Tyler Wightman (BOABC), Diana Dilworth (HAVAN), Ruta Fluxgold (NRCan) ▪ Approval of agenda
1:05	COVID-19 check-in	All	▪ Roundtable to discuss effects of COVID-19 during winter months
1:30	Proposed mandatory Step Code education for Licensed Residential Builders	Wendy Acheson, BC Housing	▪ To discuss direction and hear feedback
1:45	EMLI incentives update	Nat Gosman and Katherine Muncaster, EMLI	▪ To discuss: CleanBC Building Innovation Fund, CleanBC double upgrade rebates, Better Homes New Construction Rebate, etc.
2:00 p	Aligning LEED with Step Code	Joyce Wagenaar and Cloelle Vernon, CaGBC	▪ Technical presentation on two new LEED Alternative Compliance Pathways: o BC Energy Step Code ▪ Zero Energy Performance Index and Site Energy Metric (pilot)

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

2:20	New government mandate	Zachary May, BSSB	▪ Renewed energy efficiency mandate ▪ Carbon mandate (GHGs and local governments, CAS sectoral targets, role of electrification) ▪ Existing buildings code likely to address carbon and energy ▪ Longer timeline for BCBC 2022 energy efficiency requirements
3:20 p.m.	Local governments, GHGs, and the new govt. mandate	Lise Townsend, City of Surrey	▪ Approaches under consideration in Surrey ▪ To seed future discussion on GHGis
3:30 p	Subcommittee updates	Scott Williams, BSSB, Subcommittee Co-Chairs and Council members	▪ Local Government Peer Network: Laura Sampliner and Maya Chorobik (7 mins) ▪ Part 9 Residential: Nicholas Heap (10 mins) ▪ Part 3 & Part 9 Non-residential: Norm Connolly, Scott Williams to speak on work plan and new timelines (10 min) ▪ Capacity Building and Communications subcommittee (15 mins) o Seeking council direction on 2022 communications plan
4:00 p	Final Comments and Adjournment	All	

Hi, everyone:

Update #2 (Dec. 9, 2020): Revised agenda and CBCSC presentation attached.
Update (Dec. 8, 2020): Agenda now attached.

Most people chose the Dec. 9 option, so we'll go with that. Looking forward to it.

Hugo

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ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting

Meeting Package

Date and Time of Meeting: Thursday December 9, 2020 | Time: 1:00 to 4:00 p.m. Pacific Time
Webinar link: Click here to join the meeting
Note: There is no conventional dial-in option, but you can request a call back to join the meeting by phone.

Chair: Zachary May, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Meeting Materials

1. Agenda (revised Dec. 9, 2020)
2. Presentation slides, Capacity Building and Communications Subcommittee

Contacts if You Require Assistance

- Hugo Wong, BSSB –250-880-6418 (call or text); hugo.wong@gov.bc.ca
- Dale Andersson, BSSB – 778-679-9653 (call or text); dale.andersson@gov.bc.ca

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
1:00	Welcome and Introductions	Zachary May, ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Introductions: Tyler Wightman (BOABC), Diana Dilworth (HAVAN), Ruta Fluxgold (NRCan) ▪ Approval of agenda
1:05	COVID-19 check-in	All	▪ Roundtable to discuss effects of COVID-19 during winter months
1:30	Proposed mandatory Step Code education for Licensed Residential Builders	Wendy Acheson, BC Housing	▪ To discuss direction and hear feedback
1:45	EMLI incentives update	Nat Gosman and Katherine Muncaster, EMLI	▪ To discuss: CleanBC Building Innovation Fund, CleanBC double upgrade rebates, Better Homes New Construction Rebate, etc.
2:00 p	Aligning LEED with Step Code	Joyce Wagenaar and Cloelle Vernon, CaGBC	▪ Technical presentation on two new LEED Alternative Compliance Pathways: ○ BC Energy Step Code ▪ Zero Energy Performance Index and Site Energy Metric (pilot)

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

2:20	New government mandate	Zachary May, BSSB	▪ Renewed energy efficiency mandate ▪ Carbon mandate (GHGs and local governments, CAS sectoral targets, role of electrification) ▪ Existing buildings code likely to address carbon and energy ▪ Longer timeline for BCBC 2022 energy efficiency requirements
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4:00 p	Final Comments and Adjournment	All	

Report to the ESCC

Capacity Building and Communications Subcommittee

Wednesday December 9, 2020

Mary McWilliam
BCIT
Subcommittee Co-chair

Bertine Stelzer
BC Hydro
Subcommittee Co-chair

Dale Andersson
BSSB
Subcommittee Co-chair

2020 in Brief

Growing Subcommittee Membership

- New co-chair: Bertine Stelzer (replaces Christian Cianfrone)
- Over 90 members (not all active)
- Five Subcommittee meetings
- "Convene and catalyse" role
  - Reaching out to new organizations such as UBC, BCNPHA, REIBC, VEC, etc.
  - Sharing projects and resources at meetings

+ Three active working groups

2020 in Brief: Working Groups

Communications WG

- Maintain Step Code website including events calendar
- Collectively produced 8 newsletters (monthly except Aug, Oct, Nov)
  - BC Hydro Funds, ZEBx produces and provides in-kind support to March 31, 2021
  - Developing 'themed' issues, more intentional in 2021+
  - About 1550 subscribers
- New resources:
  - CEA case study videos
  - Mundell House ATT for Part 3 buildings video
  - Township of Langley case study
  - More being prepared by partners
- 2022 Communications Plan – prepared in 2021



2020 in Brief: Working Groups

Matrix (Capacity Building Study) WG

- Scope of Work developed by WG for capacity building study
- Study of ‘step code readiness’ of key industry professions
- Major funders: BC Hydro and FortisBC
- RFP issued Nov 2020
- Capacity component complete: April 2021
- KPI component: Mid-May 2021



2020 in Brief: Working Groups

EA WG

- **Findings from five meetings**
  - EA numbers increasing since last year: 97 in PQEA List*
  - Firms are 'hiring up' in anticipation of demand
  - Spring: Slow for EAs
  - Concern: 'Mass training' of new EAs
  - Impact of new provincial and federal incentive programs to be seen
- **Supported:** UBC Scholar Study of EA Capacity in Small and Remote Communities – still concerns/challenges
- **Supported:** EA/EM BC Energy Step Code Compliance Competency Framework (recommendation of 2019 EA/EM Scope of Practice Report) – next steps TBD



Other Capacity Building Activities

Part 9 Energy Compliance Report Training

- 3 live webinars over summer (City Green)
- Recorded training coming online shortly

Part 3 Energy Design Report Training

- 3 live webinars over summer (Focal Engineering)
  - 2 for energy modellers
  - 1 for local govt staff – high attendance
- Recorded training and tip sheet online

Annual Local Government Readiness Survey

- CEA/BC Housing doing this year – with LG Peer Network



Local Government Adoption – BSSB Numbers

Consulting Local Governments

- 72 local governments consulting on Step Code – as of Nov. 6, 2020
- Since June 2020 meeting:
  - Town of Oliver – Oct. 20, 2020
  - City of Coquitlam – Oct. 29, 2020
  - Sun Peaks Mountain Resort Municipality – Nov. 5, 2020
  - District of Kitimat – Nov. 6, 2020

Referencing in Policy, Program or Bylaw

- About 39
- Some LGs missing (await forms!) + some adoption might be 'future'



Feedback Invited from ESCC: How best solicit?

1. What do we need to do as a Subcommittee to support industry to understand the BCBC 2022 changes and be ready for them?
2. What could the Subcommittee do more of or better, to support information and education effort over coming year(s)?
3. What are the ESCC's expectations, if any, for the Communications Plan the Subcommittee has been tasked with preparing?
4. Are there key groups or sectors we should focus capacity building work and efforts on in 2021 and in the plan? e.g., local govts that have not yet done any work on Step Code, remote regions, etc.
5. Do you have any other feedback on our activities as we plan for 2021?



RE: Bullets for Step Code Council

From: May, Zachary OHCS:EX
To: Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>, Kaye, Erik ENV:EX <Erik.Kaye@gov.bc.ca>
Cc: Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>
Sent: December 9, 2020 11:31:53 AM PST

Thanks both. This is very helpful and helps to point people in the right direction on both issues.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Sent: December 8, 2020 4:50 PM
To: Kaye, Erik ENV:EX <Erik.Kaye@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>
Subject: RE: Bullets for Step Code Council

Thanks Erik. These are reasonable bullets.

From: Kaye, Erik ENV:EX <Erik.Kaye@gov.bc.ca>
Sent: December 8, 2020 4:24 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Subject: FW: Bullets for Step Code Council

Hi Zac,

Here are the bullets as requested; apologies for the delay in getting these to you. Hurrian, I did the sectoral emissions bullets based on our earlier exchange re the UDI enquiry, but let me know if you have any edits or comments on the bullets below. The Step Code Council meeting is on Wed Dec 9.

Sectoral targets

- Under the *Climate Change Accountability Act*, sectoral GHG reduction targets for British Columbia are required to be established by March 31, 2021.
- Hurrian Peyman is the CAS contact on all questions for sectoral targets.

Emissions factors for Public Sector Organizations

- The Climate Action Secretariat is currently reviewing the electricity emission intensity factors applied to public sector organizations under the Carbon Neutral Government program and participating local governments under the Climate Action Charter, including the option to adopt the Greenhouse Gas industrial Reporting and Control Act EEF methodology for those entities.
- An update on EEF will be communicated to PSOs and local governments in the coming weeks.

Erik Kaye | Manager, Reporting and Assessment, Clean Government
Climate Action Secretariat – Ministry of Environment & Climate Change Strategy
Cell/Text: **250-507-2076** | Phone: **778-698-4742** | Email: Erik.Kaye@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

RE: Dec. Energy Step Code Council meeting

From: Muncaster, Katherine EMPR:EX <Katherine.Muncaster@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, msohi@boabc.org, Catherine Ernst <catherine.ernst@boabc.org>, sean.pander <sean.pander@vancouver.ca>, Enright, Patrick <patrick.enright@vancouver.ca>, nconnolly <nconnolly@richmond.ca>, lise.townsend@surrey.ca, Megan Lohmann (CEA) <mlohmann@communityenergy.bc.ca>, J.Madden@ubc.ca, Jason Jung <jjung@asttbc.org>, Maura Gatensby <mgatensby@aibc.ca>, warrenp@bccassn.com, muneesh@boma.bc.ca, bdeeks@rdcfinehomes.com, Joe Hart <joe.iconhomes@shaw.ca>, Kelly Reid <kelly@hkrbuilders.com>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Jeff Fisher <jfisher@udi.org>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wark, Robyn <Robyn.Wark@bchydro.com>, Bains, Bea <bea.bains@fortisbc.com>, christine.gillis@canada.ca, Christopher Frye <christopher.frye@canada.ca>, Wilma Leung <wileung@bchousing.org>, Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, toby.lau@bchydro.com, nheap <nheap@richmond.ca>, Mary McWilliam <mmcwilliam3@bcit.ca>, Maya Chorobik <mchorobik@communityenergy.bc.ca>, lsampliner <lsampliner@portmoody.ca>, Lisa.Mak@bchydro.com, Michaela Neuberger <michaela@zebx.org>, Diana Dilworth <diana@havan.ca>

Cc: Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, Lavaee, Saleh <Saleh.Lavaee@fortisbc.com>, Fluxgold, Ruta (NRCAN/RNCAN) <ruta.fluxgold@canada.ca>, Stelzer, Bertine <bertine.stelzer@bchydro.com>, Wells, Ralph <ralph.wells@ubc.ca>, Pauline Rupp <pauline@chbabc.org>, jwagenaar@cagbc.org, Wendy Acheson <wacheson@bchousing.org>, CVernon@cagbc.org, aschatz@cagbc.org, MHutchinson@cagbc.org, strikwerda@cagbc.org, De Carolis, Laura EMPR:EX <Laura.DeCarolis@gov.bc.ca>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>

Sent: December 9, 2020 2:56:29 PM PST

Attachments: CBC Better Homes New Construction - Program Overview_Dec 2020.pdf

Attached is a more detailed slide deck on the CleanBC Better Homes New Construction Program. Please do reach out to Laura de Carolis if you are keen to distribute this widely or co-host a webinar. Laura.DeCarolis@gov.bc.ca

Thanks!

Katherine Muncaster | Director, Energy Efficiency Branch | Electricity and Alternative Energy Division | BC Ministry of Energy, Mines and Low Carbon Innovation | Tel 778-698-7180| katherine.muncaster@gov.bc.ca

---

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: December 9, 2020 1:46 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; msohi@boabc.org; catherine.ernst@boabc.org; sean.pander@vancouver.ca; patrick.enright@vancouver.ca; NConnolly@richmond.ca; lise.townsend@surrey.ca; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; jjung@asttbc.org; MGatensby@aibc.ca; warrenp@bccassn.com; muneesh@boma.bc.ca; bdeeks@rdcfinehomes.com; joe.iconhomes@shaw.ca; kelly@hkrbuilders.com; hradhakrishnan@egbc.ca; jfisher@udi.org; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; robyn.wark@bchydro.com; bea.bains@fortisbc.com; christine.gillis@canada.ca; christopher.frye@canada.ca; wileung@bchousing.org; Wacker, Holly MAH:EX <Holly.Wacker@gov.bc.ca>; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; toby.lau@bchydro.com; nheap@richmond.ca; mmcwilliam3@bcit.ca; mchorobik@communityenergy.bc.ca; lsampliner@portmoody.ca; Lisa.Mak@bchydro.com; Michaela Neuberger <michaela@zebx.org>; Diana Dilworth <diana@havan.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Dang, Tommy OHCS:EX <Tommy.Dang@gov.bc.ca>; Lavaee, Saleh <Saleh.Lavaee@fortisbc.com>; Fluxgold, Ruta (NRCAN/RNCAN) <ruta.fluxgold@canada.ca>; 'Stelzer, Bertine' <Bertine.Stelzer@bchydro.com>; Muncaster, Katherine EMPR:EX <Katherine.Muncaster@gov.bc.ca>; 'Wells, Ralph' <ralph.wells@ubc.ca>; pauline@chbabc.org; jwagenaar@cagbc.org; Wendy Acheson <wacheson@bchousing.org>; CVernon@cagbc.org; aschatz@cagbc.org; MHutchinson@cagbc.org; strikwerda@cagbc.org
Subject: RE: Dec. Energy Step Code Council meeting

Katherine's slides on rebates/incentives.

Dale Andersson, PhD | Senior Policy Advisor
Building and Safety Standards Branch | Email: dale.andersson@gov.bc.ca

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: December 1, 2020 10:00 AM
To: Wong, Hugo OHCS:EX; msohi@boabc.org; catherine.ernst@boabc.org; sean.pander@vancouver.ca; patrick.enright@vancouver.ca; NConnolly@richmond.ca; lise.townsend@surrey.ca; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; jjung@asttbc.org; MGatensby@aibc.ca; warrenp@bccassn.com; muneesh@boma.bc.ca; bdeeks@rdcfinehomes.com; joe.iconhomes@shaw.ca; kelly@hkrbuilders.com; hradhakrishnan@egbc.ca; jfisher@udi.org; XT:Wimmers, Guido CITZ:IN; robyn.wark@bchydro.com; bea.bains@fortisbc.com; christine.gillis@canada.ca; christopher.frye@canada.ca; wileung@bchousing.org; Wacker, Holly MAH:EX; Gosman, Nat EMPR:EX; May, Zachary OHCS:EX; toby.lau@bchydro.com; nheap@richmond.ca; mmcwilliam3@bcit.ca; Andersson, Dale OHCS:EX; mchorobik@communityenergy.bc.ca; lsampliner@portmoody.ca; Lisa.Mak@bchydro.com; Michaela Neuberger; Diana Dilworth
Cc: Williams, Scott B OHCS:EX; Dang, Tommy OHCS:EX; Lavaee, Saleh; Fluxgold, Ruta (NRCAN/RNCAN); 'Stelzer, Bertine'; Muncaster, Katherine EMPR:EX; 'Wells, Ralph'; pauline@chbabc.org; jwagenaar@cagbc.org; Wendy Acheson; CVernon@cagbc.org; aschatz@cagbc.org; MHutchinson@cagbc.org; strikwerda@cagbc.org
Subject: Dec. Energy Step Code Council meeting
When: December 9, 2020 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hi, everyone:

Update #2 (Dec. 9, 2020): Revised agenda and CBCSC presentation attached.
~~Update (Dec. 8, 2020): Agenda now attached.~~

Most people chose the Dec. 9 option, so we'll go with that. Looking forward to it.

Hugo

Microsoft Teams meeting

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CleanBC Better Homes
New Construction Program

December 2020

Agenda

- Program overview
- Eligibility criteria
- Available rebates
- How to apply
- Q&A

cleanBC
BETTER HOMES

Program overview

- The **CleanBC Better Homes New Construction Program** provides financial incentives for the construction of new, high-performance residential homes
- Advances CleanBC objectives and helps achieve the building sector's 2030 emission reduction target by supporting ESC adoption and incentivizing builders to use electric space and water heating systems
- Developed and funded by the Province of BC, administered by BC Hydro

cleanBC
BETTER HOMES

Program goals

- Reduce GHG emissions in BC's residential new construction sector:
  - High efficiency electric space and water heating
  - High performance building envelopes
  - Increasing the number of 100% electric homes (no fossil fuel connection to house)
- Prepare market for higher performance requirements and building codes leading up to 2032 when all new buildings will be required to be "net-zero energy ready"

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Rebate Pathways

- Applicants may apply for one of two rebate pathways:
  - **Energy Step Code pathway:** build a new home that meets a minimum BC Energy Step code level and uses electric space and water heating systems.

  or

  - **Heat pump pathway:** build a new home that uses an electric heat pump for space heating or water heating, regardless of Energy Step Code level.

- Add-on rebates
  - **All-Electric Bonus:** build a home with no fossil fuel connection whatsoever (e.g. natural gas, propane, oil) and receive an additional $4,000 per home.
  - **Energy Advisor Support Rebate:** work with a Program Qualified Energy Advisor and receive an additional $1,000 per home.

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Eligibility

- Homes may be constructed by a licensed residential builder or an owner builder authorized by BC Housing
- Homes must be constructed in compliance with Part 9 of the BC Building Code and, where applicable, the municipally-adopted minimum BC Energy Step Code requirement
- Homes must be built in BC Hydro (including New West Electric) service territory
- Eligible building types:
  - Single family detached
  - Laneway home
  - Duplex
  - Row or townhome

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Eligibility (continued)

- An applicant may include a licensed residential builder, owner builder, or Program Qualified Energy Advisor applying on a builder's behalf.
- Builders participating in the Energy Step Code pathway or applying for the Energy Advisor Support Rebate or All-Electric Bonus in the Heat Pump pathway must work with a Program Qualified Energy Advisor
- Building permits must be issued on or after April 1, 2020

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BETTER HOMES

Heat pump pathway incentives

- Build a home that uses an electric heat pump for space heating or water heating

Heat pump type	Requirements	Rebate	Energy Advisor Support Rebate (optional)	All-Electric Bonus (optional)
Air source heat pump	**Variable speed mini-split, multi-split, or central ASHP (Tier 2 only)** HSPF ≥9.3, SEER ≥16 Must be on the QPL	$3,000	$1,000 per individually modelled home or unit • $800 to builder • $200 to EA	$4,000 per home or unit
Air-to-water hydronic heat pump	Must be on the QPL	$3,000		
Combined space & water heat pump	Must be on the QPL	$4,000		
Heat pump water heater	Must be on the QPL	$1,000		

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BETTER HOMES

Energy Step Code pathway incentives

- Build a home to Step 3 or higher using electric space and water heating systems

ESC Step	Rebate	Energy Advisor Support Rebate	All-Electric Bonus (optional)
Step 3	$4,000	$1,000 per individually modelled home or unit • $800 to builder • $200 to EA	$4,000 per home or unit
Step 4	$6,000		
Step 5 (or Passive House-certified)	$10,000		

cleanBC
BETTER HOMES

How to apply

1. Carefully review the program website, including the Rebate Eligibility Requirements and Terms and Conditions to confirm your eligibility
2. Fill out and submit the pre-registration form
   - Within 30 days of submitting this form, BC Hydro will send you an email with the status of your submission
3. Complete your project within 12 months of the date of your pre-approval confirmation email
4. Submit the post-construction application and required supporting documentation
5. Application reviewed and if approved, rebates issued

Questions? BC Hydro's Project Manager, Residential New Construction Program and the CleanBC Energy Coaches are available to support applicants

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BETTER HOMES

Supporting documentation

Heat pump pathway

Document	Heat pump rebate	EA Support rebate	All-Electric Bonus
Pre-registration • Energy Advisor Appointment Consent Form (if applicable)	✓	✓	✓
Post-construction • Heat pump installation invoice • As-Built BC Energy Compliance Report • EnerGuide (N) Evaluation Homeowner Information Sheet	✓ × ×	× ✓ ✓	× ✓ ×

cleanBC
BETTER HOMES

Supporting documentation

Energy Step Code pathway

Document	ESC rebate & EA Support rebate (Step 3-5)	ESC rebate & EA Support rebate (PH)	All-Electric Bonus
Pre-registration			
• Energy Advisor Appointment Consent Form (if applicable)	✓	✓	✓
Post-construction			
• As-Built BC Energy Compliance Report	✓	✓	✓
• EnerGuide (N) Evaluation Homeowner Information Sheet	✓	×	×
• Passive House Planning Package	×	✓	×

cleanBC BETTER HOMES

Questions?

- **Website:** www.betterhomesbc.ca/cleanbc-new-construction
- **General inquiries:**
  - betterhomesbc@gov.bc.ca
- **Individualized Program support:**
  - Adrian Kanjer, Project Manager, Residential New Construction Program, BC Hydro
    adrian.kanjer@bchydro.com

cleanBC
BETTER HOMES

FW: Just announced! UDI Webinar: Moving Forward: TransLink and the Future of Metro Vancouver – Kevin Desmond, TransLink CEO

From:	Brian McCauley <BMcCauley@concertproperties.com>
To:	joymacp@telus.net, Jill Atkey <jill@bcnpha.ca>, Jock Finlayson <jock.finlayson@bcbc.com>, XT:Pastrick, Helmut FIN:IN <hpastrick@central1.com>, Sue Paish <spaish@digitalsupercluster.ca>
Cc:	Bert Pereboom <bpereboo@cmhc-schl.gc.ca>, Michel A. Tremblay <matrembl@cmhc-schl.gc.ca>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Aled ab Iorwerth <aiorwert@cmhc-schl.gc.ca>
Sent:	December 11, 2020 10:23:17 AM PST
Attachments:	image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Just arrived in my inbox…timely given our conversation.

Brian McCauley | President & Chief Executive Officer

8th floor, 1190 Hornby Street
Vancouver, BC V6Z 2K5

Suite 200 - 20 Wellington Street East
Toronto, ON M5E 1C5

d 604.602.3730 **c** 604.790.3965

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From: UDI Events <events@udi.org>
Sent: December 11, 2020 10:01 AM
To: Brian McCauley <BMcCauley@concertproperties.com>
Subject: Just announced! UDI Webinar: Moving Forward: TransLink and the Future of Metro Vancouver – Kevin Desmond, TransLink CEO

Email originated outside CONCERT.

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Page 047 of 283 to/à Page 048 of 283

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Please consider the environment before printing this email.

RE: Sectoral targets discussion paper and related materials

From: May, Zachary OHCS:EX
To: Dobson, Neil ENV:EX <Neil.Dobson@gov.bc.ca>, Baltutis, Jesse ENV:EX <Jesse.Baltutis@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Sent: December 17, 2020 10:58:15 AM PST

Sounds like we're good. UDI was asking me about this a couple weeks ago but they're on your list.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Dobson, Neil ENV:EX <Neil.Dobson@gov.bc.ca>
Sent: December 17, 2020 10:56 AM
To: Baltutis, Jesse ENV:EX <Jesse.Baltutis@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Subject: RE: Sectoral targets discussion paper and related materials

Hi Zac, who specifically do you think we missed from the list; and what concerns do you think they will have that we need to counsel?
Thanks
Neil

From: Baltutis, Jesse ENV:EX <Jesse.Baltutis@gov.bc.ca>
Sent: December 17, 2020 9:55 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Dobson, Neil ENV:EX <Neil.Dobson@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Subject: RE: Sectoral targets discussion paper and related materials

Hi Zac

I think we're trying not to circulate too widely but if there are contacts that you think would be very important to receive this DP, then it could be circulated by email. If that is the path, forwarding Neil's email would be the best way to carry it out.

I've cc'd Hurrian Peyman, who is leading this work with Neil.

Hurrian will be able to provide further advice if needed.

Cheers,
Jesse

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: December 17, 2020 8:41 AM
To: Baltutis, Jesse ENV:EX <Jesse.Baltutis@gov.bc.ca>
Cc: Dobson, Neil ENV:EX <Neil.Dobson@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: RE: Sectoral targets discussion paper and related materials

Hi Jesse,

Any issues if we forward Neil's email to some of our contacts who may not be on the key partners list? Hoping to avoid redrafting the information that went out under Neil's name already.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Baltutis, Jesse ENV:EX <Jesse.Baltutis@gov.bc.ca>
Sent: December 16, 2020 4:25 PM
To: EMPR EDWGCBC <EDWGCBC@Victoria1.gov.bc.ca>
Cc: Taaffe, Theresa ENV:EX <Theresa.Taaffe@gov.bc.ca>; Cross, Elaine ENV:EX <Elaine.Cross@gov.bc.ca>; Dobson, Neil ENV:EX <Neil.Dobson@gov.bc.ca>
Subject: Sectoral targets discussion paper and related materials

Hello EDWG

Please note this email is just an FYI - the sectoral targets discussion paper has been sent to key partners.

Uploaded to the SharePoint are the following documents (If you do not have access to the SharePoint, please work with your ED to access the materials):

- An updated email template that allows a little more time for recipients to RSVP to attend the sectoral targets webinar in January
- Updated bullets with links to the recently released Climate Change Accountability Report and an updated date of the sectoral targets webinar
- The final PDF of the discussion paper that was emailed out to key partners today (December 16th)

Best,
Jesse

Jesse Baltutis, PhD
Senior Policy Analyst | Climate Action Secretariat | Ministry of Environment & Climate Change Strategy
Tel: 778-698-7076 | Email: jesse.baltutis@gov.bc.ca
I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

RE: sectoral targets

From:	May, Zachary OHCS:EX
To:	Jeff Fisher <jfisher@udi.org>
Cc:	Cassandra McColman <cmccolman@udi.org>
Sent:	January 11, 2021 11:08:14 AM PST
Attachments:	image001.jpg, image004.jpg

Hi Jeff,

s.22

I don't believe there is a public report or process. I'll reach out to the lead at CAS and have them follow up to see what the easiest way is to get you up to speed.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service

Where ideas work

2020 TOP WORK UNIT AWARD

From: Jeff Fisher <jfisher@udi.org>
Sent: January 11, 2021 10:58 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>
Subject: RE: sectoral targets

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Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: December 2, 2020 7:51 AM
To: Jeff Fisher <jfisher@udi.org>
Subject: sectoral targets

Hi Jeff,

Thanks for your phone message. I'm aware of the commitment regarding sectoral targets and have been involved in some of those discussions in the last couple years. I'm still sorting out who at CAS is leading this work after the election reorganization, but I'm confident we'll be involved as the lead on codes. I'll see if we can get an update for the Step Code meeting next week.

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Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



FW: sectoral targets

From: May, Zachary OHCS:EX
To: Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Sent: January 11, 2021 11:54:51 AM PST
Attachments: image001.jpg, image004.jpg

Hi Hurrian,

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Best,
Zachary D. May, MBA
Director, Strategic Policy
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Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

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URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#1100 – 1050 West Pender Street
Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
www.udi.bc.ca

January 18, 2021

Honourable David Eby
Attorney General and Minister Responsible for Housing
Parliament Buildings
Victoria, British Columbia V8V 1X4

Dear Attorney General Eby:

On behalf of the Board of Directors of the Urban Development Institute – Pacific Region (UDI) and our over 950 members, I would like to congratulate you on your recent re-election and reappointment as Attorney General. Thank you for the opportunity to connect earlier this month, with Housing now added to your portfolio I look forward to working more closely in the future. We have many common goals, and UDI is eager to work with your Ministry to fulfill the Government's ten-year *Homes for B.C.* housing plan and find ways to incentive the creation of more new homes in municipalities across the province.

The *Homes for B.C.* plan includes providing 114,000 new rental/affordable homes to British Columbians – a laudable but challenging goal to achieve as the Government has only built 2,963 units in the previous term. I have attached a *Housing Policy Priorities* Paper UDI released in October, which outlines strategies and solutions that we ask your government to consider implementing in order to achieve this commendable housing target. The paper not only outlines the incentives needed to get housing built, but it also addresses the understanding that just focusing on housing taxation has not provided relief to tenants and homebuyers. In fact, because many of the housing taxes apply to new housing projects (including new Purpose-Built Rental buildings), they have added to the cost of providing new homes to British Columbians and ultimately impacted affordability across all housing types.

UDI believes that increasing housing options for British Columbians will be critical to the success in meeting the Government's housing objectives. This is why we are supportive of the partnerships being developed through the *Housing Hub*, and welcome the plan to use it to identify "… *pathways to home ownership through rent-to-own or other equity-building programs*." Several of our members have introduced similar rent-to-own concepts in their projects and as such, would be interested in sharing their experiences with your Ministry.

As we discussed, it will also be important for this Government to take a stronger position in encouraging local governments to approve housing projects – especially those that include rental and affordable homes. For example, UDI has long advocated that the Province invest in transit – but also fully leverage those investments by using Transit Supportive Agreements to ensure municipalities provide appropriate land use policies around stations. While this is one example, UDI looks forward to sharing best practices, and tools that municipalities can employ to support the creation of more new homes for British Columbians.

While we strongly support your Government's commitment to provide tenants in need with an annual $400 renters rebate cheque, UDI has concerns with the proposal to extend the rent freeze into next year without providing equitable relief to property owners and landlords that are experiencing mounting operating and maintenance costs and taxation. The rent increases

allowed under the *Residential Tenancy Act* were already reduced by 2% per year in 2018. At the same time, costs that rental providers are facing – property taxes, hydro bills and rapidly escalating insurance costs – are not frozen. We ask that the Government work with the rental housing sector to cap these costs and consider income testing for the rent freeze. For example, the same income threshold for the $400 renter's rebate could be applied to the rent freeze policy. In addition, we understand there has been ongoing work to develop Above Guideline Increases (AGI) for rental building rates to accommodate for maintenance and upgrades. Clarity on when this framework will come into force is even more important now, given the prolonged rent freeze.

The AGI will also be critical if the Ministry proceeds with the development of an Alterations Code for Existing Buildings. UDI has been engaged with the Building and Safety Standards Branch on this initiative and have expressed significant concern regarding the ability to upgrade rental buildings to higher energy efficiency and seismic standards without assistance from governments and/or increasing rent rates. There is also the potential for similar issues with commercial and strata buildings. UDI is eager to continue discussing the development of this Code and how it can be cost-effectively implemented for building owners.

UDI concurs with the Government that climate change is a challenge that British Columbia and the world needs to tackle. We were one of the original organizations that developed the *BC Energy Step Code* (*ESC*), and we continue to actively participate on the Energy Step Code Council. However, consultation is needed before the Government moves forward with empowering "*… local governments to set their own carbon pollution performance standards for new buildings*." UDI supports decarbonizing buildings, but we believe that this can be best implemented through the work of the Energy Step Code Council, which includes representatives from the Province, municipalities, the Federal Government, utilities, academic institutions, BC Housing, the building sector and other stakeholders. The Council helped manage the municipal implementation of the *ESC*, and we recommend that it be involved in this initiative as well.

Consultation with the housing sector is also needed with regard to any changes to accessibility requirements in the *BCBC*. UDI was involved in the development of the current adaptable housing standards in the *Building Code* for new apartment buildings. Apartment buildings are best suited for mandating accessibility features because there is usually one living level that can be accessed through common hallways and elevators. The Ministry needs to carefully consider how similar requirements would be applied to townhouses because it is far more difficult to make them accessible due to the narrowness of the units and a layout that often includes two or more levels.

Thank you again for reaching out after your reappointment and providing the opportunity to start the discussion on these critical issues. We look forward to providing your Ministry with more information on best practices to incentivize new homes as well as working with this Government to implement many of the priorities of its new mandate.

Yours sincerely,



Anne McMullin
President & CEO

C.C. Richard Fyfe, Deputy Attorney General

RE: sectoral targets

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: January 20, 2021 8:37:13 AM PST
Attachments: image002.jpg, image003.jpg, image001.jpg

I believe so. I'll just confirm from the stakeholder list on the ED WG sharepoint.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: January 20, 2021 8:36 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: sectoral targets

Has FortisBC seen this report? Can we speak to it?

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: January 19, 2021 12:55 PM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: FW: sectoral targets

This is the discussion paper for sectoral targets. Not for public distribution but Hurrian at CAS can provide more info if required.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

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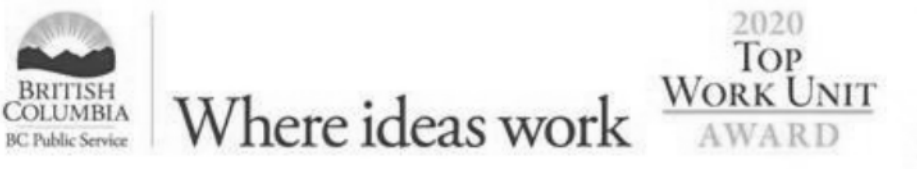

From: Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Sent: January 11, 2021 12:08 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; jfisher@udi.org
Subject: RE: sectoral targets

Hi Jeff,

Thanks for your interest. According to our records, Anna McMullin from UDI already received the Discussion paper. (It's also attached.) The webinars last week only reiterated info already within the Discussion paper.

The document can be shared with members. However, we ask that UDI consolidates all members' feedback when providing feedback.

s.22

Hurrian

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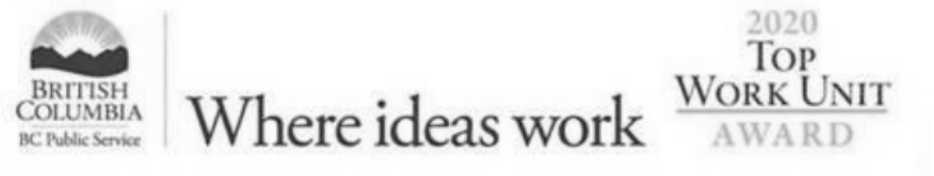

From: Jeff Fisher <jfisher@udi.org>
Sent: January 11, 2021 10:58 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>
Subject: RE: sectoral targets

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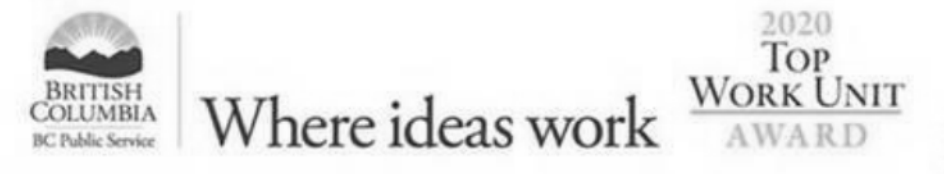

RE: sectoral targets

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Sent: January 20, 2021 9:23:39 AM PST
Attachments: image002.jpg, image003.jpg, image001.jpg

Roger Dall'Antonia (President and CEO) is on the consultation list for Fortis. I'm not sure how he may have delegated within the organization.

Best,
Zac

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BRITISH COLUMBIA
BC Public Service
Where ideas work
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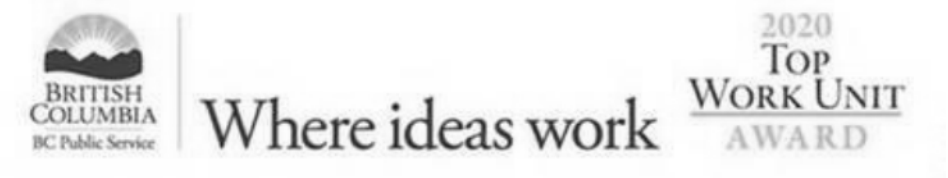

RE: Step Code Council - GHGi Consultation #1

From: May, Zachary OHCS:EX
To: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Sent: January 21, 2021 9:50:07 AM PST

There's some last minute uncertainty about the true intent of our mandate and whether establishing provincial regulation would be the kind of "support" the Premier intended. We're putting together a decision note to clarify whether we should be establishing regulations or just allowing local governments to develop their own.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Sent: January 21, 2021 9:45 AM
To: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Step Code Council - GHGi Consultation #1

Curious why?

-----Original Appointment-----
From: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Sent: January 21, 2021 9:28 AM
To: 'catherine.ernst@boabc.org'; 'sean.pander@vancouver.ca'; 'patrick.enright@vancouver.ca'; 'NConnolly@richmond.ca'; 'Maxwell.Sykes@surrey.ca'; 'msohi@boabc.org'; 'mlohmann@communityenergy.bc.ca'; 'J.Madden@ubc.ca'; 'jjung@asttbc.org'; 'MGatensby@aibc.ca'; 'warrenp@bccassn.com'; 'muneesh@boma.bc.ca'; 'bdeeks@rdcfinehomes.com'; 'joe.iconhomes@gmail.com'; 'kelly@hkrbuilders.com'; 'hradhakrishnan@egbc.ca'; 'diana@havan.ca'; 'jfisher@udi.org'; 'michaela@zebx.org'; XT:Wimmers, Guido CITZ:IN; 'robyn.wark@bchydro.com'; 'bea.bains@fortisbc.com'; 'christine.gillis@canada.ca'; 'christopher.frye@canada.ca'; 'wileung@bchousing.org'; Wacker, Holly MAH:EX; Gosman, Nat EMLI:EX; May, Zachary OHCS:EX; 'toby.lau@bchydro.com'; 'nheap@richmond.ca'; 'mmcwilliam3@bcit.ca'; Andersson, Dale OHCS:EX; 'mchorobik@communityenergy.bc.ca'; 'lsampliner@portmoody.ca'; 'Lisa.Mak@bchydro.com'; 'SHorsburgh@rdn.bc.ca'; 'ralph.wells@ubc.ca'; 'hgoodland@brantwoodreci.com'; 'vanessa@chbabc.org'; 'rthe@wesgroup.ca'; 'gary.hamer@bchydro.com'; 'christopher.mclellan@canada.ca'; 'bertine.stelzer@bchydro.com'; 'pauline@chbabc.org'
Cc: Wolfe, Jason; Bryant, Tyler
Subject: Canceled: Step Code Council - GHGi Consultation #1
When: January 29, 2021 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting
Importance: High

Hello everyone,

This session is being postponed and will be re-scheduled for a future date.

Thank you for your interest and for making time in your schedules.

Kylie

KYLIE SANDHAM, MPA, PMP, MCIP/RPP | **Policy Analyst**

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing

Email: Kylie.Sandham@gov.bc.ca
TEL: 250-213-6502

Microsoft Teams meeting

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RE: Step Code Council - GHGi Consultation #1

From: May, Zachary OHCS:EX
To: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Sent: January 21, 2021 9:56:32 AM PST

We could unrestricted that issue and remove the building act as a barrier. It wouldn't be consistent with all the other work we're doing or the requests of local governments themselves, but it's an option. I think there's a lack of familiarity on this topic within the ministry so we're having to revisit and clarify some of our assumed mandates. Hopefully we've got clarity within a few weeks.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Sent: January 21, 2021 9:51 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Subject: RE: Step Code Council - GHGi Consultation #1

I thought LGs didn't have the authority to establish technical building standards under the Community Charter and Building Act?

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: January 21, 2021 9:50 AM
To: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Subject: RE: Step Code Council - GHGi Consultation #1

There's some last minute uncertainty about the true intent of our mandate and whether establishing provincial regulation would be the kind of "support" the Premier intended. We're putting together a decision note to clarify whether we should be establishing regulations or just allowing local governments to develop their own.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Sent: January 21, 2021 9:45 AM
To: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Step Code Council - GHGi Consultation #1

Curious why?

-----Original Appointment-----
From: Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Sent: January 21, 2021 9:28 AM
To: 'catherine.ernst@boabc.org'; 'sean.pander@vancouver.ca'; 'patrick.enright@vancouver.ca'; 'NConnolly@richmond.ca'; 'Maxwell.Sykes@surrey.ca'; 'msohi@boabc.org'; 'mlohmann@communityenergy.bc.ca'; 'J.Madden@ubc.ca'; 'jjung@asttbc.org'; 'MGatensby@aibc.ca'; 'warrenp@bccassn.com'; 'muneesh@boma.bc.ca';

'bdeeks@rdcfinehomes.com'; 'joe.iconhomes@gmail.com'; 'kelly@hkrbuilders.com'; 'hradhakrishnan@egbc.ca'; 'diana@havan.ca'; 'jfisher@udi.org'; 'michaela@zebx.org'; XT:Wimmers, Guido CITZ:IN; 'robyn.wark@bchydro.com'; 'bea.bains@fortisbc.com'; 'christine.gillis@canada.ca'; 'christopher.frye@canada.ca'; 'wileung@bchousing.org'; Wacker, Holly MAH:EX; Gosman, Nat EMLI:EX; May, Zachary OHCS:EX; 'toby.lau@bchydro.com'; 'nheap@richmond.ca'; 'mmcwilliam3@bcit.ca'; Andersson, Dale OHCS:EX; 'mchorobik@communityenergy.bc.ca'; 'lsampliner@portmoody.ca'; 'Lisa.Mak@bchydro.com'; 'SHorsburgh@rdn.bc.ca'; 'ralph.wells@ubc.ca'; 'hgoodland@brantwoodreci.com'; 'vanessa@chbabc.org'; 'rthe@wesgroup.ca'; 'gary.hamer@bchydro.com'; 'christopher.mclellan@canada.ca'; 'bertine.stelzer@bchydro.com'; 'pauline@chbabc.org'
Cc: Wolfe, Jason; Bryant, Tyler
Subject: Canceled: Step Code Council - GHGi Consultation #1
When: January 29, 2021 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting
Importance: High

Hello everyone,

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Thank you for your interest and for making time in your schedules.

Kylie

KYLIE SANDHAM, MPA, PMP, MCIP/RPP | **Policy Analyst**

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Municipal Affairs and Housing
Email: Kylie.Sandham@gov.bc.ca
TEL: 250-213-6502

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RE: Part 3 Overheating Working Group - UDI members?

From: Williams, Scott B OHCS:EX
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Jeff Fisher <jfisher@udi.org>
Sent: February 4, 2021 11:09:05 AM PST

Hi Jeff,

With regards to airtightness and smaller buildings, we have a working group for Part 9 that will reconvene as soon as we have more clarity regarding the direction of the NBC for NLA/NLR alternative metrics. A working group will be formed for Part 3 later in 2021 once we get some of the more critical items addressed within the workplan.
Please let us know who from UDI would like to take part and we can add them to the distribution list.

Cheers,

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: February 4, 2021 10:41 AM
To: Jeff Fisher <jfisher@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: Part 3 Overheating Working Group - UDI members?

Hi Jeff,

Per the Part 3/9 Subcommittee meeting, our next Part 3 OHWG meeting is Feb 18 from 10:30 to noon. Please let me know who from UDI might like to be a part and happy to include them in the group and the invite.

Kind regards,

Dale Andersson, PhD | Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9653 | Email: dale.andersson@gov.bc.ca

RE: Correspondence from UDI

From: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: February 9, 2021 4:53:16 PM PST

Hello! It is in eApps, however I am soliciting policy replies from four different sources right now so I don't want to start sending the eApp to various people.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: February 9, 2021 4:18 PM
To: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Correspondence from UDI

Susan – is this in eapps? That would be the easiest way to provide BSSB input on a response. We have several project teams that need to weigh-in.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: February 9, 2021 3:28 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Correspondence from UDI

Hello all! Thanks for a speedy reply Hugo!
Here is the letter in full.
AGI is Above-Guideline Increases on rent (relates to the previous paragraph).

I'm happy to lump together these three issues and indicate that BSSB will continue to consult with UDI. s.13
s.13

Susan

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: February 9, 2021 3:25 PM
To: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Correspondence from UDI

Hi Susan,

No bother! Looping in Zac and Nicole, who works on existing buildings. I've been separately asked to write an information note on the Energy Step Code Council, so this is quite timely.

What is the AGI? Above Guideline Increases? And could I see the letter for context?

I'm assuming this is related to the Jan. 26 news item UDI posted to their website.

Basically, we have and will continue to consult with UDI on these issues.

- On the first bullet, the Ministry does intend to proceed with developing a strategy for existing buildings. Potential results may include additions to the BC Building Code to guide renovations to existing buildings, best practice guides, and a gradual increase in performance requirements. A second round of consultation, which will include UDI, is expected to begin this summer.
- On the second bullet, I believe this is pending decision (Zac, can you confirm this?). I don't know if I can really answer this one, other than confirm the issue has been raised substantively during Energy Step Code Council meetings in the past.
- Accessibility is outside my wheelhouse, but I can find someone. Probably Andy.

Nicole/Zac, is there anything I missed or anything you'd like to add?

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

From: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: February 9, 2021 2:37 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: Correspondence from UDI

Hi Hugo,
I'm wondering if you could help me out with some bullets/points in response to a letter from UDI Pacific Region to the Minister. It's a bit of a catch-all letter with various policy issues across the division. I got assigned this reply today when it was already overdue to go back to ADMO, so if you have time to help or could suggest someone who can help soon, that would be really lovely.

Here are the three paragraphs that relate to BSSB stuff:

- The AGI will also be critical if the Ministry proceeds with the development of an Alterations Code for Existing Buildings. UDI has been engaged with the Building and Safety Standards Branch on this initiative and have expressed significant concern regarding the ability to upgrade rental buildings to higher energy efficiency and seismic standards without assistance from governments and/or increasing rent rates. There is also the potential for similar issues with commercial and strata buildings. UDI is eager to continue discussing the development of this Code and how it can be cost-effectively implemented for building owners.
- UDI concurs with the Government that climate change is a challenge that British Columbia and the world needs to tackle. We were one of the original organizations that developed the *BC Energy Step Code* (*ESC*), and we continue to actively participate on the Energy Step Code Council. However, consultation is needed before the Government moves forward with empowering "… *local governments to set their own carbon pollution performance standards for new buildings*." UDI supports decarbonizing buildings, but we believe that this can be best implemented through the work of the Energy Step Code Council, which includes representatives from the Province, municipalities, the Federal Government, utilities, academic institutions, BC Housing, the building sector and other stakeholders. The Council helped manage the municipal implementation of the *ESC*, and we recommend that it be involved in this initiative as well.
- Consultation with the housing sector is also needed with regard to any changes to accessibility requirements in the *BCBC*. UDI was involved in the development of the current adaptable housing standards in the *Building Code* for new apartment buildings. Apartment buildings are best suited for mandating accessibility features because there is usually one living level that can be accessed through common hallways and elevators. The Ministry needs to carefully consider how similar requirements would be applied to townhouses because it is far more difficult to make them accessible due to the narrowness of the units and a layout that often includes two or more levels.

Sorry to bother you!

Susan Low
Pronouns: she/her
Senior Policy Analyst, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Phone: 778 698-1690
My home and workplace are on the unceded territories of the Lkwungen people (Songhees and Esquimalt First Nations), and I am grateful for their stewardship of these lands and waters that surround me and nurture me.

FW: UDI response the MAG&H mandate letter

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
To: Laboucane, Shannon OHCS:EX <Shannon.Laboucane@gov.bc.ca>, Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: February 19, 2021 10:40:18 AM PST
Attachments: image001.jpg

Please see and note recommendations below from UDI on accessible units. I assume they are on the consult list already.

Jun'ichi Jensen
Director, Building Policy (Acting)
Building and Safety Standards
Ministry of Attorney General and Minister Responsible for Housing
Province of BC
250 858 1325
or 778 974-3910



From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: February 9, 2021 9:41 AM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: UDI response the MAG&H mandate letter

Comments on accessibility, existing buildings, and GHGi.

Not sure if this has been received by the ADMO, but I assume we will be asked to support a response. Dale managed to track this down on the UDI website:
https://udi.bc.ca/wp-content/uploads/2021/01/UDI-Letter-Minister-Eby-Attorney-General-and-Minister-responsible-for-Housing_January-18-2021.pdf

The AGI will also be critical if the Ministry proceeds with the development of an Alterations Code for Existing Buildings. UDI has been engaged with the Building and Safety Standards Branch on this initiative and have expressed significant concern regarding the ability to upgrade rental buildings to higher energy efficiency and seismic standards without assistance from governments and/or increasing rent rates. There is also the potential for similar issues with commercial and strata buildings. UDI is eager to continue discussing the development of this Code and how it can be cost-effectively implemented for building owners.

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buildings. Apartment buildings are best suited for mandating accessibility features because there is usually one living level that can be accessed through common hallways and elevators. The Ministry needs to carefully consider how similar requirements would be applied to townhouses because it is far more difficult to make them accessible due to the narrowness of the units and a layout that often includes two or more levels.

RE: strata consultations

From: Ko, Juliana B OHCS:EX <Juliana.Ko@gov.bc.ca>
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra McColman <cmccolman@udi.org>, jbaker@polyhomes.com, cli@polyhomes.com, Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: February 19, 2021 2:01:18 PM PST
Attachments: image002.png, image001.wmz

Hello Jeff, in order to keep the size manageable, we are limiting participants to one per organization. Could you please let me know if I should send an invitation to Joscelyn or Clara? The meeting with be through Skype for Business on Friday February 26 1-3pm. Thanks,

Juliana Ko

Senior Policy Analyst
Housing Policy Branch
Ministry of Attorney General and Minister Responsible for Housing
Province of British Columbia
UC: 778-974-3890
Cell: 778-679-9656
Pronoun: she/her

Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live and work.

From: Jeff Fisher <jfisher@udi.org>
Sent: February 18, 2021 1:55 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>; Ko, Juliana B OHCS:EX <Juliana.Ko@gov.bc.ca>; 'jbaker@polyhomes.com' <jbaker@polyhomes.com>; 'cli@polyhomes.com' <cli@polyhomes.com>
Subject: RE: strata consultations

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Doug, thanks for getting back to me. I did reach out to our members, and there may be some issues for developers when they are carrying out the responsibilities of the strata corporation prior to the first AGM (see Section 5 of the Act). Joscelyn Baker or Clara Li from Polygon Homes (and the UDI Real Estate Legal Issues Committee) would be interested in participating on the February 26 call. Can you send them the details?

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: February 11, 2021 4:28 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra McColman <cmccolman@udi.org>; Ko, Juliana B OHCS:EX <Juliana.Ko@gov.bc.ca>
Subject: strata consultations

Hi Jeff,

I heard back from OSRE. They advised that:

Filling out a Form B won't necessitate changes to a disclosure statement. If a developer's insurance coverage changed between when they filed a disclosure statement and then were required to fill out a Form B they would have to amend their disclosure regarding strata insurance, but they would have to make that amendment regardless of whether they had to fill out a Form B. Essentially, there are specific reasons you'd have to amend your disclosure statement (i.e. changes to the development), which may have to be addressed in a Form B, but you wouldn't have to amend your disclosure statement due to filling out a Form B.

I hope that answers your question. As we discussed, there are still occasions where owner developers need to fill out Form B's as the strata corporation, so let me know if you'd like to have someone participate on the call on the 26th. I expect the topics in the following months will be of more interest, however.

Regards,

Doug Page, (RI)
Director of Policy and Legislation

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Cell: 250 380-8696
Email: doug.page@gov.bc.ca

RE: UDI Okanagan rep - Metrics Research Report Update Steering Committee

From:	UDIOkanagan <UDIOkanagan@udi.org>
To:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Cc:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Sargent, David (Davara Holdings) <dave.sargent@davara.ca>
Sent:	February 25, 2021 10:32:49 AM PST
Attachments:	image002.jpg, image003.jpg, image004.jpg, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Dale,

Thanks for reaching out. The UDI Okanagan representative for this will be David Sargent from Davara Holdings. His email address is: dave.sargent@davara.ca and I have also cc'd him in this email reply.

Let me know if you need any further information.

Thank you,

Jennifer Dixon
Executive Director

Urban Development Institute – Okanagan Chapter
210, 1460 Pandosy Street
Kelowna, BC V1Y 1P3

Phone: 778.478.9649
Fax: 778.478.0393
Cell :250.869.7235

Like us on…

From: Andersson, Dale OHCS:EX [mailto:Dale.Andersson@gov.bc.ca]
Sent: February 24, 2021 4:02 PM
To: UDIOkanagan <UDIOkanagan@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: UDI Okanagan rep - Metrics Research Report Update Steering Committee

Hello UDI Okanagan staff,

I'm just reviewing our membership list for our Metrics Research Report Update Steering Committee, and see that we have a spot for a representative from UDI-Okanagan, but it doesn't appear to have been filled (unless my list is out of date?).

Would you like to have a rep on this Steering Committee? The Steering Committee is helping support the development of the BC Energy Step Code as follows:

- **ROLE OF STEERING COMMITTEE:** Provide advice to guide an updated analysis of the 2018 Metrics Research Report, and an analysis of 20% better, to prepare for and determine the energy-efficiency requirements to be included in the 2022 BC Building Code.
- **CURRENT STATUS:** We're waiting for submissions to a BC Bid proposal and anticipate the Steering Committee will next meet late March or early April for a kick-off meeting with the successful proponent, with the research done by late June or so – the anticipated timeline for the work.
- **FYI - OTHER UDI REPS**:
    - *Jeff Fisher, UDI-Pacific*
    - *Nicholas Standeven, UDI-Capital Region (Abstract Developments)*
    - *Dave Ramslie, Concert Properties*

Scott Williams, Senior Energy Codes Administrator (cc'd here) of our branch chairs the group. Please let us know if this is of interest or if you have any questions. Thank you.

Kind regards,
Dale

Dale Andersson, PhD | Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9653 | Email: dale.andersson@gov.bc.ca

RE: UDI eApp

From: May, Zachary OHCS:EX
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: March 4, 2021 8:49:12 PM PST
Attachments: image001.png, image002.png

Sounds good. We have lots to include.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: March 4, 2021 4:38 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: UDI eApp
Importance: High

Hey Zac,

Apologies for the Rush UDI eApp – we only received it late yesterday and Susan added content today before flexing tomorrow. We figure BSSB will have suitable industry connections and content and have left about 5 min of space for your SN. Please have APS review/approve and direct to John for final review. Due to ADMO tomorrow at noon. Thanks!

Cimarron Corpé
Director, Housing Secretariat

Ministry of Attorney General and Minister Responsible for Housing
Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

FW: UDI eApp

From: May, Zachary OHCS:EX
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 4, 2021 8:53:54 PM PST
Attachments: image001.png, image002.png

Hi Juni

There's an eapps with me due tomorrow at 12:00pm. MDE talking to UDI exec and staff (15 ppl). We have about 5 mins max to fill. I was thinking a nod to the GHG and Step Code work, and possibly a bit about accessibility?

Let me know if you or someone on your team can provide some speaking bullets.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: March 4, 2021 4:38 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: UDI eApp
Importance: High

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Cimarron Corpé
Director, Housing Secretariat

Ministry of Attorney General and Minister Responsible for Housing
Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

RE: Emailing: Port Moody Sustainable Building Practices

From: Hutchinson, Jarrett MAH:EX <Jarrett.Hutchinson@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Hoffman-McGaw, Trilby MAH:EX <Trilby.Hoffman-McGaw@gov.bc.ca>, Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>, Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>, Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: March 9, 2021 3:00:44 PM PST

Hi Zac and everyone!
Thanks for looping us in. Interesting take by this one councillor. How the pendulum has swung from 2009 when wood buildings were the ones being "banned" by local governments!
Agreed that embodied carbon is primed to enter the mainstream conversation around how we build buildings.
Interesting times ahead!

Jarrett Hutchinson | Executive Director
Office of Mass Timber Implementation
250-208-7277

-----Original Message-----
From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 9, 2021 2:44 PM
To: Hoffman-McGaw, Trilby MAH:EX <Trilby.Hoffman-McGaw@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>; Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>; Hutchinson, Jarrett MAH:EX <Jarrett.Hutchinson@gov.bc.ca>; Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Subject: FW: Emailing: Port Moody Sustainable Building Practices

Hello EMTC colleagues,

Sounds like Port Moody is getting (over)excited about mass timber and trying to "phase-out the use of concrete as the main component of buildings over six storeys in height."

Issues with the Building Act aside, this does show the interest at the local government level to encourage mass timber and address embodied emissions. It also shows the need to help everyone understand that a mass timber building is not entirely mass timber, so removing barriers likely works better than creating new barriers for concrete and steel.

No action required but thought you may be interested.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Jeff Fisher <jfisher@udi.org>

Sent: March 9, 2021 2:27 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Emailing: Port Moody Sustainable Building Practices

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Zachary, this Report is going to Port Moody Council tonight. The Councillor is requesting that staff look at banning concrete construction in the City. Can local governments ban concrete construction under the Building Act?

Your message is ready to be sent with the following file or link attachments:

Port Moody Sustainable Building Practices

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

RE: HEADS UP! Port Moody Sustainable Building Practices

From: May, Zachary OHCS:EX
To: Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>
Cc: Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
Sent: March 9, 2021 3:27:27 PM PST

Jeff also called, so I told him it sounded like there might be some Building Act issues but couldn't specify. Sounds like they will flag the Building Act as a possible issue, along with other issues, and hopefully this becomes a more refined proposal and possibly comes our way in a more formal way from Port Moody. Jeff suggested there are many issues so there's little chance of this proceeding as planned and was only worth us being aware of for now. No need to dispatch the Building Act Strike Force yet.

s.22

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>
Sent: March 9, 2021 3:10 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
Subject: HEADS UP! Port Moody Sustainable Building Practices
Importance: High

Hi Zac,

Not sure if/how you're planning to respond to Jeff Fisher. You might be inclined to say the same thing that I would say: "Of course they can't ban concrete construction, it's permitted in the Code!" (I infer this from your "issues with the Building Act" comment.)

This email is just a reminder s.14 s.22
s.22

(By the way . . . I fully agree with the rest of your summary in your paragraph two.)

Don

-----Original Message-----
From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 9, 2021 2:44 PM
To: Hoffman-McGaw, Trilby MAH:EX <Trilby.Hoffman-McGaw@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>; Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>; Hutchinson, Jarrett MAH:EX <Jarrett.Hutchinson@gov.bc.ca>; Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>

Subject: FW: Emailing: Port Moody Sustainable Building Practices

Hello EMTC colleagues,

Sounds like Port Moody is getting (over)excited about mass timber and trying to "phase-out the use of concrete as the main component of buildings over six storeys in height."

Issues with the Building Act aside, this does show the interest at the local government level to encourage mass timber and address embodied emissions. It also shows the need to help everyone understand that a mass timber building is not entirely mass timber, so removing barriers likely works better than creating new barriers for concrete and steel.

No action required but thought you may be interested.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Jeff Fisher <jfisher@udi.org>
Sent: March 9, 2021 2:27 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Emailing: Port Moody Sustainable Building Practices

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Zachary, this Report is going to Port Moody Council tonight. The Councillor is requesting that staff look at banning concrete construction in the City. Can local governments ban concrete construction under the Building Act?

Your message is ready to be sent with the following file or link attachments:

Port Moody Sustainable Building Practices

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

RE: GHGi Mandate - Monthly Touch Base

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Sent: March 10, 2021 8:55:02 AM PST

Sounds good. We will add these to the agenda.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 10, 2021 8:52 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sandham, Kylie OHCS:EX <Kylie.Sandham@gov.bc.ca>
Subject: GHGi Mandate - Monthly Touch Base

At today's meeting I would like to discuss two tweaks to address recent information.
1. Considering all three methods for sectoral targets in the analysis
2. Responding directly to the UDI letter asking for percentage reduction as opposed to intensity targets
3. Commissioning a third party to develop the GHG intensity of natural gas in light of FortisBC's massive effort to decarbonize. This is best done by a third party such as CSA who can maintain the test standard

Also, I am pleased to report that NRC will take in our work as part of the RCT, so we should be able to pass the baton to the national system by 2025

GHGi Mandate - Monthly Touch Base
Scheduled: Mar 10, 2021 at 11:00 AM to 12:00 PM, PST
Location: Microsoft Teams Meeting
Invitees: May, Zachary OHCS:EX, Sandham, Kylie OHCS:EX

Andrew Pape-Salmon
Cell 250-812-1933

RE: New eapp - Energy Step Code Council terms of reference and membership

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 12, 2021 10:09:50 AM PST

I will have the membership list and terms of reference updated accordingly and ready for your review when you're back from holidays.

Two points of clarification:

- Would you like us to hold off scheduling the next ESCC meeting until this has been reviewed and approved? We had discussed an April meeting, but I'm not sure if that should still proceed if we don't have endorsement from you and Cheryl to operate under our current membership and terms of reference.

- If current member organizations on the ESCC are not identified in your list below should I assume you would like us to respectfully ask them to focus on participating in subcommittees or participate as observers rather than members?

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 11, 2021 5:02 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: New eapp - Energy Step Code Council terms of reference and membership

As promised.

Scope of the ESCC:
- CleanBC and 2020 MAG Mandate item (new construction)
  - 20% better than BCBC
  - Carbon Pollution Standards
  - Not including existing buildings

Membership:
- National Code (1) - NRC staff
- Market developers (4) - UDI 4 chapters
- Social housing developers (2) - one Lower Mainland developer, plus BCNPHA
- Builders (4) - CHBA-BC plus 3 chapters in each region (interior, VI, LM)
- Local governments (4), including one rural / RD representative
- Indigenous (1) - AHMA or FNHIC
- Finance (2) - BC Housing, BCI or some other institutional investor
- Insurance (1) - BC Housing LCS
- BOABC
- Design (2) - EGBC member (not staff), AIBC staff, transitioning to member by 2022
- Research and capacity building (2) - UNBC, Canadian Association of Consulting Energy Advisors
- Energy (2) - utilities

Governance and communications
- Leadership team - need to add a local government vice-Chair
- Decisionmaking methods
- Documentation of decisions (in Teams)
- Public review format (cross-posting on BSSB website, email blast to all BSSB stakeholders)
- Newsletter

I would like to approve this package, not the acting ED during my vacation.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

-----Original Message-----
From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 11, 2021 10:12 AM
To: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: New eapp - Energy Step Code Council terms of reference and membership

Jessica, please initiate an eapp to Zac to revise and seek approval of the Terms of Reference. I will send instructions separately to Zac by email. This will go to ADM for approval.

Andrew Pape-Salmon
Cell 250-812-1933

RE: New eapp - Energy Step Code Council terms of reference and membership

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 12, 2021 11:59:47 AM PST
Attachments: ESCC Subco WG Master List 2021.xlsx

BCIT, Zebex, NRCan, UBC, BC Construction Association, PIBC, and Ministries of Municipal Affairs and EMLCI don't seem to be on the list you have prepared, but our current membership may be focused on a purpose that isn't the same as what you would like the council to focus on the future.

For the time being I will add new members you have suggested to our existing list and you can decide if we need to reduce numbers or modify the list when you review.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 12, 2021 10:35 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: New eapp - Energy Step Code Council terms of reference and membership

I think you should proceed in April and announce we are reviewing the membership.

Which of the current membership doesn't fit with the criteria?

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 12, 2021 10:10 AM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: RE: New eapp - Energy Step Code Council terms of reference and membership

I will have the membership list and terms of reference updated accordingly and ready for your review when you're back from holidays.

Two points of clarification:

- Would you like us to hold off scheduling the next ESCC meeting until this has been reviewed and approved? We had discussed an April meeting, but I'm not sure if that should still proceed if we don't have endorsement from you and Cheryl to operate under our current membership and terms of reference.
- If current member organizations on the ESCC are not identified in your list below should I assume you would like us to respectfully ask them to focus on participating in subcommittees or participate as observers rather than members?

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Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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Sent: March 11, 2021 5:02 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: New eapp - Energy Step Code Council terms of reference and membership

As promised.

Scope of the ESCC:
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I would like to approve this package, not the acting ED during my vacation.

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Cell: 250-812-1933

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Sent: March 11, 2021 10:12 AM
To: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: New eapp - Energy Step Code Council terms of reference and membership

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Andrew Pape-Salmon
Cell 250-812-1933

Last Name	First Name	Organization	Email	ESCC	PART 3/9 SUBCO	Part 3/9 Subco: Metrics Steering Co
Abraham	Yasmin	Empower Me	yasmin@empowerme.ca			
Amarasena	Kavisha	UBCO - Engineering	s.22			
Andersson	Dale	BSSB	dale.andersson@gov.bc.ca	**yes other subco chair**	**yes observer**	**yes**
Anthonsen	Niels	Enerlytics Building Performance	niels@enerlytics.ca			
Bains	Bea	FortisBC	bea.bains@fortisbc.com	**yes**	**yes**	
Baker	Robert	Township of Langley	rbaker@tol.ca		**yes**	
Bell	Pat	CEA	pbell@communityenergy.bc.ca			
Bennett	John	City of Prince George	John.Bennett@princegeorge.ca			
Benson	George	VEC (Vcr Econ Commission)	gbenson@vancouvereconomic.com			
Berkhout	Tom	BC Hydro	Tom.Berkhout@bchydro.com			
Bernhardt	Mark	Bernhardt Contracting	mark@bernhardtcontracting.com			**yes**
Bernhardt	Rob	PHC (Passive House Canada)	rob@passivehousecanada.com			
Bezerra	Luiz	PHC (Passive House Canada)	luiz.bezerra@passivehousecanada.com			
Bortolussi	Rick	UDI & Townline	Rick.Bortolussi@townline.ca		**yes**	
Brar	Sunny	FortisBC	sunny.brar@fortisbc.com		**yes**	
Burns	Susan	MAEST (Min Advanced Ed)	Susan.Burns@gov.bc.ca			
Cappon	Olivier	CIET (Canadian Institute for Energy Training)	ocappon@cietcanada.com			
Carignan	Gaetane	CEA	GCarignan@communityenergy.bc.ca			
Catania	Eric	RDH	ecatania@rdh.com			
Charron	Remi	BC Housing	rcharron@bchousing.org			**yes**
Chase	Andy	BSSB	andy.chase@gov.bc.ca			
Chorobik	Maya	CEA	mchorobik@communityenergy.bc.ca	**yes other subco chair**		**yes**

Chow	Kenneth	Environment & Climate Change Canada, Canadian Centre for Climate Services	kenneth.chow2@canada.ca			
Christie	Andy	City of Kimberley	building.official@kimberley.ca			
Comtois	Jim	NRCan	jim.comtois@canada.ca		yes	
Connolly	Norm	PIBC & City of Richmond	NConnolly@richmond.ca	yes	yes co-chair	yes
Conroy	Alison	Pelican Consulting	alison@pelicanconsulting.ca			
Cormier	Greg	Bowen Island Municipality	s.22			
Croome	Rod	HomeTech Energy Solutions	rod@hometechenergy.com			
Curry	Charles	PCIC UVic	cc@uvic.ca			
Dang	Tommy	BSSB	Tommy.Dang@gov.bc.ca			
Deeks	Bob	CHBA BC & RDC Fine Homes	bdeeks@rdcfinehomes.com	yes chair		yes
Dilworth	Diana	HAVAN	diana@havan.ca	yes		
Dolan	Luke	Capital Home Energy	luke@capitalhomeenergy.com			
Dubrous	Francois	NRCan	francois.dubrous@canada.ca		yes	
Ellacott	Warrington	Whirlpool Corp Canada	warrington_ellacott@whirlpool.com		yes observer	
Ely	Torsten	RDH	tely@rdh.com			
Enright	Patrick	City of Vancouver	patrick.enright@vancouver.ca	yes alternate	yes	yes
Ernst	Catherine	BOABC	catherine.ernst@boabc.org	yes	yes	
Falconer	Chenelle	VICA & BCCA	chenelle@vicabc.ca			
Faught	Brady	City of Vancouver	brady.faught@vancouver.ca			
Faulkner	Paul	RDCK (Regional District of Central Kootenay)	pfaulkner@rdck.bc.ca			
Ferguson	Alex	NRCan	alex.ferguson@canada.ca			yes
Fisher	Jeff	UDI	jfisher@udi.org	yes	yes	yes
Fluxgold	Ruta	NRCan	ruta.fluxgold@canada.ca	yes		
Foroushani	Sepehr	City of Richmond	SForoushani@richmond.ca			yes

Gareau	Cindy	CACEA	manager@cacea.ca			
Gatensby	Maura	AIBC	MGatensby@aibc.ca	**yes**	**yes**	**yes**
Gatz	Stephen	Whirlpool Corp Canada	stephen_e_gatz@whirlpool.com		**yes observer**	
Gazo	Nick	NAIMA Canada	ngazo@naimacanada.ca		**yes**	
Gerke	Greg	Townline	greg.gerke@townline.ca		**yes**	
Glasner	Troy	E3 Eco Group	troy@e3ecogroup.com			
Goodland	Helen	BCCA and Scius Advisory	hgoodland@scius.ca	**yes alternate**		
Gosman	Nat	EMLI	Nathaniel.Gosman@gov.bc.ca	**yes**		
Gustafson	Christine	HPSC (Home Performance Stakeholder Council)	Christine@homeperformance.ca			
Halbig	Einar	CACEA & E3 Eco Group	einar@e3ecogroup.com			
Hamer	Gary	BC Hydro	gary.hamer@bchydro.com		**yes**	
Hart	Joe	CHBA BC & Icon Homes	joe.iconhomes@gmail.com	**yes**		**yes**
Hayes	Eoghan	IBPSA-Canada & Edge	ehayes@edgec.ca			**yes**
Heap	Nicholas	City of Richmond	nheap@richmond.ca	**yes other subco chair**	**yes**	**yes**
Heryet	Jeremy	FortisBC	Jeremy.Heryet@fortisbc.com			
Higgins	Chris	City of Vancouver	Chris.Higgins@vancouver.ca			
Hilder	Scott	Total Home	scott@totalhome.ca			
Ho	Chris	UDI & Polygon Homes	cho@polyhomes.com			
Horsburgh	Sharon	PIBC & RDN (Regional District of Nanaimo)	SHorsburgh@rdn.bc.ca	**yes alternate**		
Hussain	Assad	UBCO - Engineering	s.22			
Hussein	Nabila	Empower Me	nabila.hussein@empowerme.ca			
Hutton	Alex	Fraser Health Authority	Alex.Hutton@fraserhealth.ca		**yes**	
James	Andre	District of Saanich	Andre.James@Saanich.ca			

Jang	Stan	Building Balance (EA)	stan@buildingbalance.ca			
Jiang	Tao	City of Surrey	tao.jiang@surrey.ca		yes	
Joehl	Vanessa	CHBA BC	vanessa@chbabc.org	yes alternate		yes
Joynt	Anna	NRCan	anna.joynt@canada.ca		yes	
Jung	Jason	ASTTBC	jjung@asttbc.org	yes		
Just	Sabine	ICBA	Sabine@icba.ca			
Kadulski	Richard	Richard Kadulski Architect	kadulski@direct.ca		yes	
Kanyuk	Jackie	BCNPHA	jackie@bcnpha.ca			
Kapuscinski	Marek	NAIMA Canada	mkapuscinski@naimacanada.ca		yes	
Koepfgen	Pete	FortisBC	Pete.Koepfgen@fortisbc.com			yes
Lane	Kelly	City of Maple Ridge	klane@mapleridge.ca			
Langevin	Patric	NRCan	patric.langevin@canada.ca			
Larson	Janice	UBC Okanagan	janice.larson@ubc.ca			
Lau	Toby	BC Hydro	toby.lau@bchydro.com	yes other subco chair	yes co-chair	yes
Lemieux	Kathryn	NRCan	kathryn.lemieux@canada.ca			
Lesage	Gilles	CACEA & Total Home Solutions	gilles@totalhome.ca			
Leung	Wilma	BC Housing	wileung@bchousing.org	yes	yes	yes
Li	Charling	City of Vancouver	charling.li@vancouver.ca			
Liyanage	Rukmal	UBCO - Engineering	s.22			
Lohmann	Megan	UBCM & CEA	mlohmann@communityenergy.bc.ca	yes		
Lundgren	Lee	City of Kamloops	llundgren@kamloops.ca			
MacDonald	Iain	National Research Council	Iain.Macdonald@nrc-cnrc.gc.ca			yes
MacDougall	Susan	Focal Engineering	susan@focaleng.com		yes	yes
MacLeod	Robyn	City of Port Moody	rmacleod@portmoody.ca			
Madden	John	UBC	J.Madden@ubc.ca	yes		
Mak	Lisa	BC Hydro	Lisa.Mak@bchydro.com	yes other	yes	
Mathews	Richard	District of Squamish	s.22			
May	Zachary	BSSB	Zachary.May@gov.bc.ca	yes chair	yes	yes
McCaffrey	Jen	REFBC (Real Estate Foundation of BC)	Jen@refbc.com			

McCall	Gregory	City of Vancouver	gregory.mccall@vancouver.ca		**yes**	**yes**
McIntyre	Manda	RDCK (Regional District of Central Kootenay)	mmcintyre@rdck.bc.ca			
McLellan	Christopher	NRCan	christopher.mclellan@canada.ca	**yes alternate**	**yes**	
McWilliam	Mary	BCIT	mmcwilliam3@bcit.ca	**yes other subco chair**		
Meads	Jonathan	Streetside Developments	JMeads@qualico.com			
Mihailovic	Mihailo	National Research Council	Mihailo.Mihailovic@nrc-cnrc.gc.ca		**yes**	
Milne	Colin	Dome Energy	colin@domeenergy.ca			
Mohareb	Adrian	CAS (Climate Action Secretariat)	adrian.mohareb@gov.bc.ca		**yes**	
Morhart	Ryan	City of Victoria	rmorhart@victoria.ca			
Narvaez	Kally	NRCan	kally.narvaez@canada.ca			
Nash	Stuart	EGBC	snash@egbc.ca			
Neuberger	Michaela	ZEBx	Michaela@zebx.org			
Nolin	Frederic	NRCan	frederic.nolin@canada.ca			
Olmedo	Matheus	Capital Home Energy	s.22			
Pander	Sean	City of Vancouver	sean.pander@vancouver.ca	**yes**		
Pearson	Emily	VanCity	Emily_Pearson@vancity.com			
Pecora	Roberto	ZEBx	roberto@zebx.org	**yes**	**yes**	**yes**
Pedde	Don	BSSB	don.pedde@gov.bc.ca		**yes**	
Perera	Ishanka	UBCO - Engineering	s.22			
Perks	Warren	BCCA	warrenp@bccassn.com	**yes**		
Phillips	Freya	RDKB (Regional District of Kootenay Boundary)	fphillips@rdkb.com			
Poirier	Simon	NRCan	simon.poirier@canada.ca			
Prabatha	Tharindu	UBCO - Engineering	s.22			
Pye	Andrew	EMLI	Andrew.Pye@gov.bc.ca			
Radhakrishnan	Harshan	EGBC	hradhakrishnan@egbc.ca	**yes**	**yes**	**yes**
Ramlu	Kevin	Township of Langley	kramlu@tol.ca			
Ramslie	Dave	UDI & Concert Properties	reception@concertproperties.com			**yes**

Rattray	Gord	MHABC	gord@mhabc.com			
Ray	Chris	City of Kelowna	CRay@kelowna.ca			
Reid	Kelly	CHBA BC & HRK Builders	kelly@hkrbuilders.com	**yes**		**yes**
Richards	Gordon	Jensen Hughes	grichards@jensenhughes.com		**yes**	
Roux	Louise	NRCan	louise.roux@canada.ca			
Rumak	Tanya	FortisBC	Tanya.Rumak@fortisbc.com			**yes**
Rupp	Pauline	CHBA BC	pauline@chbabc.org			**yes**
Rutherford	Sarah	BC Housing	srutherford@bchousing.org			
Sampliner	Laura	City of Port Moody	lsampliner@portmoody.ca	**yes other subco chair**		**yes**
Sargent	David	UDI-Okanagan & Davara Holdings	dave.sargent@davara.ca			**yes**
Sawkins	Gerry	3West Building Energy Consultants	gsadvisor@shaw.ca		**yes**	
Schatz	Akua	CaGBC	aschatz@cagbc.org			
Sharma	Muneesh	BOMA BC	muneesh@boma.bc.ca	**yes**		
Shea	Kevin	Integral Group	kevin.shea@integralgroup.com			
Smith	Ray	Kootenay Energy Advisor	kootenayenergyadvisor@gmail.com			
Southam	Brenda	REIBC (Real Estate Institute of BC)	bsoutham@reibc.org			
Standeven	Nicholas	UDI-Capital Region & Abstract Developments				**yes**
Stelzer	Bertine	BC Hydro	bertine.stelzer@bchydro.com			
Sundberg	Peter	City Green Solutions	Peter.Sundberg@citygreen.ca		**yes**	
Surendran	Ajeen	Township of Langley	asurendran@tol.ca			
Sykes	Maxwell	UBCM & City of Surrey	Maxwell.Sykes@surrey.ca	**yes**		
Tang	Elizabeth	CMHC	etang@cmhc-schl.gc.ca			
Thé	Ryan	UDI & WES Group	rthe@wesgroup.ca	**yes alternate**		
Thompson	Alexander	CHBA BC	alex@chbabc.org			
Tomes	Stephen	KINGSMERE Construction Ltd	stephen@kingsmereconstruction.com			
Trudeau	Marc	AME Group	marctrudeau@amegroup.ca			
Wacker	Holly	MAH	Holly.Wacker@gov.bc.ca	**yes**		

Wagenaar	Joyce	CaGBC	jwagenaar@cagbc.org			
Wanniarachchi	Tharaka	UBCO - Engineering	s.22			
Wark	Robyn	BC Hydro	Robyn.Wark@BCHydro.com	**yes chair**		
Wells	Ralph	UBC	ralph.wells@ubc.ca	**yes alternate**	**yes**	
Westerhoff	Lisa	Integral Group	lwesterhoff@integralgroup.com			
Wightman	Tyler	BOABC	tyler.wightman@boabc.org	**yes**		
Williams	Scott	BSSB	scott.b.williams@gov.bc.ca	**yes other**	**yes co-chair**	**yes chair**
Wills	Adam	NRCan	Adam.Wills@nrc-cnrc.gc.ca			
Wimmers	Guido	UNBC	Guido.Wimmers@unbc.ca	**yes**	**yes**	
Wong	Hugo	BSSB	Hugo.Wong@gov.bc.ca	**yes other**		
Woo	Angie	Fraser Health Authority	angie.woo@fraserhealth.ca			
Zhang	Haonan	UBCO - Engineering	s.22			

Part 3/9 Subco: Overheating WG	Part 3/9 Subco: Airtightness WG	PART 9 SUBCO	Part 9: 20% Better - Unique Building Types WG	PART 9: Overheating WG	PART 9: NLA/NLR/ACH WG	PART 9: %-better TEDI WG	PART 9: Correction for Intentional Openings WG	PART 9: Articulations and Upper Steps WG	PART 9: Airtightness
yes									
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		yes co-chair	yes	yes	yes				
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yes chair		yes	yes	yes					
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yes									

CAP BLDG AND COMM SUBCO	CBCSC: Comm WG	CBCSC: Matrix WG	CBCSC: EA WG
yes			
yes			
yes co-chair	yes chair	yes chair	yes chair
			yes
yes			
yes		yes	
yes	yes	yes	yes
yes			yes
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yes	yes		yes
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yes co-chair	yes	yes	yes
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yes			

Notes to 2021 List Formatting

Organizations = entered in short form if commonly used (e.g., EGBC, AIBC, BOABC), or in short form & spelled out if not (e.g., REIBC (Real Estate Foundation of BC)
Municipal Govts names = entered with full name e.g., District of XX, City of XX, Township of XX etc.
Individuals representing an organization = entered with the org name first and then their own org using & - e.g., UDI & ABC Builder; CHBA BC & XYZ Builder; UBCM and City of Richmond

ESCC Members - have subcategories to identify different folks on the list
- yes = for all regular members
- yes chair = for chair and co-chairs
- yes other - not members but included for info such as BSSB staff
- yes other subco chair = people included as they are ESCC Subcommittee co-chairs
- yes alternate = if they are an alternate member of the ESCC for someone else

Date	Name	Change
25-Feb-21	ESCC List	All names from original sheet added including alternates. Should confirm alternates sometime soon. Updated Helen Goodland email address
25-Feb-21	Part 3/9 List	All names added from orignal Part3/9 Subco tab. Need to confirm w Lisa M the list is still current. Are
25-Feb-21	Metrics Steering Co	All names added - from Teams list Feb 25/2021
25-Feb-21	Part 3 Oheating WG	All names added - from Teams list Feb 25/2021
26-Feb-21	CBCSC Added	All names added from original tab
26-Feb-21	CBCSC Comm WG	All names added from original tab some adjustments
26-Feb-21	CBCSC Matrix WG	All names added from original tab - with adjustments
26-Feb-21	Ruta Fluxgold NRCan	Need to confirm with her which groups she wants to be on - just listed ESCC for now
26-Feb-21	CBCSC EA WG	All names added
26-Feb-21	Part 9 Subco and WGs added	Taken from Part 9 tab prepared by Hugo - Should Adam Wills be included? Yes for 1 WG
26-Feb-21	Part 9 - 6 WGs added	Taken from Part 9 tab prepared by Hugo - Should Adam Wills be included? He just had an email listin
	Question: Are these people part of the Subco and working groups? They are the last 4 on the tab/list:	
	NRCan	simon.poirier@canada.ca
		Adam.Wills@nrc-cnrc.gc.ca Just NLA/NL
	MHABC	gord@mhabc.com Just unique t
	CHBA-BC	joe.iconhomes@gmail.com
26-Feb-21	Part 9 Subco and WGs added	Ask Hugo if the colour coding of the lines means anything
26-Feb-21	Part 9 WGs	Confirm right members w Hugo
1-Mar-21	Chris Ho, Polygon Homes	Added as UDI rep to Part 3 and Part 9 ATT Working Groups per UDI interest in this topic
3-Mar-21	Part 9 Subco and WGs	Removed colour coding and changed X to yes to match other groups
8-Mar-21	Stephanie Yen, Jeremy Heryet	Per email from Bea Bains, replaced Stephanie Yen with Jeremy.Heryet@fortisbc.com; Stephanie rem
22-Mar-21	Replace Michaela with Kim	Kimberley McClymont <kim@zebx.org - replaces Michaela Neuberger/ZEBX on all Michaela's groups -
1-Apr-21	Remove Nabila Hussein	Per out of office msg: " Nabila Hussein is no longer working at Kambo Energy Group. For any Empower Me inquiries, please contact Yasmin Abraham, VP, Business Development and Co-Founder, at yasmin@empowerme.ca or 778-819-8359."
1-Apr-21	Remove Sunny Brar, Fortis	Per his out of office message - and Pete K confirmed he is no longer w FortisBC
1-Apr-21	Adam Wills	Changed org from NRCan to NRC - per Chris McClelland/Nrcan
7-Apr-21	Ashley Lubyk	Added to CBCSC per his request following CBCSC meeting
7-Apr-21	Ross Lyle	Added to CBCSC per his request following CBCSC meeting
7-Apr-21	Sara Fralin	Added to CBCSC per his request following CBCSC meeting
12-Apr-21	Nicholas Standeven	Removed from Metrics Steering Co per his request - UDI-Capital Region & Abstract Developments - n
12-Apr-21	Remove Christine Gustavson	Per email from Christine, removed her from CBCSC and replaced by Jovan Cheema - jovan@homeper
12-Apr-21	Jovan Cheema	Added to CBCSC
13-Apr-21	Remove Gary Hamer Part3/9	Remove from part 3/9 per email Lisa Mak
13-Apr-21	Kevin Ramlu and Ajeen Surendran	Add to Part 3/9 per email from Lisa Mak - they are from ToL
22-Apr-21	Rob Bernhardt	No longer w PHC per out of office msg? Confirmed April 27 Rob still involved, updated email address
26-Apr-21	Ron Rapp	Added as Co-Chair, Part 9 per email Zac M, taking over for Nick Heap
30-Apr-21	Sepehr Foroushani	No longer with Richmond, removed from list
3-May-21	Vanessa Joehl	Removed from Metrics Steering Co per her request - Pauline doing this
3-May-21	Candace W	Candace Witkowskyj <cwitkowskyj@lgma.ca> - added to CBCSC
5-May-21	Christopher McLellan	Away until Nov 1, 2021 but kept him on the list. Checking on replacement during his absence.
5-May-21	Alex Bigoness	Alex Bigonesse - replacing Chris McLellan while Chris is away - for all groups
10-May-21	Patrick Caraher	Added as ESCC rep from AHMA; Sara Fralin identified as ESCC alternate
10-May-21	Sara Fralin	Added as ESCC AMHA rep alternate - per mtg w Patrick Caraher
18-May-21	Brent Reems, Ron Rapp	Brent Reems replaces Andre James in Saanich; Ron Rapp new P9 co-chair
31-May-21	Richard Mathews	Named as new cochair of Part 9 Subco
31-May-21	Nicholas Heap	Changed status to Part 9 Subco member, formerly co-chair
22-Jun-21	Existing Buildings	Add Tech Research Steering Co for EB project to master list with new column
28-Jun-21	Existing Buildings	Added Wilma Leung to new CB steering co
28-Jun-21	ESCC List	Added Tom Berkhout as an alterate to Robyn Wark.
29-Jun-21	ESCC List	Changed Adrian Mohareb to Yes other for ESCC; added Daisy Lilley from ENV as Yes other temporaril
19-Jul-21	Existing Buildings	Added Daisy Lilley to EB Steering Co per request Erik Kaye
20-Jul-21	Part 3 Oheating WG	Added Maura G. per her/Toby request
28-Jul-21	ESCC List	Added Katherine Muncaster as alternate for Nat Gosman
10-Aug-21	Eliz Tang and Olivier Cappon	Removed from CBCSC Comm WG due (to keep to active participants)
12-Aug-21	Luiz Bezerra	Add to Part 3/9 Subcommittee
17-Aug-21	Alex Blue	Added to main Council as "yes other" until Metrics report closes
19-Aug-21	Charling Li	Add to Part 3/9 per Lisa Mak
31-Aug-21	Holly Pridie	Holly Wacker now Holly Pridie. Email and name updated.
Sept. 1, 2021	Alex Thompson	Remove from list per Pauline - he's no longer at CHBA BC
Sept. 1, 2021	Pauline Rupp	Add to CBCSC for Alex temporarily, and to ESCC as "other"
1-Sep-21	Tiffany Warkentin	Added to ESCC as acting Chair
4-Sep-21	Ian Cullis/Jackie Kanyuk	Yes, other, main council, for GHG meetings only

	Katy Fairley and Chris Atchison			
13-Sep-21		Add to CBCSC per Warren Perks s.22		
13-Sep-21	Susannah.Machelak	Add to CBCSC - with AVED		
13-Sep-21	kathryn.lemieux	Removed - kathryn.lemieux@canada.ca - no longer with govt, email returned		
14-Sep-21	Pete Koepfgen	Adjusted his memberships per his request		
15-Sep-21	Lilly Shields-Anderson	Added per request Jeff Fisher/UDI		
4-Oct-21	Warren Perks	Removed - s.22 warrenp@bccassn.com per out of office message		
	Zac May and Tiffany Warkentin			
5-Oct-21		Replaced Zac w Tiffany for all groups s.22		
5-Oct-21	EB Rsch Phase 2	Started new group - added all folks from Phase 1 + Adrian Mohareb/CAS		
6-Oct-21	Emily Pearson	Removed from the list; inactive member Emily_Pearson@vancity.com (doesn't attend meetings)		
	Damian Stathonikos and Madeline			
5-Nov-21	Dams	Damian replaces Muneesh, s.22 . Madeline replaces Holly Pridie from MUNI.		
12/9/2021	Jason Owen	Jason Owen sub for Max Sykes s.22)		
1/12/2022	Ruta Fluxgold	Removed.		
3/8/2022	Scott Hilder, Total Home	Pt 9 Subco No longer with Total Home - no other contact info		
3/8/2022	John Bennett City of PG	Part 9 Subco Removed at his request.		
3/10/2022	Troy Glasner E3	Part 9 Subco. No longer a principal. No new contact info provided.		
3/14/2022	Gerry Sawkins	Pt 9 Subco New email address		
3/16/2022	Kelly Lane, Maple Ridge	No longer with Maple Ridge		
4/21/2022	Luke Dolan, Capital Homes	Added to Master List & Pt 9 Subco (already on meeting invite list)		
4/21/2022	Daisy Lilley	Removed from ESCC as she's moved on to another position		
4/21/2022	Sara Fralin	s.22 Removed from ESCC as alternate and Cap/Comm subco		
5/3/2022	Lise Townsend	Added her as Max Sykes' alternate for Surrey.		
9/20/2022	Louise Roux	Removed. s.22		
9/23/2022	Peter Sunberg	Left City Green (Peter.Sundberg@citygreen.ca) for FRESCo		
10/11/2022	Tami Rothery	Added to Master List & Pt 9 Subco		
10/11/2022	Chris McCurray	Added to Master List & Pt 9 Subco		
10/14/2022	Richard Mathews	New email address		
10/14/2022	Manda McIntyre	New email address - with the City of Nelson now		
10/14/2022	Dale Andersson	No longer with BSSB - removed from list		
11/3/2022	Elisabeth Baudinaud	Added to Master List, ESCC & Part 3 Subco		
11/4/2022	Gaetane Carignan	Added to ESCC and Part 3 Subco		
11/4/2022	Tami Rothery	Added to ESCC and Part 3 Subco		
11/4/2022	Chris McCurray	Added to ESCC and Part 3 Subco		
3/14/2023	Don Pedde	Deleted s.22		
	Luke Dolan, Capital Homes	Deleted a duplicate (he's still on the list)		
5/2/2023	Anna Joynt	Deleted as she's left Office of Energy Efficiency		
5/12/2023	Alex Hutton	No longer at Providence Health/Fraser Health. Now a sole proprietor. Email changed.		
5/24/2023	Rob Bernhardt	No longer representing Passive House Canada. Removed from P9 subco.		
6/23/2023	Rachel Buskie	Added from CEA		
2023 06-28	Dustin Winstanley	Removed as not representing larger org		

FW: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

From: May, Zachary OHCS:EX
To: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>
Sent: March 12, 2021 4:36:32 PM PST
Attachments: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL - comments from CHBA.pdf

FYI – given the timelines on this issue I assume there will be ADMO questions about the status of this on Monday.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 12, 2021 4:32 PM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>; Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

Greetings all,

As I prepare Minister David Eby's speech, I will use the previous UDI speech as the basis of content. There is a lot of Housing Policy Branch content in there.

I called Carmina at Canadian Home Builders about this event next week and she provided some helpful comments for the speaking points. See attached.

For BSSB, note the comments about:

- BOQs in Central Interior – delays in permits
- Noting differences in interests of builders in rural and remote communities versus urban with respect to standards
- Energy Step Code being a challenge due to differing standards by municipality
- Happy with the outcome from meeting with Superintendent re: Professional Governance Act and Home Designers

For PLUM

- The DAPR is the primary interest of CHBA members on this list
- They were encouraged with the announcement and hope cities like Vancouver will apply, noting City of Vancouver permitting doesn't include online option (still require a paper application)
- Challenges with regulations under Water Act – referrals to the Province with long approvals
- ALR – Fraser Valley and Vancouver Island
- MOTI regulations – no specifics

She also said she would get in touch with us if there are any other issues her members raise before this event. I said I would put her in touch with John Thomson if that is OK.

I will get the speaking points done today or over the weekend, email them to Jessica as an FYI, and to Zac, John before going to ADMO.

I am on vacation next week.

Cheers,
Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: Pape-Salmon, Andrew OHCS:EX
Sent: March 12, 2021 3:46 PM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>; Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

Greetings Jessica and John, I am writing these speaking notes for our Minister now.

I will send you both a draft end of day – Jessica by email and John by eApps.

My colleague Jessica Alexander can collate MMA comments into our points on Monday.

Cheers,
Andrew

CANADIAN HOME BUILDERS' ASSOCIATION BRITISH COLUMBIA

2021 PROVINCIAL MEETING
MINISTERS' ADDRESS BRIEFING NOTES

MARCH 19, 2021 from 1pm – 1:45pm

VIRTUAL MEETING LOG-IN INSTRUCTIONS FOR LIFESIZE:

- You are invited to call into CHBA BC's secured, confidential meeting line on Lifesize at 1pm. Join the meeting here: https://call.lifesizecloud.com/6185905.

EVENT LOGISTICAL NOTES:

1) **Who will the audience consist of and approximately what size?**
   - The audience will consist of the leadership of CHBA BC's organization and CHBA BC staff. This includes the Board of Directors, the Executive Committee, Local Officers and Committee Chairs.
   - The typical turnout for this event in previous years has been 30-40 participants.
   - CHBA BC will be providing the full list of confirmed registrants in advance of the meeting.

2) **Will media be invited?**
   - No media will be present for this event. It is closed to CHBA BC and member-company representatives.

3) **Can you share a contact name/cell number?**
   - Please contact CARMINA TUPE, DIRECTOR OF POLICY & GOVERNMENT RELATIONS at (647) 326-6181.

STRUCTURE OF PROGRAM FOR MINISTERS' SEGMENT:

- 45-minute program running from 1pm to 1:45pm, broken down as follows:

Welcome & Introductions by CHBA BC CEO, Neil Moody	2-3 minutes
Opening remarks by Attorney General and Minister Responsible for Housing, Hon. David Eby and Minister of Municipal Affairs, Hon. Josie Osborne	Approx. 10-15 minutes (5-7 minutes each)
Open Discussion/Q&A Period Moderated by CHBA BC President, Joe Hart	20-25 minutes
Wrap Up/Closing Remarks	2-3 minutes

DISCUSSION TOPICS AND POTENTIAL QUESTIONS:

- In the time you've had to review the housing files, what do you think the government is doing well in terms of supporting delivery of housing options and what areas do you think greater attention is needed to better improve the environment for delivering housing supply?

- Residential construction is one of the most heavily regulated industries. We face regulations at three different tiers of government and often need to work with different departments and ministries (beyond MMA) to receive approvals. How will you be collaborating with other ministries to ensure they maintain a housing lens on the work they do, specifically as it related to reducing red tape and unnecessary barriers to approvals?

- Predictability and certainty are important to plan housing projects. However, members continue to face rising construction costs, especially with lumber shortages, and exponential increases to the development related DCCs and CACs at the local municipal level. What are some ways your Ministries are considering ways to improve the cost certainty for development and ensure that the fees and charges imposed are transparent, reasonable and justified?

- The Development Approval Process Review (DAPR) is a significant piece of work that CHBA BC and its members are highly supportive of and believe it will have a significant impact on streamlining processes. Can you share how you intend to advance that work forward and what opportunities will be made for CHBA BC and its members to be involved?

- Residential construction is a major contributor to the provinces' economy. We create billions of dollars in investment value and contribute thousands of jobs each year. As the pandemic continues to impact the economy, what ways will you seek to have housing play a role in the province's recovery efforts?

- What do you believe our industry and members can do better to work with this government and our mutual housing objectives for more supply and affordability?

Existing Buildings

From: May, Zachary OHCS:EX
To: Jeff Fisher <jfisher@udi.org>
Sent: March 12, 2021 4:51:34 PM PST
Attachments: image001.jpg

Hi Jeff,

Heard your message. We're likely starting on existing buildings consultation in May or June. We have internal approvals in place and need to award an RFP for a facilitator, Which will likely take 6-8 weeks to complete.

I may need some advice about your early thoughts on key issues we need to address before we go for consultation. If there's anything in particular you think we should know please feel free to reach out.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



RE: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

From: May, Zachary OHCS:EX
To: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Sent: March 15, 2021 9:22:34 AM PDT
Attachments: image001.jpg
Will take a look now.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Sent: March 15, 2021 9:22 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

Zac – do you have any comments or changes for the speaking notes?

Thanks,

Jessica Alexander | *Office Manager*
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live, work and play

---

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: March 13, 2021 11:30 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: RE: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

I've reviewed the speaking notes and have no comments or changes.

Thanks.

Jun'ichi Jensen
Director, Building Policy (Acting)
Building and Safety Standards
Ministry of Attorney General and Minister Responsible for Housing
Province of BC
250 858 1325
or 778 974-3910



From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 13, 2021 12:58 AM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: RE: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

My last task before taking 2 weeks vacation!

The eApp has been sent to John Thomson for HPB edits. Note that CHBA-BC provides the construction services for buildings up to 6-storeys (as opposed to UDI that dominates larger developments). As such, a large proportion of our social housing is built by CHBA-BC members. John, when HPB is done you can send it to Jessica Alexander and she can submit for the 10am Monday deadline to ADMO. ADM comments should go back to John T for addressing.

Juni and Zac, I invite your input to the attached – please send the word document with tracked changes to Jessica Alexander by 9:30am Monday.

Jessica Brooks, I suspect you are doing your own package.

What is missing from this OHCS package is speaking points for the Q&A topics. I suggest a joint briefing note for both Ministers that can be attached to the eApp later. Who wants to go first? PLUM or HPB?

- In the time you've had to review the housing files, what do you think the government is doing well in terms of supporting delivery of housing options and what areas do you think greater attention is needed to better improve the environment for delivering housing supply?
    - Ministers can speak freely about their experiences.
- Residential construction is one of the most heavily regulated industries. We face regulations at three different tiers of government and often need to work with different departments and ministries (beyond MMA) to receive approvals. How will you be collaborating with other ministries to ensure they maintain a housing lens on the work they do, specifically as it related to reducing red tape and unnecessary barriers to approvals?
    - In my conversation with Carmina, the regulations were focused on development approvals. See my notes in Attachment #4.
    - However, the Ministers should also be prepared to speak to the challenges for climate action noted in attachment #3.
- Predictability and certainty are important to plan housing projects. However, members continue to face rising construction costs, especially with lumber shortages, and exponential increases to the development related DCCs and CACs at the local municipal level. What are some ways your Ministries are considering ways to improve the cost certainty for development and ensure that the fees and charges imposed are transparent, reasonable and justified?
    - Focused on development approvals.
- The Development Approval Process Review (DAPR) is a significant piece of work that CHBA BC and its members are highly supportive of and believe it will have a significant impact on streamlining processes. Can you share how you intend to advance that work forward and what opportunities will be made for CHBA BC and its members to be involved?
    - Ditto.
- Residential construction is a major contributor to the provinces' economy. We create billions of dollars in investment value and contribute thousands of jobs each year. As the pandemic continues to impact the economy, what ways will you seek to have housing play a role in the province's recovery efforts?
    - I have noted some statistics in MDE speech, based on metrics published by CHBA-BC (link in the first attachment).
    - I think they are seeking further information about their policy positions (attachment #2) which are in the domain of Finance.
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Cheers,
Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

From: Pape-Salmon, Andrew OHCS:EX
Sent: March 12, 2021 4:32 PM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>; Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>

Subject: RE: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

Greetings all,

As I prepare Minister David Eby's speech, I will use the previous UDI speech as the basis of content. There is a lot of Housing Policy Branch content in there.

I called Carmina at Canadian Home Builders about this event next week and she provided some helpful comments for the speaking points. See attached.

For BSSB, note the comments about:

- BOQs in Central Interior – delays in permits
- Noting differences in interests of builders in rural and remote communities versus urban with respect to standards
- Energy Step Code being a challenge due to differing standards by municipality
- Happy with the outcome from meeting with Superintendent re: Professional Governance Act and Home Designers

For PLUM

- The DAPR is the primary interest of CHBA members on this list
- They were encouraged with the announcement and hope cities like Vancouver will apply, noting City of Vancouver permitting doesn't include online option (still require a paper application)
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- MOTI regulations – no specifics

She also said she would get in touch with us if there are any other issues her members raise before this event. I said I would put her in touch with John Thomson if that is OK.

I will get the speaking points done today or over the weekend, email them to Jessica as an FYI, and to Zac, John before going to ADMO.

I am on vacation next week.

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Greetings Jessica and John, I am writing these speaking notes for our Minister now.

I will send you both a draft end of day – Jessica by email and John by eApps.

My colleague Jessica Alexander can collate MMA comments into our points on Monday.

Cheers,
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RE: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

From: May, Zachary OHCS:EX
To: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>, Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>
Sent: March 15, 2021 9:43:00 AM PDT
Attachments: 615021-AG-SN-Canadian Home Builders Spring Provincial Meeting zm .docx

Edits for two of the bullets in tracked changes.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 13, 2021 12:58 AM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: RE: 2021 Provincial Meeting - Ministers Program Briefing Note FINAL (003).pdf

My last task before taking 2 weeks vacation!

The eApp has been sent to John Thomson for HPB edits. Note that CHBA-BC provides the construction services for buildings up to 6-storeys (as opposed to UDI that dominates larger developments). As such, a large proportion of our social housing is built by CHBA-BC members. John, when HPB is done you can send it to Jessica Alexander and she can submit for the 10am Monday deadline to ADMO. ADM comments should go back to John T for addressing.

Juni and Zac, I invite your input to the attached – please send the word document with tracked changes to Jessica Alexander by 9:30am Monday.

Jessica Brooks, I suspect you are doing your own package.

What is missing from this OHCS package is speaking points for the Q&A topics. I suggest a joint briefing note for both Ministers that can be attached to the eApp later. Who wants to go first? PLUM or HPB?

- In the time you've had to review the housing files, what do you think the government is doing well in terms of supporting delivery of housing options and what areas do you think greater attention is needed to better improve the environment for delivering housing supply?
    - Ministers can speak freely about their experiences.
- Residential construction is one of the most heavily regulated industries. We face regulations at three different tiers of government and often need to work with different departments and ministries (beyond MMA) to receive approvals. How will you be collaborating with other ministries to ensure they maintain a housing lens on the work they do, specifically as it related to reducing red tape and unnecessary barriers to approvals?
    - In my conversation with Carmina, the regulations were focused on development approvals. See my notes in Attachment #4.
    - However, the Ministers should also be prepared to speak to the challenges for climate action noted in attachment #3.
- Predictability and certainty are important to plan housing projects. However, members continue to face rising construction costs, especially with lumber shortages, and exponential increases to the development related DCCs and CACs at the local municipal level. What are some ways your Ministries are considering ways to improve the cost certainty for development and ensure that the fees and charges imposed are transparent, reasonable and justified?
    - Focused on development approvals.
- The Development Approval Process Review (DAPR) is a significant piece of work that CHBA BC and its members are highly supportive of and believe it will have a significant impact on streamlining processes. Can you share how you intend to advance that work forward and what opportunities will be made for CHBA BC and its members to be involved?
    - Ditto.
- Residential construction is a major contributor to the provinces' economy. We create billions of dollars in investment value and contribute thousands of jobs each year. As the pandemic continues to impact the economy, what ways will you seek to have housing play a role in the province's recovery efforts?

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Cheers,
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Event Information/Speaking Notes
Minister David Eby Opening Remarks

Event:	Canadian Home Builders Spring Provincial Meeting – Jointly attended with Minister Josie Osborne
When:	March 19, 13:00-13:45
Where:	Online: https://call.lifesizecloud.com/6185905
Contact:	**Carmina Tupe. Director of Policy and Government Relations. (647) 326-6181**
Length:	5-7 min for each Minister
Key Participants:	Leadership of CHBA BC's organization and CHBA BC staff
Speaking Backdrop:	Online
Audience Description:	Board of Directors, the Executive Committee, Officers from eight Local Associations and Committee Chairs. • President Joe Hart is a member of CHBA Northern British Columbia and previously served as its local president from 2017-2019. He has co-owned Icon Homes Ltd. since 1995, offering both new homes and renovations to Quesnel and Cariboo region as a licensed residential builder. His experience includes starter homes, developments, and custom homes. In 2018, Joe's company initiated the second net-zero energy home in northern B.C. in order to trial energy-efficient processes in a northern climate. • CEO Neil Moody has led the CHBA BC since August 2013. During this time, membership has grown by 37% to 2,100 member companies and the association has become the leading provider of builder education and energy efficiency programs. Neil brings an action-based, collaborative approach to advocacy and government relations. Neil is a former business owner, home builder and brings more than 15 years of association experience to CHBA BC.

Number of Participants: 30-40 participants

Agenda:

Welcome & Introductions by CHBA BC CEO, Neil Moody	2-3 minutes
Opening remarks by Attorney General and Minister Responsible for Housing, Hon. David Eby and Minister of Municipal Affairs, Hon. Josie Osborne	Approx. 10-15 minutes (5-7 minutes each)
Open Discussion/Q&A Period Moderated by CHBA BC President, Joe Hart	20-25 minutes
Wrap Up/Closing Remarks	2-3 minutes

Media attending: No media will be present

Background Stats:

- 2019 Economic impacts – combined new construction and existing buildings
-

Territory Acknowledgement

- Before I begin, I would like to acknowledge, with respect, that I am joining this event from the traditional territory of the Lekwungen speaking Indigenous peoples, whose relationships with this land continue to this day.

Commented [PAO1]: Depends on location where the Minister is taking this meeting. This is greater-Victoria based territorial acknowledgement.

Key Messages/Bullet Points

- The members of CHBA-BC and your eight regional home builder associations play a vital role in constructing the affordable, safe, functional and resilient housing that British Columbians need.

- Your members also renovate existing homes and construct additional affordable residential units such as secondary suites and laneway houses.

- Your sector is central to the strength of the provincial economy, generating $25.6B in investment, $13.4B in wages and providing over

213,000 jobs in 2019, almost equally split between new construction and renovations.

- As you all know, we face a shortage of the types of housing British Columbians need and an affordability challenge in several parts of the province.

- These challenges call for decisive action. That is why Budget 2018 introduced the 30 Point Plan and an historic $7-billion investment in the homes people need. As a result of that investment, more than 26,000 new homes are complete, under construction or in the approvals process for a range of people who are struggling to find a place to live – people who are experiencing homelessness and seniors on fixed incomes, to middle-income families, students and individuals.

- Under the leadership of my colleague Hon. Josie Osborne, Minister of Municipal Affairs, communities are collecting data, analyzing trends

Commented [PAO2]: HPB: check this figure

and presenting reports that describe their current and anticipated housing needs.

- Your members will build a significant proportion of those needs in virtually all communities across British Columbia, both market housing and BC Housing-funded affordable housing developed by non-profits, housing authorities and Indigenous organizations.

Commented [PAO3]: HPB: Is this a complete list of the types of organizations building affordable housing in BC?

- Along with renovations of existing homes to extend their lifetime, functionality, safety and resilience.

- I'd like to take a few moments to talk about some of the new commitments our government has made to make housing more affordable, efficient and functional.

Housing Hub

- **(Commitment)** We know the development industry and home builders have an important

role to play in creating new supply of affordable housing. That is why we've committed to deliver more affordable housing through HousingHub partnerships by:

  - looking into an increase in the lending capacity for rental construction financing through the HousingHub;

  - identifying new pathways to home ownership through equity-building programs;

  - promoting the Affordable Home Ownership Program gives buyers a leg-up by closing the gap on the equity needed to buy a home.

- But our direct investment and programs like the HousingHub won't deliver all the affordable housing we need. That is why I cannot overstate the importance of collaboration across all governments, with federal and local governments and Indigenous communities, and with the development industry.

Development Approvals

- Much of housing development is impacted through the local government development approvals process. I support my colleague, the Honourable Josie Osborne, Minister of Municipal Affairs, to work with local governments to identify barriers to housing supply, streamline processes, and apply innovative thinking.

- I appreciate the valuable input that CHBA-BC has contributed through multiple channels regarding the importance of land-use changes within the context of urban planning and development practices

- In your January 25 letter to the Climate Action Secretariat you noted the widespread acceptance that residential densification, intensification and brownfield redevelopment support more housing forms and transit-oriented development, and to reduce a community's greenhouse gas emissions.

- My mandate commitments also include important initiatives to make improvements to buildings across the Province.

CleanBC and Climate Action

- **(Commitment)** We will continue government's work to make new and existing buildings more efficient and cleaner and support local governments to set their own carbon pollution performance standards.

- We will seek input from CHBA-BC members and others in the construction and real estate industries and local governments to develop standards that deliver on Government's CleanBC goals.

    - This includes proposed standards to improve energy efficiency in new construction by 20% by 2022.

- We will also engage with building owners and managers in the coming months to develop a strategy for improving the energy efficiency and resiliency of existing buildings.

- In response to my new mandate for local government carbon pollution performance standards, we will develop a consistent set of technical requirements that local governments can voluntarily reference in building bylaws or policies, similar to the Energy Step Code.

- We are aware of the current practice of local governments establishing ~~making~~ their own ~~determinations~~ approaches to~~on~~ ~~achieving~~ achieve ~~GHG emissions~~ reductions in GHG emissions, and we hope that a provincial approach will improve the consistency and accountability of carbon pollution standards. ~~through bylaws that require low carbon energy systems in new homes at the expense of energy efficiency levels and plan to address this, as this compromises energy affordability for homeowners.~~

- Also, in support of affordability of construction costs, our government is committed to transitioning over time to harmonization with national building codes to increase consistency across Canada and to advance BC's policy priorities for climate action through the national code development system.

- This will be implemented over the next four years in response to the Regulatory Reconciliation Agreement on Construction Codes, part of the Canadian Free Trade Agreement.

- My staff are active participants in this transition, working closely with their counterparts with Codes Canada and other Provinces and Territories.

Accessibility for People with Disabilities

- **(Commitment)** My staff are working with the Parliamentary Secretary for Accessibility Dan

Coulter to ensure that the next edition of the Building Code includes changes that will make new buildings more accessible for all people.

- Many of my staff in the Building and Safety Standards Branch are supporting Codes Canada to finalize the National Building Code in 2021 on which the next edition of the BC Building Code will be based.

- My staff are also collaborating with the National Research Council, Accessibility Standards Canada, and the Canadian Standards Association on new accessibility requirements for adoption in future national and BC codes.

- We will be seeking input from CHBA-BC.

Building Official Qualifications

- We heard your desire for more consistent code interpretations from the building officials with whom you regularly interact.

- On February 28, it became mandatory for building officials to meet standardized qualification requirements if they are making code enforcement decisions for local governments.

- With our regulatory partner, the Building Officials Association of BC, core competencies and technical subject matter knowledge have been identified for each level of building official.

- These will support a more unified approach to code interpretation among jurisdictions and more predictability for home builders.

- In response to CHBA-BC's input, we are excited to see BOABC taking approaches to curriculum development and training that seek to bring building officials, builders and recognized professions, like architects and engineers, together to receive the same information and to appreciate the diverse perspectives and roles they each have.

- We heard from CHBA-BC a concern about delayed building permits in areas that have insufficient staffing of qualified building officials.

- Flexibility is provided to local authorities to quickly secure a building official-in-training, along with other options such as registered professionals.

Closing Remarks

- We are taking steps to make sure British Columbians have an affordable place to call home. Increasing housing supply is central to this priority.

- Members of CHBA-BC are critical influencers in facilitating the construction of residential units that British Columbians need throughout the province, from Sooke to Dawson Creek and all parts in between.

- I commend CHBA-BC for your work in supporting housing excellence with government and public relations, education and building innovation.

- I really appreciate CHBA-BC's volunteerism in providing input to provincial staff and elected officials to help inform our policy work, including your January 29 letter to my attention with your policy positions.

- I welcome CHBA-BC's continued input on our policy and regulatory work to ensure that the Province supports a vibrant residential construction sector that provides for an expanded supply of affordable, safe and functional housing that meets the needs of British Columbians.

- I invite your advice today on the challenges your sector faces, and how my Ministry can support reducing or alleviating those challenges.

- I am looking forward to the discussion during the Q&A following our introductory remarks

-END-

time-sensitive: Doodle dates for strata CRF consultation

From: Barlee, Veronica OHCS:EX
To: Jeff Fisher (UDI) <jfisher@udi.org>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: March 16, 2021 11:36:12 AM PDT

Hello Jeff,

As part of the Province's actions to address strata insurance issues, Housing Policy branch will be holding consultations on contributions from developers and strata owners to the strata corporation's Contingency Reserve Fund at the end of March.

Please use this Doodle poll to indicate whether you, or a representative of your organization, are available on:

- Fri Mar 26 from 1 to 3 pm
- Mon Mar 29 from 9 to 11 am or 1 to 3 pm
- Wed Mar 31 from 9 am to 11 am or 1 to 3 pm

https://doodle.com/poll/bd4zndyxi9hzwx8p?utm_source=poll&utm_medium=link

This will be an online meeting including representatives from developer and home builder organizations and strata homeowner associations.

Key questions and resource material will be send out later this week.

If you have any questions, suggestions or concerns please don't hesitate to get in touch with me, as the lead policy advisor on this file, or Doug Page, Director of Policy and Legislation.

kind regards,
Veronica Barlee, MBA
Senior Policy Advisor
See the strata housing website or search for "BC strata housing"

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Cell: 778.679.9655 Email: Veronica.Barlee@gov.bc.ca

Offering acknowledgement in respect of the traditional territory of the WSÁNEĆ (Saanich), Lkwungen (Songhees), Wyomilth (Esquimalt) peoples of the Coast Salish Nation, traditional keepers of this land on which I live and dream.

Thanks Jeff. We're meeting Wed Mar 31 from 1 to 3 pm.

Clara and Joscelyn, please let me know who can attend and I will send the Outlook calendar invite to you.

Thanks again,

kind regards,

Veronica Barlee,MBA

Senior Policy Advisor

See the strata housing website <https://www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing> or search for "BC strata housing"

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Sent: March 17, 2021 1:59 PM
To: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Li, Clara <cli@polyhomes.com>; 'Baker, Joscelyn' <jbaker@polyhomes.com>
Subject: RE: time-sensitive: Doodle dates for strata CRF consultation

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Veronica/Doug, thanks for the invite. As with the last consultation, either Joscelyn or Clara will be attending on behalf of UDI.

Jeff Fisher, M.PL., CAE, MCIP, RPP

Vice-President and Senior Policy Advisor

Urban Development Institute

Suite 1100, 1050 West Pender Street

Vancouver, BC V6E 3S7 Canada

Tel 604 661-3031|Fax 604 689-8691

Cell 604 340-8019 |E-mail jfisher@udi.org

Web www.udi.bc.ca <http://www.udi.bc.ca/>

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RE: SN for stakeholder events

From: May, Zachary OHCS:EX
To: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: March 17, 2021 2:55:47 PM PDT
Attachments: image001.jpg

Hi Susan,

Can you send these over in eapps when the housing content is complete? We will need ED approval on these so that would help us manage that process.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: March 17, 2021 2:53 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: SN for stakeholder events

Hi Zachary,
I'm writing speaking notes for three stakeholder events that MDE will be speaking at in May. The audiences are the BC Real Estate Sector's annual Government Relations Days, Real Estate Board of Greater Vancouver, and the UDI Under 40 committee.

For the BC Real Estate Sector presentation, one of the topics that has been requested is "Energy Efficiency in Housing". I'm hoping that you may be able to share some existing SN or bullet points on this topic. The other topic is Housing Affordability & Supply, so there's plenty to fit into a 10 or 20 minute presentation!

I'll probably re-purpose the first SN for the REBGV talk, and then will riff off those and the previous SNs done for UDI-Greater Vancouver for the last event (I have those).

The timelines aren't super pressing on this – the sooner I can get them off my plate the better though I'm hoping to finish up a first draft for the first event's SN by middle of next week.

Feel free to IM me or call to discuss if that's easier.

Thank you!

Susan Low
Pronouns: she/her
Senior Policy Analyst, Housing Policy Division
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Phone: 778 698-1690
My home and workplace are on the unceded territories of the Lkwungen people (Songhees and Esquimalt First Nations). I am grateful for their stewardship of these lands and waters and the opportunity to live and work here as a settler.

RE: SN for stakeholder events

From: May, Zachary OHCS:EX
To: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: March 17, 2021 3:01:58 PM PDT
Attachments: image001.jpg

Overall – supporting improved consistency of building regulations in BC, removing barriers to innovation, and supporting governments key priorities (housing, CleanBC, and economic recovery)

CleanBC – 20% improvement in energy efficiency in the BC Building Code in 2022, developing a strategy to improve the energy efficiency and climate and seismic resilience of existing buildings, and establishing carbon pollution standards for new buildings.

Accessibility – improving accessibility requirements in the BC Building Code

Best,
Zac

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Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: March 17, 2021 2:57 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: SN for stakeholder events

Yes, I can definitely do that. To help me with the outline, can you hint at what the top-level priorities would be in this area? I'm so out of touch.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 17, 2021 2:56 PM
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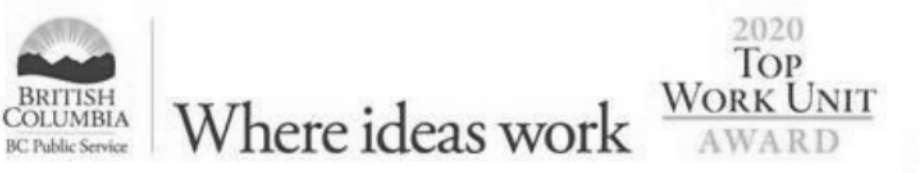

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Subject: SN for stakeholder events

Hi Zachary,
I'm writing speaking notes for three stakeholder events that MDE will be speaking at in May. The audiences are the BC Real Estate Sector's annual Government Relations Days, Real Estate Board of Greater Vancouver, and the UDI Under 40 committee.

For the BC Real Estate Sector presentation, one of the topics that has been requested is "Energy Efficiency in Housing". I'm hoping that you may be able to share some existing SN or bullet points on this topic. The other topic is Housing Affordability & Supply, so there's plenty to fit into a 10 or 20 minute presentation!

I'll probably re-purpose the first SN for the REBGV talk, and then will riff off those and the previous SNs done for UDI-Greater Vancouver for the last event (I have those).

The timelines aren't super pressing on this – the sooner I can get them off my plate the better though I'm hoping to finish up a first draft for the first event's SN by middle of next week.

Feel free to IM me or call to discuss if that's easier.

Thank you!

Susan Low
Pronouns: she/her
Senior Policy Analyst, Housing Policy Division
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Phone: 778 698-1690
My home and workplace are on the unceded territories of the Lkwungen people (Songhees and Esquimalt First Nations). I am grateful for their stewardship of these lands and waters and the opportunity to live and work here as a settler.

RE: Sectoral targets announcement

From: May, Zachary OHCS:EX
To: May, Cheryl OHCS:EX <Cheryl.May@gov.bc.ca>
Sent: March 19, 2021 10:02:12 AM PDT
Attachments: image001.jpg, image002.png

Will do.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: May, Cheryl OHCS:EX <Cheryl.May@gov.bc.ca>
Sent: March 19, 2021 10:02 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Sectoral targets announcement

Thanks Zac – can you please be sure that our GCPE shop is aware of this going out next week - and that it may result in possible concerns being raised by our stakeholders.

Cheryl

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 19, 2021 9:58 AM
To: May, Cheryl OHCS:EX <Cheryl.May@gov.bc.ca>
Subject: FW: Sectoral targets announcement

Hi Cheryl,

See below regarding a delay in the Sectoral Targets announcement until next week. As Andrew may have mentioned, messaging is being sent from CAS to ADMs and DMs to have sent out to stakeholders. We're happy to support that communication effort with OHCS stakeholders. We have received questions from UDI and CHBABC (Homebuilders) about this process and they may have comments or concerns in the media following the announcement.

There are no immediate implications for OHCS with this announcement, but it does provide outcomes that our codes and standards need to work towards over time. Andrew is working with EDs from other building-related ministries to develop a more detailed roadmap of how the Province will achieve the building and communities emissions targets, to be released in the fall.

Best,
Zachary D. May, MBA
Acting Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Dobson, Neil ENV:EX <Neil.Dobson@gov.bc.ca>
Sent: March 19, 2021 9:47 AM
To: EMLI EDWGCBC <EDWGCBC@Victoria1.gov.bc.ca>

Cc: Taaffe, Theresa ENV:EX <Theresa.Taaffe@gov.bc.ca>; Baltutis, Jesse ENV:EX <Jesse.Baltutis@gov.bc.ca>
Subject: Sectoral targets announcement

Hi all,

I believe many of you are aware that we were planning to announce the sectoral targets today. I therefore wanted to let you that the announcement has been delayed until likely Tuesday. No changes to the decisions are happening, just a delayed announcement. We will share final NR and an email to send to stakeholders and partners nearer the time.

Thanks
Neil

Neil Dobson
Executive Director, CleanBC Implementation | Climate Action Secretariat, Province of British Columbia
M: 250 893-8567 |O: 778 698-4064
Email: neil.dobson@gov.bc.ca



FW: Sectoral targets announcement

From: May, Zachary OHCS:EX
To: Harbord, Darren GCPE:EX <Darren.Harbord@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Sent: March 19, 2021 10:05:00 AM PDT
Attachments: image004.png, image002.jpg, image001.jpg

Hi Darren,

Flagging this upcoming announcement for your team. Let me know if you have any questions. I assume the GCPE team working with the Climate Action Secretariat has more details than me on the content of the announcements and communication plans for stakeholders.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



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To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
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Zachary D. May, MBA
Acting Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service

Where ideas work

2020 TOP WORK UNIT AWARD

From: Dobson, Neil ENV:EX <Neil.Dobson@gov.bc.ca>
Sent: March 19, 2021 9:47 AM
To: EMLI EDWGCBC <EDWGCBC@Victoria1.gov.bc.ca>
Cc: Taaffe, Theresa ENV:EX <Theresa.Taaffe@gov.bc.ca>; Baltutis, Jesse ENV:EX <Jesse.Baltutis@gov.bc.ca>
Subject: Sectoral targets announcement

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Thanks
Neil

Neil Dobson
Executive Director, CleanBC Implementation | Climate Action Secretariat, Province of British Columbia
M: 250 893-8567 |O: 778 698-4064
Email: neil.dobson@gov.bc.ca

TOP WORK UNIT 2020 WINNERS
Where ideas work

Re: [External Email] - Pick a date: Spring Energy Step Code Council meeting

From: May, Zachary OHCS:EX
To: Bains, Bea <Bea.Bains@fortisbc.com>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: March 19, 2021 10:49:20 AM PDT

That's what we were thinking as well. I believe Hugo is going to be setting up a time to follow up on that next week.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

On Mar 19, 2021, at 10:43 AM, Bains, Bea <Bea.Bains@fortisbc.com> wrote:

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Thanks Hugo!

Zac,
Wondering if this would be a great opportunity to set aside a bit of time to share the renewable gas outlook (and Guidehouse study) with the council members? Thoughts?

Thx Bea

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Tuesday, March 16, 2021 1:48 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Bains, Bea <Bea.Bains@fortisbc.com>; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; mmcwilliam3@bcit.ca; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: [External Email] - Pick a date: Spring Energy Step Code Council meeting

CAUTION: **This is an external email.**

Do not respond, click on links or open attachments unless you recognize the sender.

Hello, members of the Energy Step Code Council:

We're hoping to meet in late March or early April to continue our discussion on GHGs and provide an update on the progress of a few mandate letter items.

Please fill out this Doodle poll with your preferences: https://doodle.com/poll/cm8rk2fbknk8638i?utm_source=poll&utm_medium=link

Thanks very much.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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*"FortisBC" refers to the FortisBC group of companies which includes FortisBC Holdings. Inc., FortisBC Energy Inc., FortisBC Inc., FortisBC Alternative Energy Services Inc. and Fortis Generation Inc.

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This is to confirm the next strata insurance consultation meeting will be on Wed Mar 31 from 1 to 3 pm Pacific Daylight Savings Time using Teams.

Meeting questions and resource material will be emailed by Thurs March 25. The focus of this meeting will be to discuss strata owner and developer contributions to the strata corporation's contingency reserve fund.

Any questions, concerns or suggestions please don't hesitate to contact me or Doug Page.

kind regards,
Veronica Barlee, MBA
Senior Policy Advisor
See the strata housing website<https://www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing> or search for "BC strata housing"

_____

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Cell: 778.679.9655 Email: Veronica.Barlee@gov.bc.ca<mailto:Veronica.Barlee@gov.bc.ca>

Offering acknowledgement in respect of the traditional territory of
the WSÁNE (Saanich), Lkwungen (Songhees), Wyomilth (Esquimalt) peoples of the Coast Salish Nation,
traditional keepers of this land on which I live and dream.

_____

Microsoft Teams meeting
Join on your computer or mobile app
s.15

_____

FW: Emailing: Port Moody Sustainable Building Practices

From:	May, Zachary OHCS:EX
To:	Hoffman-McGaw, Trilby MUNI:EX <Trilby.Hoffman-McGaw@gov.bc.ca>
Sent:	March 29, 2021 2:23:13 PM PDT
Attachments:	Port Moody Sustainable Building Practices.pdf

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Jeff Fisher <jfisher@udi.org>
Sent: March 9, 2021 2:27 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Emailing: Port Moody Sustainable Building Practices

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Zachary, this Report is going to Port Moody Council tonight. The Councillor is requesting that staff look at banning concrete construction in the City. Can local governments ban concrete construction under the Building Act?

Your message is ready to be sent with the following file or link attachments:

Port Moody Sustainable Building Practices

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Report to Council
From the Office of Councillor Steve Milani

Date: March 1, 2021

Subject: Sustainable Building Practices

Purpose

For Council to consider phasing out the use of concrete as the main component of buildings over six storeys in height as tall concrete buildings are not sustainable and continuing to build them works against the Climate Action Plan, which was endorsed by Council on July 21, 2020.

Recommendation

THAT staff report back to Council with options and recommendations on how best to:

a) **prioritize and incentivize Mass Timber (Cross-Laminated Timber (CLT)) construction for buildings over six storeys in height; and**
b) **phase-out the use of concrete as the main component of buildings over six storeys in height;**

as recommended in the report dated March 1, 2021 from the Office of Councillor Steve Milani regarding Sustainable Building Practices;

AND THAT this item be classified as High Priority to address the current state of climate emergency.

Background

In June of 2019, the City of Port Moody declared a state of climate emergency. Oxford Dictionaries defines a 'climate emergency' as "a situation in which immediate action is needed to reduce or stop climate change and prevent serious and permanent damage to the environment". In July of 2020, City Council endorsed the Climate Action Plan. One of the six goals included in the plan is to cut the carbon content of construction projects by 40% (compared to 2018) by the year 2030. Committing to it is the first step, the next is action, which is where this report comes into play.[1]

Discussion

Tall concrete buildings such as high-rises are not sustainable and constructing them should no longer be permitted in Port Moody. The recommendations in this report are not meant to affect those development applications that have already passed first-reading.

[1] https://www.portmoody.ca/en/city-hall/climate-action-plan.aspx#Our-Plan-was-developed-with-input-from-the-community

In Canada, a building that is ten storeys or more in height is considered a high-rise while a building with forty or more stories and taller than 150 m (490 ft) is generally considered a skyscraper. The inefficiencies resulting from concrete high-rise construction have been known for years. In the past, profit seemed to take precedence over environmental concerns. In an article dating back to 2012, Patrick Condon of the University of British Columbia states, “Our high-rises, according to BC Hydro (the province of British Columbia’s main electric utility) data, use almost twice as much energy per square metre as mid-rise structures.” He goes on to say, “... high-rise buildings built largely of steel and concrete are less sustainable than low-rise and mid-rise buildings built largely of wood; steel and concrete produce a lot of GHG. Wood traps it. Concrete is 10 times more GHG-intensive than wood.”[2]

A study published in October of 2019 in the International Journal of Environmental Science and Technology examined the carbon footprint of a residential tower during the construction phase and concluded the following: This paper assessed all sources of carbon emissions in the construction phase, including emissions from manufacturing and extraction of building materials, transportation of building materials, construction equipment, vegetation cover around the building, and transportation of construction waste. According to the results, the highest amounts of carbon footprint were estimated at 83% and 14%, which were, respectively, related to the emissions from the transportation of materials and construction wastes. The emissions from the construction phase accounted for 3% of the total footprints. Also in the manufacturing process of building materials, the highest contributions in CO2 emissions were 78%, 10%, and 6%, belonging to concrete, rebar, and cement mortar, respectively.[3]

In a wonderful opinion piece, entitled, “High-rises are energy hogs, not climate solutions” the author states that in addition to the “embodied energy” of high-rise buildings being substantially higher than that of other building types, data collected by the City of Seattle as a result of its Energy Benchmarking and Reporting Program indicates that multi-family buildings higher than nine stories, currently use 60 percent more energy per square foot than comparable four-story or five-story buildings.[4]

Page 32 of the Climate Action Plan states the following under the heading of Buildings:
14.2 Goals
Design/construct/renovate buildings that:

- Are durable and more likely to withstand or recover quickly from the anticipated effects of climate change;
- Use relatively little energy to operate; and
- Provide a healthy indoor environment with good air quality.
- Design/construct/renovate buildings with:
- Materials that are associated with low levels of embodied carbon; and
- Materials that store carbon.

[2] https://ourworld.unu.edu/en/a-city-that-runs-on-itself
[3] https://link.springer.com/article/10.1007/s13762-019-02557-3
[4] https://crosscut.com/2016/11/high-rises-run-counter-to-the-citys-environmental-goals?fbclid=IwAR3ub1UYQgGw0iWf3SEeM1sD6QnwrGZ1DXi_t2VTOnf90U5AcWGBa1Wgjnc

Use sources of energy that produce lower amounts of greenhouse gas emissions and energy systems that are more likely to withstand or recover quickly from disruptive events.
Mass Timber construction, also known as CLT (cross-laminated timber) meets the Climate Action Plan criteria while concrete construction does not. A building material with a long-standing history in construction, Mass Timber is recognized as being a durable and sustainable building option. Lighter and more efficient to use than other structural materials, engineered wood carries much less of an environmental footprint than concrete, which produces up to 8% of the world's emissions. Originally a Swiss invention, CLT has been the norm in Europe for decades while in North America, its uses have been hampered by years of conservative building regulations. The foundations and underground parking garages of Mass Timber buildings are still primarily formed using concrete.

The following excerpt was taken from the Think Wood website.[5]
Here are 4 things the Mass Timber Code Coalition wants you to know about Mass Timber:

1. Mass Timber is Fire Resistant
    - During a fire resistance test of a 5-ply cross-laminated timber (CLT) panel wall, the panel was subjected to temperatures exceeding 1,800 Fahrenheit and lasted 3 hours and 6 minutes, far more than the two-hour rating that building codes require.
    - During fires, exposed mass timber chars on the outside, which forms an insulating layer protecting interior wood from damage. Additionally, when the code requires mass timber to be protected with gypsum wallboard, the mass timber can achieve nearly damage-free performance during a contents-fire burnout event.

2. Mass Timber is Strong
    - Recent mass timber buildings weigh approximately 1/5th that of comparable concrete buildings, which in turn reduces their foundation size, inertial seismic forces, and embodied energy. High strength-to-weight ratios enable mass timber to perform well during seismic activity.

3. Mass Timber is Sustainable
    - Replacing steel with mass timber would reduce carbon dioxide emissions by between 15% and 20%.
    - By some estimates, the near-term use of CLT and other emerging wood technologies in buildings 7-15 stories could have the same emissions control effect as taking more than 2 million cars off the road for one year.
    - The fire tests confirmed that mass timber structures meet and generally exceed the fire resistance requirements in the current code. Studies have shown that building with wood produces fewer greenhouse gas emissions than building with other materials.

4. Mass Timber Makes Construction Cost-efficient

[5] https://www.thinkwood.com/blog/4-things-to-know-about-mass-timber

- Mass timber buildings are roughly 25% faster to construct than concrete buildings and require 90% less construction traffic.
- Since mass timber panels are prefabricated and then assembled on-site, buildings made from mass timber have much shorter project timelines and safer construction sites.

Less construction noise and related traffic are only a couple of the benefits of using mass timber over concrete, here are a few more.

- Wood is a natural insulator and has a lower thermal conductivity compared to concrete, steel-frame, and masonry construction and is ideally suited to energy-efficient design. This efficiency translates to less heating and cooling costs which results in less GHG emissions. A Port Moody resident currently living on the 25th floor of a 26 storey tower said that they spend as much to cool their condo as they do to heat it.
- “As our economy bounces back from the COVID-19 crisis, we want to do everything we can to support forest workers,” said Premier Horgan. “By focusing on mass timber, we have an opportunity to transition the forestry sector to high-value over high-volume production. This will mean opportunities for local workers, strong partnerships with First Nations, and greater economic opportunity while making a significant contribution to advancing CleanBC.”[6]
- A very important fact to consider is that all land surrounding the Burrard Inlet in Moody Centre, Inlet Centre, and Pleasantside neighbourhoods is susceptible to soil liquefaction[7] as referenced in OCP Map 14 - Hazardous Lands.[8] The lighter weight of Mass Timber buildings makes them far less likely to trigger liquefaction in the event of an earthquake.[9]
- There is a growing body of evidence internationally demonstrating that connection to nature, biophilic design, and wood, exposed wood in this case, is associated with improved physical and mental wellbeing. Biophilia (meaning love of nature) focuses on human’s innate attraction to nature and natural processes.

Environmentally Friendly ‘Circular Construction’

Circular construction is achieved by using sustainable materials and construction processes. Mass timber is circular as its components can be dismantled and reused while concrete structures are poured into place requiring them to be demolished when reaching their useful life.

Building materials should be assessed in terms of their life cycle in order to achieve maximum circular potential. Starting to shift into more reconstructable materials and designs will allow engineers, constructors, and designers to depend less on energy-intensive and heavy emitting materials such as concrete and steel.

---

[6] https://news.gov.bc.ca/releases/2020PREM0033-001076

[7] https://en.wikipedia.org/wiki/Soil_liquefaction

[8] https://www.portmoody.ca/en/business-and-development/resources/Documents/map-14-hazardous-lands.pdf

[9] https://cdn.britannica.com/84/152184-050-0C74FF5D/qualities-soil.jpg

Sustainability [10]
Unlike concrete, building with mass timber has a number of environmental benefits. Life cycle assessments show that wood outperforms both steel and concrete in terms of energy, air pollution, and water pollution.

Carbon storage is an important component of building with CLT. A healthy tree in a forest will release oxygen and store carbon dioxide (CO2). Using mass timber as a building product reduces the carbon footprint by also storing carbon dioxide (CO2) in the same way a healthy tree would. To put it into perspective, it is believed a single five-storey, cross-laminated timber building will cut emissions by levels equivalent to removing up to 600 cars from the road for a year.

In British Columbia, large amounts of CLT are made from Mountain Pine Beetle-kill wood. If those dead trees were to remain in the forest, they would emit CO2 into the atmosphere instead of storing it. However, if trees have already died due to pine beetle contamination, the timber is still sound and usable for construction for up to 10 years. By utilizing that wood before it goes to waste, CLT becomes a building product that not only sequesters tonnes of carbon but also reduces greenhouse gas emissions during construction through the prefabrication process.

CLT also outperforms concrete when it comes to job site waste. Since most or all CLT panels are prefabricated, there is little to no waste on-site. Manufacturers can also re-use any scraps for stairs or other architectural elements.

How will the city meet growth targets if concrete high-rise buildings are no longer permitted?
If Port Moody's current population of approximately 36,000 is added to the projected population numbers for all approved and applications in progress, the City should reach a population of approximately 49,000. If preliminary applications are also factored in, the 2041 population target of 50,000 will have been met. These population projections do NOT include Coronation Park, Moody Centre TOD, and Flavelle Oceanfront which come to 21,867 for those projects alone. Adding them in would bring the collective total to over 70,000 people which is more than double our current population.

These projected numbers do NOT take into account any development applications applied for over the next 20 years. It would not be logical to think there will be zero development applications submitted in two decades, so reaching our population target is not an issue should future concrete high-rise buildings be banned from being built in the city.

[10] https://www.structurlam.com/whats-new/news/concrete-vs-cross-laminated-timber/#:~:text=Despite%20being%20five%2Dtimes%20lighter,panel%20spans%20in%20two%20directions.&text=Buildings%20using%20mass%20timber%20carry,minimizing%20cost%20and%20building%20time

From the City's website: From time to time, the City reviews growth scenarios for the long term by estimating potential buildout overtime. This table[11] is a summary of recently approved applications, proposals currently in the pipeline for Council consideration as well as areas slated for development in the next 10 - 30 years. These numbers provide a tentative indication of what the population growth might be under the assumption that current development applications would all be approved and constructed by 2050.

On May 26, 2020, Council approved the Tall Wood Early Adoption Initiative which allows for the construction of mass timber buildings up to 12 storeys in height which can provide additional density if required[12]. Questions about fire safety were addressed in an attachment included with the report[13].

With both the Climate Action Plan and Tall Wood Early Adoption Initiative now in place, the City of Port Moody has the opportunity to lead by example by banning concrete high-rise buildings within the city, setting the stage for other municipalities to follow. "It's not just words. Action expresses priorities." Mahatma Gandhi

Other Option(s)

THAT staff report back to Council with options and recommendations to prioritize and incentivize mass timber construction.

Financial Implications

The financial implications are the staff time to prepare a report. .

Communications and Civic Engagement Initiatives

There are no communications and civic engagement initiatives related to this report.

Council Strategic Plan Objectives

The recommendation in this report aligns with the Council's Strategic Priorities under the heading of Environmental Leadership.
Maintain and enhance Port Moody's natural and built assets while reducing the impact on our planet.

- Inspire environmental actions and advocacy.
- Reduce the City's impact on the planet.

Expand and enhance policies to guide environmental goals and sustainability programs.

- Review and update existing environmental policies on a regular basis to find leadership opportunities.

Provide leadership in climate change by thinking globally and acting locally.

- Respond and adapt to climate change through planning and policy development.

Address global climate change with local actions.

---

[11] https://www.portmoody.ca/en/business-and-development/resources/Documents/Development_Horizon_Pipeline_Projects.pdf
[12] https://pub-portmoody.escribemeetings.com/filestream.ashx?DocumentId=8207
[13] https://pub-portmoody.escribemeetings.com/filestream.ashx?DocumentId=8208

RE: Spring Energy Step Code Council meeting

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: March 30, 2021 4:16:40 PM PDT
Attachments: Screenshot 2021-03-28 112303.jpg, image002.jpg, ESCC New Mandate 9Dec2020.pptx

Your list looks good to me.

I have attached the slides I delivered on December 9th providing a high-level summary of the Ministry's mandate items, as we understood them at the time. Timelines have shifted somewhat but the details are consistent with our current direction, so it gives a good foundation to build on with your presentation. Please note the notes are not related to the content on the slides.

If it's ok with you we will complete the GHG presentations and discussion from 1-3:30, then have your strategic presentation to finish the meeting from 3:30-4:00.

FYI – Dale will be standing in for Hugo (on vacation) and Scott has graciously offered to chair if I happen to be in the delivery room .

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 Top Work Unit Award

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 28, 2021 11:25 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: Re: Spring Energy Step Code Council meeting

Greetings Zac,

I composed a message and then got the Windows spinning wheel of death.

Here is a screen shot of my email :)

John and Juni, please send us your comments.

Cheers,

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing
Cell/Text: 250.812.1933
Email: Andrew.PapeSalmon@gov.bc.ca

I acknowledge with respect the Lkwungen-speaking peoples on whose traditional territory the Ministry of Municipal Affairs and Housing stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

From: Wong, Hugo OHCS:EX
Sent: Tuesday, March 23, 2021 5:41 PM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; bea.bains@fortisbc.com; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; May, Zachary OHCS:EX; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Cc: Muncaster, Katherine EMLI:EX; Pape-Salmon, Andrew OHCS:EX; jason.wolfe@fortisbc.com; Caradonna, Jeremy MUNI:EX; Brendan McEwen; Emerson, Victoria (NRCAN/RNCAN); Gisborne, Carolyn MUNI:EX
Subject: Spring Energy Step Code Council meeting
When: Thursday, April 1, 2021 1:00 PM-4:00 PM.
Where: Microsoft Teams Meeting

Update, March 26, 2021: Draft agenda, discussion questions, and three reports attached. Please contact dale.andersson@gov.bc.ca if you have questions or concerns, as I will be away Mar. 29-Apr. 1 inclusive. Thank you.

Hi, everyone:

Agenda to be added. Please let me know if you have conflicts and we can arrange for alternates to attend.

Thank you very much.

Hugo

Microsoft Teams meeting

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Zac,

Happy Spring!

Looking forward to this Energy Step Code Council meeting on Thursday. I will join at 2:30pm because I have a 1hr conflict at 1:15pm.

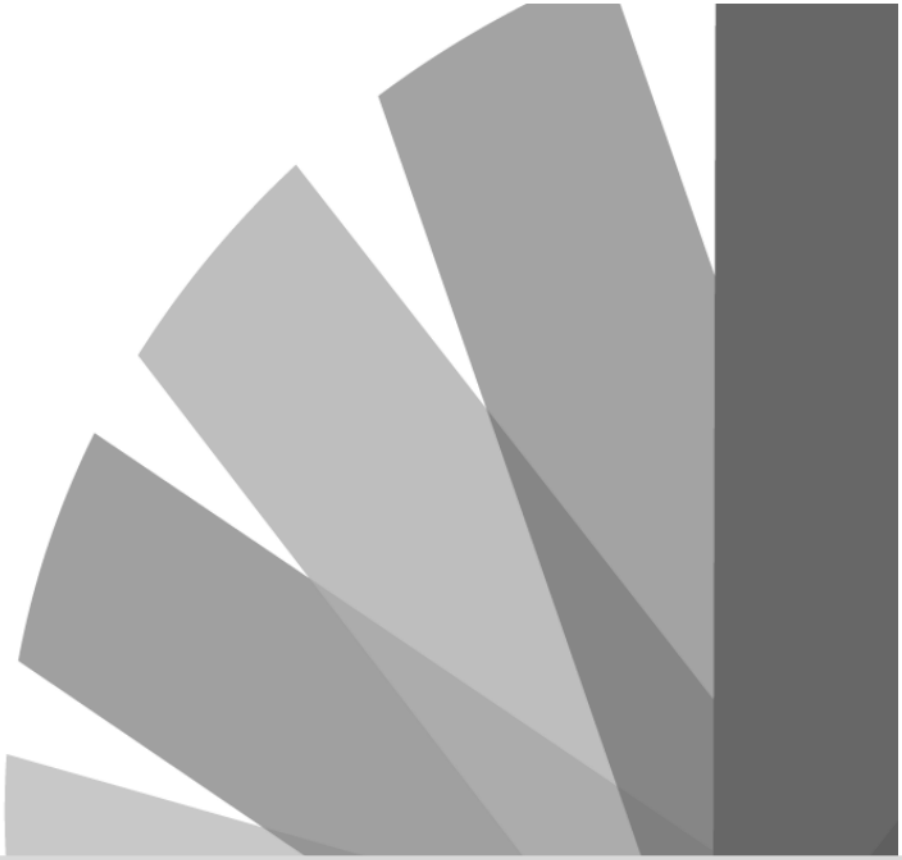
As I mentioned previously, I would like to make some ED remarks to help frame the work of the ESCC in 2021; I approximately 20min to highlight:
- current CleanBC mandate with Minister Eby
- housing goals, including central focus on housing supply
- the need to revamp the ESCC membership to spokespeople who can represent constituencies aligned with government mandate priorities (affordable housing developers, tenants and Indigenous Peoples, Professional Governance Act prohibition on advocacy by regulators)
- overview of "affordability" - four types (first cost, life-cycle operations, social cost with future carbon price, and risk mitigation)
- the need for neutrality with respect to multiple building code objectives - life-safety, structural and fire protection, accessibility
- the unique role of BC Housing in supporting market transformation and all of the above
- an overview of the Regulatory Reconciliation Agreement on Construction Codes and transition to strict harmonization by 2025, including institutions being established to support P/T priorities

I also invite comments from those copied on this email.

ENERGY

STEPCODE

BUILDING BEYOND THE STANDARD



New Ministry Mandate

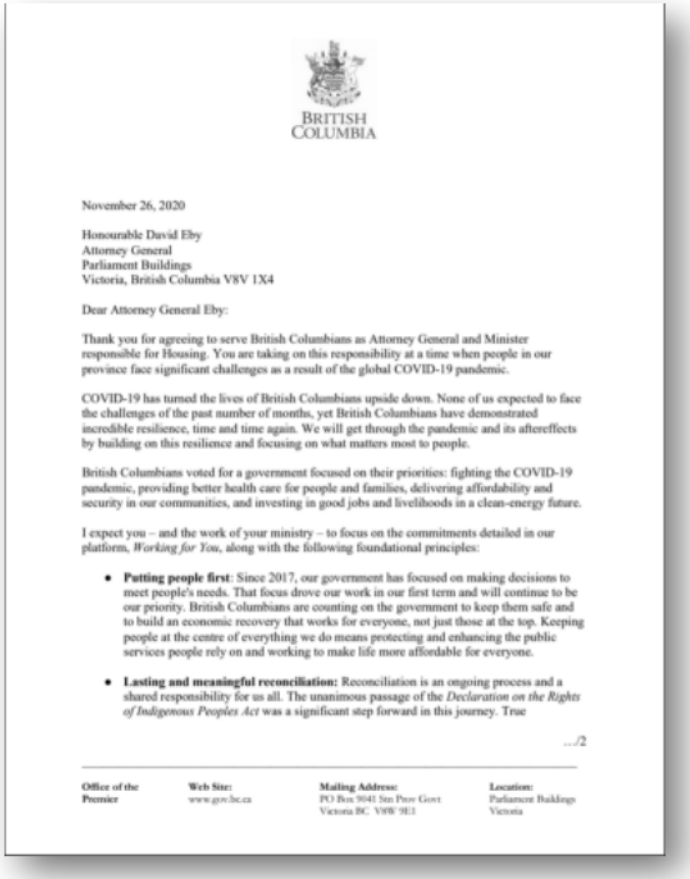
December 9, 2020

New Ministry – Same Office



Honourable David Eby
Attorney General and Minister responsible for Housing

Mandate Letter



BRITISH COLUMBIA

November 26, 2020

Honourable David Eby
Attorney General
Parliament Buildings
Victoria, British Columbia V8V 1X4

Dear Attorney General Eby:

Thank you for agreeing to serve British Columbians as Attorney General and Minister responsible for Housing. You are taking on this responsibility at a time when people in our province face significant challenges as a result of the global COVID-19 pandemic.

COVID-19 has turned the lives of British Columbians upside down. None of us expected to face the challenges of the past number of months, yet British Columbians have demonstrated incredible resilience, time and time again. We will get through the pandemic and its aftereffects by building on this resilience and focusing on what matters most to people.

British Columbians voted for a government focused on their priorities: fighting the COVID-19 pandemic, providing better health care for people and families, delivering affordability and security in our communities, and investing in good jobs and livelihoods in a clean-energy future.

I expect you – and the work of your ministry – to focus on the commitments detailed in our platform, *Working for You*, along with the following foundational principles:

- **Putting people first**: Since 2017, our government has focused on making decisions to meet people's needs. That focus drove our work in our first term and will continue to be our priority. British Columbians are counting on the government to keep them safe and to build an economic recovery that works for everyone, not just those at the top. Keeping people at the centre of everything we do means protecting and enhancing the public services people rely on and working to make life more affordable for everyone.
- **Lasting and meaningful reconciliation:** Reconciliation is an ongoing process and a shared responsibility for us all. The unanimous passage of the *Declaration on the Rights of Indigenous Peoples Act* was a significant step forward in this journey. True

.../2

Office of the Premier | **Web Site:** www.gov.bc.ca | **Mailing Address:** PO Box 9041 Stn Prov Govt Victoria BC V8W 9E1 | **Location:** Parliament Buildings Victoria

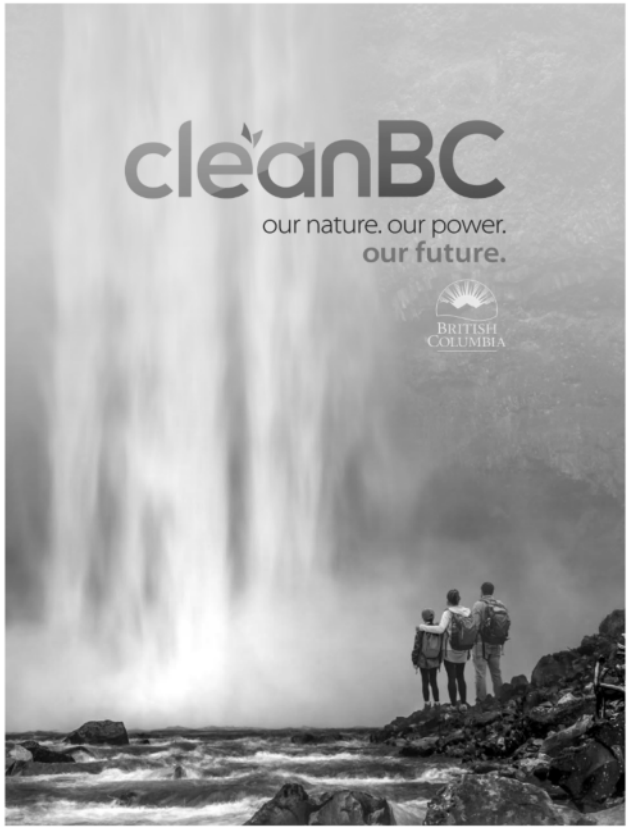
Key Mandate:

- Build on our government's work to require new buildings and retrofits to be more energy efficient and cleaner by supporting local governments to set their own carbon pollution performance standards for new buildings.

“Require new buildings and retrofits to be more energy efficient and cleaner”

“supporting local governments to set their own carbon pollution performance standards for new buildings.”

CleanBC – Better Buildings



New Buildings

2021 – opt-in carbon targets for local governments (NEW)

2022 – 20% energy improvement*

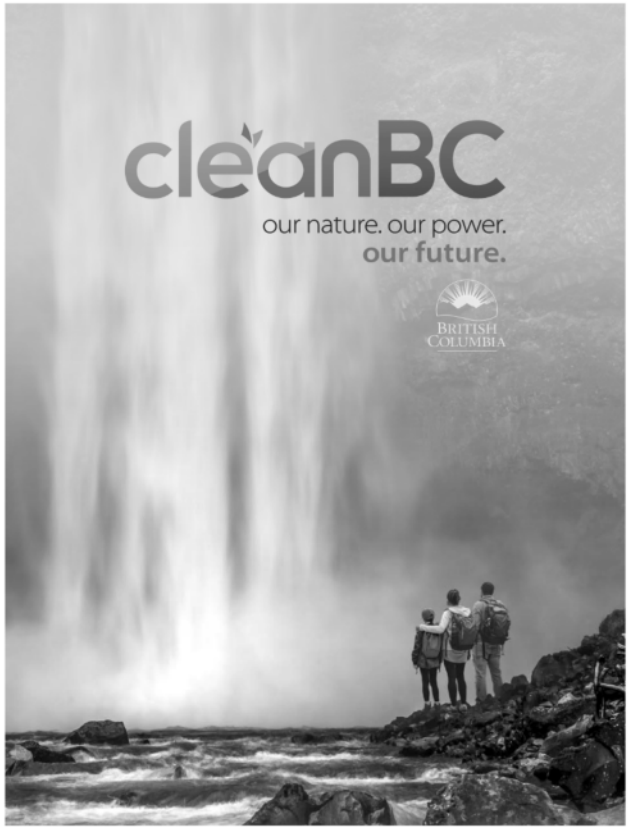
2027 – 40% energy improvement*

2032 – Net Zero Energy Ready

Existing Buildings

Code for existing buildings in 2024

Anticipated Updates on GHGs



Sectoral Targets

- Under the *Climate Change Accountability Act*, sectoral GHG reduction targets for British Columbia are required to be established by March 31, 2021.

- Hurrian Peyman is the CAS contact on all questions for sectoral targets.

Emissions Factors for Public Sector Organizations

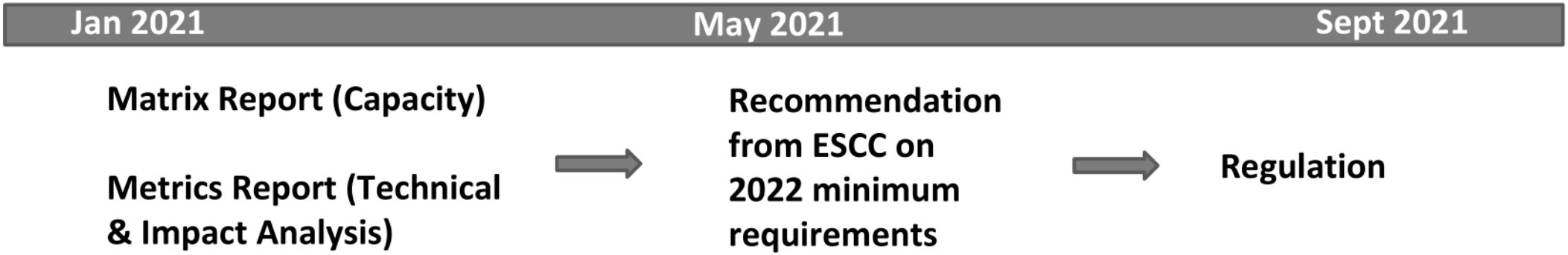
- The Climate Action Secretariat is currently reviewing the electricity emission intensity factors applied to public sector organizations under the Carbon Neutral Government program and participating local governments under the Climate Action Charter, including the option to adopt the Greenhouse Gas industrial Reporting and Control Act EEF methodology for those entities.

- An update on EEF will be communicated to PSOs and local governments in the coming weeks.

New Buildings 20% by 2022

New Buildings

- Continue work on 2022 BC Building Code
  - Step 3 for Part 9, Step 2/3 for Part 3
  - Harmonize with NBC/NECB
  - Goal: Energy Step Code to be the default in BC



LG Carbon Pollution Standards

Voluntary GHG requirements

- Provide a standardized provincial approach to support LG mandate to address carbon emissions in new buildings
- Build on current practice and recent reports
- Integrate into Energy Step Code, but not necessarily to specific steps (measure – improve – long-term goals)

Jan 2021	March 2021	Sept 2021
Consultation through ESCC on targets and implementation	**Recommendations from ESCC**	**Regulation**
CAS emissions factors for LGs and public sector	**CleanBC sectoral emissions targets**	**Implementation guidelines**

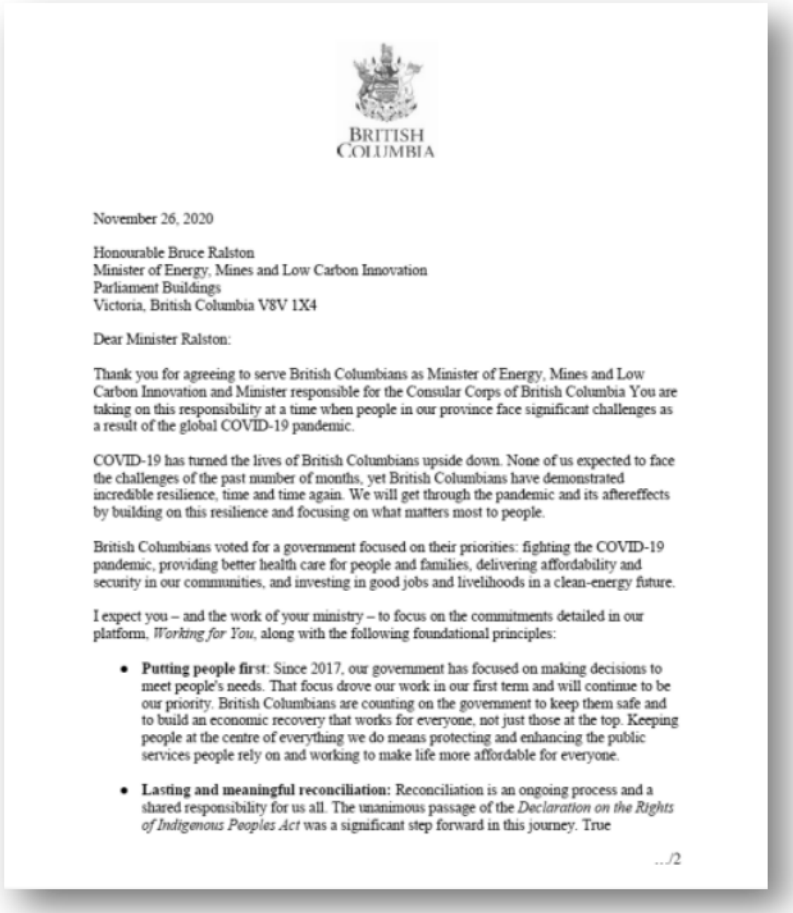
Existing Buildings

Existing Buildings Renewal Strategy

- Energy efficiency, carbon emissions, and resilience
- Likely to require adjustments to the regulatory system and authorities of the Province, local authorities, and others
- Incremental implementation prior to 2024
- ESCC and other venues for ongoing engagement

Spring 2021	Fall 2021	2022-2024
Consultation on draft strategy		
CleanBC sectoral emissions targets →	**Release strategy** →	**Any necessary legislation/regulation**
Pilot programs		

Energy, Mines and Low Carbon Innovation (EMLI) Mandate Letter



BRITISH COLUMBIA

November 26, 2020

Honourable Bruce Ralston
Minister of Energy, Mines and Low Carbon Innovation
Parliament Buildings
Victoria, British Columbia V8V 1X4

Dear Minister Ralston:

Thank you for agreeing to serve British Columbians as Minister of Energy, Mines and Low Carbon Innovation and Minister responsible for the Consular Corps of British Columbia You are taking on this responsibility at a time when people in our province face significant challenges as a result of the global COVID-19 pandemic.

COVID-19 has turned the lives of British Columbians upside down. None of us expected to face the challenges of the past number of months, yet British Columbians have demonstrated incredible resilience, time and time again. We will get through the pandemic and its aftereffects by building on this resilience and focusing on what matters most to people.

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- **Lasting and meaningful reconciliation:** Reconciliation is an ongoing process and a shared responsibility for us all. The unanimous passage of the *Declaration on the Rights of Indigenous Peoples Act* was a significant step forward in this journey. True

.../2

Key EMLI Built Environment Mandates:

- "Work with cabinet colleagues to advance clean economic opportunities and CleanBC goals as our government responds to and recovers from the COVID-19 pandemic."

- "Enhance energy efficiency programs and incentives for residential and commercial buildings, including Property Assessed Clean Energy financing to help homeowners make energy-saving retrofits and repay the cost of them over time."

- "..Require realtors to provide energy efficiency information on listed homes to incent energy-saving upgrades and let purchasers know what energy bills they will face."

FW: Spring Energy Step Code Council meeting

From: May, Zachary OHCS:EX
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: March 30, 2021 10:31:27 PM PDT
Attachments: image002.jpg

FYI

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 30, 2021 10:30 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Re: Spring Energy Step Code Council meeting

Thanks - the timing is good.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing
Cell/Text: 250.812.1933
Email: Andrew.PapeSalmon@gov.bc.ca

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From: May, Zachary OHCS:EX
Sent: Tuesday, March 30, 2021 4:16 PM
To: Pape-Salmon, Andrew OHCS:EX
Cc: Andersson, Dale OHCS:EX; Williams, Scott B OHCS:EX
Subject: RE: Spring Energy Step Code Council meeting

Your list looks good to me.

I have attached the slides I delivered on December 9th providing a high-level summary of the Ministry's mandate items, as we understood them at the time. Timelines have shifted somewhat but the details are consistent with our current direction, so it gives a good foundation to build on with your presentation. Please note the notes are not related to the content on the slides.

If it's ok with you we will complete the GHG presentations and discussion from 1-3:30, then have your strategic presentation to finish the meeting from 3:30-4:00.

FYI – Dale will be standing in for Hugo (on vacation) and Scott has graciously offered to chair if I happen to be in the delivery room .

Best,

Zachary D. May, MBA

Director, Strategic Policy

(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



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Cc: Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: Re: Spring Energy Step Code Council meeting

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John and Juni, please send us your comments.

Cheers,

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE

Executive Director, Building and Safety Standards Branch

Ministry of Attorney General and Minister Responsible for Housing

Cell/Text: 250.812.1933

Email: Andrew.PapeSalmon@gov.bc.ca

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Cc: Muncaster, Katherine EMLI:EX; Pape-Salmon, Andrew OHCS:EX; jason.wolfe@fortisbc.com; Caradonna, Jeremy MUNI:EX; Brendan McEwen; Emerson, Victoria (NRCAN/RNCAN); Gisborne, Carolyn MUNI:EX
Subject: Spring Energy Step Code Council meeting
When: Thursday, April 1, 2021 1:00 PM-4:00 PM.
Where: Microsoft Teams Meeting

Update, March 26, 2021: Draft agenda, discussion questions, and three reports attached. Please contact dale.andersson@gov.bc.ca if you have questions or concerns, as I will be away Mar. 29-Apr. 1 inclusive. Thank you.

Hi, everyone:

Agenda to be added. Please let me know if you have conflicts and we can arrange for alternates to attend.

Thank you very much.

Hugo

Microsoft Teams meeting

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RE: Wendy, FYI There is a green roof resolution circulating around for UBCM

From: May, Zachary OHCS:EX
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: March 31, 2021 3:05:51 PM PDT

This must mean that a code for grow-op remediation can't be far behind. We should give out awards for the classic no-chance resolutions that just won't die.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: March 31, 2021 3:00 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Wendy, FYI There is a green roof resolution circulating around for UBCM

TIFFANY WARKENTIN, BDes, LLB | Manager, Policy and Regulation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Wendy Acheson <wacheson@bchousing.org>
Sent: March 31, 2021 2:51 PM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Denisa Ionescu <dionescu@bchousing.org>; Michelle Hayes <mhayes@bchousing.org>; Deanna Nesbitt <dnesbitt@bchousing.org>
Subject: FW: Wendy, FYI There is a green roof resolution circulating around for UBCM

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Andrew and Tiffany,

I received this from UDI and wanted to give you a heads up. As you may remember, mandating green roofs came up recently at the City of Vancouver and has come up several times over the last couple of decades from various municipalities. Despite the potential environmental benefits of green roofs, we always have to remind municipalities that mandating green roofs might have the unintended consequence of freezing residential construction due to the mandatory home warranty insurance regime. Home warranty insurance companies are not obliged to provide coverage for proposed projects that are considered to be a high insurance risk. When I checked with them a year or so ago about their appetite to cover homes and buildings with green roofs, their position was unchanged. In general, while they may entertain some plans by some builders with an adequate plan and technical expertise, most warranty providers are not willing to provide coverage. In addition, organizations such as CHOA, are concerned that the maintenance requirements of most green roofs are beyond the reasonable ability of strata corporations to manage consistently and competently.

If you need more information on the history of the topic should this issue arise again, or if you need to respond for the purpose of UBCM, Denisa Ionescu, copied here, remembers it all and has the information available. And on the licensing side we can get in touch with the insurers again as necessary for an update.

Regards,

Wendy

RE: Wendy, FYI There is a green roof resolution circulating around for UBCM

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 31, 2021 3:55:27 PM PDT

What action would you like us to take on this? Seems like a possible UBCM resolution that hasn't yet made it through the regular channels.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 31, 2021 3:52 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Wendy, FYI There is a green roof resolution circulating around for UBCM

For action.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

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Regards,

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Re: Wendy, FYI There is a green roof resolution circulating around for UBCM

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 1, 2021 9:29:29 AM PDT

No action recommended.

If this comes through as a resolution from UBCM then we can prepare a response.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

On Mar 31, 2021, at 4:15 PM, Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca> wrote:

I don't know – I haven't read it. For your recommendation.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

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Best,
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Hi Andrew and Tiffany,

I received this from UDI and wanted to give you a heads up. As you may remember, mandating green roofs came up recently at the City of Vancouver and has come up several times over the last couple of decades from various municipalities. Despite the potential environmental benefits of green roofs, we always have to remind municipalities that mandating green roofs might have the unintended consequence of freezing residential construction due to the mandatory home warranty insurance regime. Home warranty insurance companies are not obliged to provide coverage for proposed projects that are considered to be a high insurance risk. When I checked with them a year or so ago about their appetite to cover homes and buildings with green roofs, their position was unchanged. In general, while they may entertain some plans by some builders with an adequate plan and technical expertise, most warranty providers are not willing to provide coverage. In addition, organizations such as CHOA, are concerned that the maintenance requirements of most green roofs are beyond the reasonable ability of strata corporations to manage consistently and competently.

If you need more information on the history of the topic should this issue arise again, or if you need to respond for the purpose of UBCM, Denisa Ionescu, copied here, remembers it all and has the information available. And on the licensing side we can get in touch with the insurers again as necessary for an update.

Regards,

Wendy

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Package Revision 1

Date and Time of Meeting: April 1, 2021 | Time: 1:00 to 4:00 p.m. Pacific Time
Webinar link: Click here to join the meeting

Note: There is no conventional dial-in option.

Chair: Zachary May, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Meeting Materials

1. Agenda
2. Discussion questions

Meeting Reports Provided as Separate Documents

3. Pathways for British Columbia to Achieve its GHG Reduction Goals (FortisBC)
4. Low Carbon Building Systems in Energy Step Code Requirements Report (AES, for the Local Government Peer Network)
5. Implications of the BC Energy Step Code on GHG Emissions 2019 (BSSB)

Contacts if You Require Assistance

- Dale Andersson, BSSB – 778-679-9653 (call or text); dale.andersson@gov.bc.ca

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AGENDA

Time	Topic	Speaker(s)	Purpose(s)
1:00 p.m.	Welcome and Introductions	Zachary May, ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Approval of agenda
1:05	Framework for developing GHG requirements for new construction	Zachary May, Building and Safety Standards Branch	▪ Presentation regarding goals, timelines and key discussion questions for this process
1:20	Reducing carbon from homes fuelled with natural gas	Bea Bains and Jason Wolfe, FortisBC	▪ Pathways study presentation and RNG ▪ Questions
1:55	Local government perspective on reducing carbon	Brendan McEwan, AES; Maya Chorobik and Laura Sampliner, Local Government Peer Network	▪ AES report on Step Code and GHGi ▪ LGPN perspective on current approach from local governments ▪ Questions
2:30	Discussion questions	Zachary May/ All	▪ Work through discussion questions
3:35	Update on government mandates, additions to the Council table	Andrew Pape-Salmon, Building and Safety Standards Branch	▪ Further clarity on government mandates ▪ Questions ▪ Adding affordable and Indigenous housing providers to the Council table
4:00 p.m.	Adjournment	All	

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Energy Step Code Council Meeting

Discussion questions
Reducing carbon emissions in new construction

1. We have heard that consistency, flexibility, predictability, and affordability are important values for all parties. Are there other values that are important to include? What does success look like to your organization and your members?

2. Following the structure of the BC Energy Step Code, requirements for GHG emissions will require a specific unit of measurement or metric, and specific performance levels using that metric. The following questions will guide our discussion for establishing standards for GHG emissions:

    Metrics:

    a. Which metric(s) should be considered? (GHG intensity; total GHG per house, dwelling unit, or building; others?)

    b. Should the same approach be considered for homes and small buildings as we consider for large complex buildings?

    c. Should we focus on building types addressed in the Metrics Research Report first, or do all building types have equal priority when establishing GHG requirements?

GHG performance levels:

    d. Should we apply a similar approach used for the Energy Step Code and establish a first step that only requires measurement of GHG emissions and increasing steps towards a specific long-term low-carbon outcome? Should we align the number of GHG steps with the number of energy efficiency steps expected in 2022: 3 steps?

    e. What should the highest step should be for GHG emissions?

    f. What should the relationship be between GHG steps and the energy efficiency steps in the Energy Step Code? Should there be flexibility to apply different levels of energy and GHG requirements or should the steps be aligned?

3. In addition to any regulation, there are several implementation and impact analysis issues that should be addressed, either as part of the Metrics Research Report or through separate analysis and discussion. What issues do you and your members see as important to address as we develop GHG emissions requirements? Based on preliminary discussions the following issues have been identified:

    a. Consideration of embodied carbon

    b. Consideration of renewable natural gas

    c. Analysis of the incremental capital cost and operation cost implications of achieving different GHG steps alongside energy efficiency steps (in scope for Metrics Research Report) as well as the equipment and systems required to achieve GHG steps in different regions of the province

    d. Consideration of district energy and other local or site energy systems

ENERGY
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Energy Step Code Council Meeting
Meeting Notes

Date and Time of Meeting: Thursday April 1, 2021 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Chair: Zachary May, Building and Safety Standards Branch, Attorney General and Minister Responsible for Housing
Co-Vice Chairs: Bob Deeks, CHBA BC/RDC Fine Homes and Robyn Wark, BC Hydro
Virtual Microsoft Teams meeting

Participants

1. Dale Andersson, BSSB & CBC Subcommittee Co-chair
2. Bea Bains, FortisBC
3. Maya Chorobik, LGPN Co-chair
4. Norm Connolly, Richmond/PIBC, and P3 Subco Co-chair
5. Diana Dilworth, HAVAN
6. Patrick Enright, City of Vancouver
7. Catherine Ernst, BOABC
8. Jeff Fisher, UDI
9. Maura Gatensby, AIBC
10. Nat Gosman, EMLI
11. Joe Hart, Icon Homes/CHBA BC
12. Nicholas Heap, City of Richmond and P9 Subco co-chair
13. Vanessa Joehl, CHBA BC
14. Jason Jung, ASTTBC
15. Toby Lau, BC Hydro and P3 Subco Co-chair
16. Wilma Leung, BC Housing
17. Megan Lohmann, CEA and UBCM rep;
18. Mary McWilliam, BCIT & CBC Subcommittee Co-chair
19. Roberto Pecora, ZEBx
20. Warren Perks, BCCA
21. Harshan Radhakrishnan, EGBC
22. Kelly Reid, HKR Builders/CHBA BC
23. Laura Sampliner, LGPN Co-chair
24. Muneesh Sharma, BOMA
25. Maxwell Sykes, City of Surrey/UBCM Rep
26. Ralph Wells, UBC
27. Molly Johnson for Holly Wacker, Ministry of Municipal Affairs
28. Guido Wimmers, UNBC (joined later)
29. Scott Williams, BSSB
30. **Guests:** Jason Wolfe, FortisBC; Brendan McEwen, AES Engineering; Pauline Rupp and Carmina Tupe, CHBA BC; Katherine Muncaster and Caitlin Hinton, EMLI, Katherine King and Tom Berkhout, BC Hydro
31. **Regrets:** John Madden, UBC; Lisa Mak, BC Hydro; Tyler Wightman, BOABC

ACTION ITEMS

1. **BSSB:** Revise the discussion questions and send a Word version to ESCC members.
2. **ESCC members:** Please send written responses to questions to Hugo Wong (Hugo.Wong@gov.bc.ca) by Friday April 16, 2021.
3. **BSSB:** Book upcoming Council meetings so ESCC members have time reserved in their schedules.
4. **ESCC members:** Please let BSSB know if anyone else should be part of these discussions. BSSB will be reaching out to some regional groups e.g., CHBA and UDI regional chapters.

NOTES

This meeting was the first of four proposed between now and June/July 2021 to address GHGs and buildings. Four of five agenda items were covered in the meeting. Discussion of the questions included in the agenda has been deferred to a subsequent meeting. To assist that process, ESCC members were asked

to provide a written response to the questions to BSSB by April 16, 2021 so the information can be collated in preparation for meeting #2.

Framework for developing GHG requirements for new construction, Zachary May

- Key government mandate items:
  - Build on our government's work to require new buildings and retrofits to be more energy efficient and cleaner by **supporting local governments to set their own carbon pollution performance standards for new buildings.**
  - **Lead work to continue delivering our government's 10-year housing plan, Homes for B.C., and the affordable housing it's bringing to tens of thousands of British Columbians,** including working in partnership to create 114,000 affordable homes**.**
- Under the *Climate Change Accountability Act*, sectoral GHG reduction targets for British Columbia are required to be established by March 31, 2021.
  - Announcement last week establishing a 59%-64% GHG reduction below 2007 levels by 2030 for buildings and communities; specific goals for communities, new buildings, and existing buildings still being determined
- Provincial goals for carbon pollution standards
  - Align with Ministry and Government mandates and commitments
  - Enable local governments to establish "their own" carbon pollution standards for new construction
  - Align with Provincial standards for measuring and reporting carbon emissions
  - Canada's official greenhouse gas inventory for combustion fuels
  - Greenhouse Gas Industrial Reporting and Control Act (GGIRCA) for electricity
- Proposed Energy Step Code Council goals
  - Align with the basic principles of the Energy Step Code
  - Consistent provincial standard to provide long-term certainty
  - Flexibility for local governments to support their policy and program needs
  - Flexibility for builders to determine the most cost-effective way to achieve desired outcomes
  - Work towards consensus recommendations regarding the technical standard and implementation considerations
  - Coordinate with 2021 Metrics Research Report to conduct impact analysis
- Proposed timelines:
  - Meeting 1 April 1 – Background presentations and agree on key discussion questions
  - Meeting 2 Late May - Renewable natural gas, embodied carbon, district energy systems
  - Meeting 3 Early June - Initial review of impact analysis for proposed metrics and steps
  - Meeting 4 Late June - Seek consensus on recommended option for technical standard and seek consensus on key issues to be addressed in an implementation guide supporting the technical standards
  - Summer 2021 - Technical standard for consideration by the Ministry as possible regulation and implementation guidelines (substantial outline)
- Discussion of the following points:

    - The regulation can be kept simple; implementation may be more complex
    - Intention: Standard for Part 3 and Part 9 buildings; each may have different levels or possibly also different metrics
    - There may be a best practice guide to support implementation – possibly combined in the existing Step Code BP guide or a stand-alone document
    - ESCC members will have advance notice of upcoming meetings so you can invite others who need to be part of the conversation
    - The mandate is for new construction only; this work is separate from other, related existing buildings work
    - This is intended to replace what local governments are currently doing and will ideally be seen as a better standard; it may require the Province to amend authority local governments currently have in the Building Act General Regulation that enables local governments to mandate the Energy Step Code.
- Meeting chat notes
    - Methodology under Greenhouse Gas Reductions Targets Act (GGRTA) referenced by Zac: https://www2.gov.bc.ca/assets/gov/environment/climate-change/cng/methodology/2016-17-pso-methodology.pdf
    - Reference material from IStructE on embodied carbon: https://www.istructe.org/resources/guidance/how-to-calculate-embodied-carbon/
    - City of Richmond can share analysis done by a UBC Scholar in 2020 on embodied carbon in a 2,200 ft^2 home (Part 9), with proportions of embodied versus operational carbon at each Step Code level, and for an all-electric versus mostly natural gas heated home. UBC also did a comprehensive study recently for larger buildings on campus and in their neighbourhood zones

Reducing Carbon from Homes Fuelled with Natural Gas, Jason Wolfe, FortisBC

- Jason provided a detailed overview of the findings of FortisBC's report entitled Pathways for British Columbia to Achieve its GHG Reduction Goals (report sent with the meeting agenda)
- FortisBC engaged a consultant to develop pathways for B.C. to achieve 80% GHG reduction by 2050
- The report explored an electric pathway and diversified pathway; key finding: a diversified pathway is more resilient
- Key challenge: Peak heating and cooling demands
- Key challenge for the electrical path: Meeting clean peak capacity
- Diversified pathway expected to be at least $100B lower than the electrification pathway
- FortisBC is currently undertaking another study by Dunsky Energy, RDH and E3 EcoGroup – New and Retrofit Buildings Study
    - Study seeks to understand current GHGi of buildings with natural gas heat and/or hot water, and how much energy efficiency can reduce GHGi
    - Study will be shared when complete – expected late May
- FortisBC – has a Renewable Natural Gas Program
- RNG Comprehensive Review, BC Utilities Commission filing – must be done by end of year
- Questions and discussion about the report

Low Carbon Building Systems in New Construction Requirements – Brendan McEwen, AES Engineering

- Brendan summarized a report he wrote, which was commissioned by members of the Local Government Peer Network (report sent with the meeting agenda – see also earlier 2019 Step Code GHG study)
- Many local governments (LGs) seeking to reduce carbon in new construction as part of their climate goals; the report explores options to reduce GHGs and principles for performance
- Electric building systems are very low carbon on B.C.'s clean electrical grid
- USA cities driving low carbon, all-electric building requirements – e.g., many communities in California, Seattle, Massachusetts, and other jurisdictions
- Current local government approaches to low carbon given Building Act limitations: Require a higher step or a lower step with a low carbon energy system (LCES)
- Defining LCES – 3 approaches which aren't exclusive:
    1. All electric
    2. GHGi
    3. Seasonal average coefficient of performance or COP
- Recommendations for ESCC:
    - Enable LGs to require GHGi as well as all-electric building systems
    - If using GHGi, allow LG to reference 1, 3, 6 targets
    - Ensure modelling tools (e.g., HOT2000) don't allow loopholes such as modelling an energy source as a 'back-up' source then it's really used as a primary source
    - Consider when/how to use RNG
    - Industry: Wants 'direction of travel'
    - Consider tying GHGi directly into Step Code
    - Mitigate electric utility extension fee uncertainty
- LGPN members support the principles in the report and want a smooth transition and to keep their own local approach until a Provincial standard is ready with no rollback
- Questions and discussion - key issues raised:
    - **Affordability:** E.g., heat pumps in the north can be very expensive to operate
    - **Embodied carbon:** A key part of the discussion as well
    - **Early/dedicated support for rural, northern, interior communities:** Their experience is different, e.g., use of wood heat, reminder not all communities on gas grid
    - **Future climate considerations:** GHG measures should not create issues for resiliency

Update on Government Mandates, Additions to the Council Table – Andrew Pape-Salmon, Executive Director, BSSB

- Andrew reviewed the importance of housing to our Minister and Government's commitment for affordable housing units
    - Types of affordability: initial construction cost; life-cycle costs; social cost
- Expansion of the ESCC: We will be expanding the Council to include Indigenous representatives and more housing providers – e.g., non-profits
- Reconciliation on Codes



    - Pan-Canadian Agreement on Construction Codes – commits the Province to harmonize with the National Code by 2025 and minimize variations (which have substantive impact) and differences (which have non-substantive impacts)
    - Advice to ESCC: Keep an eye on the convergence of the two, so that by 2025 we can get to full convergence
- Questions and discussion

RE: New eapp - Energy Step Code Council terms of reference and membership

From: May, Zachary OHCS:EX
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: April 13, 2021 2:11:14 PM PDT

Hi Hugo,

I appreciate how much you have on your plate. I assumed this was on the back burner while you dealt with higher priorities. Feel free to confirm that with me in the future, but no complaints from me on how you have been prioritizing.

We do still need that eapps completed. Nothing significant from the past meeting. We really just need ot update membership according to Andrew's request in the email attached to the eapps (indigenous and affordable housing).

Maybe a call to walk through this would make sense?

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: April 13, 2021 2:00 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: New eapp - Energy Step Code Council terms of reference and membership

Hi Zac,

I still have an eApp (27064) - "Energy Step Code Council terms of reference and membership," that has languished for a while, and has passed its due date by a few weeks. I was sidelined with the GHG meeting prep, so I apologize for not preparing this in time. Do you still want me to complete it, and if so, by what date? I realize the content may also differ given what happened at the Apr 1 meeting, so any feedback on how that meeting will affect the note would also be helpful.

Best,
Hugo

-----Original Message-----
From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 11, 2021 5:02 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: New eapp - Energy Step Code Council terms of reference and membership

As promised.

Scope of the ESCC:
- CleanBC and 2020 MAG Mandate item (new construction)
- 20% better than BCBC
- Carbon Pollution Standards

- Not including existing buildings

Membership:
- National Code (1) - NRC staff
- Market developers (4) - UDI 4 chapters
- Social housing developers (2) - one Lower Mainland developer, plus BCNPHA
- Builders (4) - CHBA-BC plus 3 chapters in each region (interior, VI, LM)
- Local governments (4), including one rural / RD representative
- Indigenous (1) - AHMA or FNHIC
- Finance (2) - BC Housing, BCI or some other institutional investor
- Insurance (1) - BC Housing LCS
- BOABC
- Design (2) - EGBC member (not staff), AIBC staff, transitioning to member by 2022
- Research and capacity building (2) - UNBC, Canadian Association of Consulting Energy Advisors
- Energy (2) - utilities

Governance and communications
- Leadership team - need to add a local government vice-Chair
- Decisionmaking methods
- Documentation of decisions (in Teams)
- Public review format (cross-posting on BSSB website, email blast to all BSSB stakeholders)
- Newsletter

I would like to approve this package, not the acting ED during my vacation.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

-----Original Message-----
From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: March 11, 2021 10:12 AM
To: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: New eapp - Energy Step Code Council terms of reference and membership

Jessica, please initiate an eapp to Zac to revise and seek approval of the Terms of Reference. I will send instructions separately to Zac by email. This will go to ADM for approval.

Andrew Pape-Salmon
Cell 250-812-1933

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council

Discussion questions Revision 2
Reducing carbon emissions in new construction

Please return questions by April 16, 2021 to Hugo.Wong@gov.bc.ca

Note: Questions differ slightly from the ones included in the April 1, 2021 agenda.

Your name and organization: Jeffrey Fisher, Urban Development Institute

1. We have heard that consistency, flexibility, predictability, and affordability are important values for all parties. Are there other values that are important to include? What does success look like to your organization and your members?

   Answer: These four are important values that need to be followed – especially affordability. There are a couple of others that should be considered:

   - *Capacity – the industry has taken on a lot to adjust to the Energy Step Code (ESC) and manage the impact COVID-19. We need to be careful regarding how much and how soon we are changing construction.*
   - *Simplicity – especially for the Part 9 builders.*

2. Following the structure of the BC Energy Step Code, requirements for GHG emissions will require a specific unit of measurement or metric, and specific performance levels using that metric. The following questions will guide our discussion for establishing standards for GHG emissions:

   Metrics:

   a. Which metric(s) should be considered? (GHG intensity; total GHG per house, dwelling unit, or building; others?)

      Answer: Can the Ministry model what the impact would be, as it may vary by type of building, size and location – maybe the Metrics report noted below?

b. Should the same metric(s) be considered for homes and small buildings as we consider for large complex buildings?

Answer: See above

c. Should we focus on residential, hotel, office and retail building types (i.e., the ones for which we have specific Step Code requirements)? Or do all building types (occupancies) have equal priority when establishing GHG requirements?

Answer: I think it's important to also focus on the buildings constructed by and for the Broader Public Sector (BPS). This would help in terms of getting the industry on side. As I have noted in the past, it was the BPS in Metro Vancouver that led to the adoption of LEED. BC Housing will also be critical in demonstrating how best to build high ESC and low GHG residential buildings through their housing projects.

GHG performance levels:

d. Should we apply a similar approach used for the Energy Step Code and establish a first step that only requires measurement of GHG emissions and increasing steps towards a specific long-term low-carbon outcome? Should we align the number of GHG steps with the number of energy-efficiency steps expected in 2022: 3 steps?

Answer: I would have Step 1 be measuring, so builders have time to become more familiar with what is expected of them.

e. What should the relationship be between GHG steps and the energy-efficiency steps in the Energy Step Code? Should there be flexibility to apply different levels of energy and GHG requirements or should the steps be aligned?

Answer: One of our concerns is our members will lose an incentive that is currently available. Communities who are interested in lowering carbon emissions have offered builders lower ESC step requirements as an incentive to reduce GHGs.

3. In addition to any regulation, there are several implementation and impact analysis issues that should be addressed, either as part of the Metrics Research Report or through separate analysis and discussion. What issues do you and your members see as important to address as we develop GHG emissions requirements? Based on preliminary discussions the following issues have been identified:

a. Consideration of embodied carbon – *We would be concerned if this were added as an additional requirement. Many builders are still navigating the ESC – especially the higher*

steps – and now they will have to manage building electrification. If embodied carbon is being considered, it should be used as an incentive. For example, if you lower your embodied carbon, the ESC or GHG step is reduced.

b. Consideration of renewable natural gas, hydrogen or other renewable combustion fuels – *The more options and information we can provide the industry the better.*

c. Wood burning and other secondary heating sources – *Do you mean heat capture (e.g. transferring the heat from a grocery store on the main floor to the residential units above)?*

d. Analysis of the incremental capital cost and operational cost implications of achieving different GHG steps alongside energy-efficiency steps (in scope for Metrics Research Report) as well as the equipment and systems required to achieve GHG steps in different regions of the province – *This is critical. If local governments are concerned about GHGs, it would help if the Metrics Report had information on how best to reduce GHGs with lower upfront and life cycle costs. This could potentially impact the implementation of the highest ESC step by the Province in the B.C. Building Code (BCBC). Our members also need to know how best to deliver the ESC and GHG reductions cost effectively, and best practices. For example, do you install heat pumps in every unit, every floor, or the whole apartment building?*

e. Consideration of district energy and other local or site energy systems – *We still need to address the viability of municipal district energy systems if the Province will be moving to adopt Step Code 4 for Part 3 buildings.*

f. Transition from local governments' current GHG policies/programs to a provincial standard, including unique regional conditions – *Yes this is needed. As noted above, we are concerned that builders may lose the incentive of a lower ESC step to deliver GHG reductions.*

Other issues to address: The impact of changes BCBC as the ESC steps increase over time.

Also incentives are important - to address the split-incentive issue, and because there may be fewer Fortis incentives if buildings are electrified.

The issue mentioned in the meeting about BC Hydro infrastructure costs for electrified buildings. Right now, our members do not know if they will be asked to pay for additional infrastructure for their projects. If they do, the costs are high and a surprise.

The benefits of air source heat pumps. They offer cooling opportunities. If the Province is also considering expanding the use of them in new and existing buildings en masse, is there an economic development opportunity to have them built in British Columbia?

4. Other comments – Please add any other comments that will help our discussion in the space below.

It is important to note that if we were starting from scratch, it would have been better to build the ESC with two targets – one to reduce GHGs and one to reduce the amount of electricity drawn from the BC Hydro grid – especially at peak times. This would have provided builders with a substantial amount of flexibility – better envelopes, heat pumps, solar PV, geo-thermal/exchange, building batteries, other onsite renewables, RNG, and other technologies that will emerge. This flexibility is important now (because site characteristics vary) and in the future (because technologies and their cost effectiveness change over time).

Sprinklers

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
To: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>, Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
Sent: April 19, 2021 12:10:07 PM PDT
Attachments: image001.jpg

Team,

Please note this from my conversation with Pat Ryan from CoV today:

-COV GM undertaking sprinkler review -permits, design through to construction. Includes Part 9. Links to BC sprinkler project. COV has seen success from their mandatory sprinkler program (sprinklers since 1970's in some occupancies). UDI would have interest in water damage issue.
Future conversations with Pat needed.

We can chat next meeting.

Jun'ichi Jensen
Director, Building Policy (Acting)
Building and Safety Standards
Ministry of Attorney General and Minister Responsible for Housing
Province of BC
250 858 1325
or 778 974-3910



RE: extension, GHG and Step Code feedback

From:	Jeff Fisher <jfisher@udi.org>
To:	Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Cc:	May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent:	April 20, 2021 9:24:01 AM PDT
Attachments:	image003.png, image007.jpg, image005.jpg, image008.jpg, image006.jpg, image004.png, image001.png, image002.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hugo, thanks. In terms of my responses to the questions, here is an example of an emerging technology:

Photovoltaic Cladding and Roofing Offering Path to Net-Zero Ambitions

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Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: April 16, 2021 5:02 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; bea.bains@fortisbc.com; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; catherine.ernst@boabc.org; Jeff Fisher <jfisher@udi.org>; ruta.fluxgold@canada.ca; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; mmcwilliam3@bcit.ca; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: extension, GHG and Step Code feedback

Hello, members of the Energy Step Code Council:
Thank you to those who have submitted answers to the questionnaire I sent on April 7. We have had a few requests for more time, so we can accept submissions until Friday, April 23. If there are other extenuating circumstances, please reply

and I'll see if I can make alternate arrangements.

Although we are eager to digest all your feedback and plan future meetings, we also understand that surveying colleagues can take time.

Have a great weekend!

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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Re: follow up meeting on contingency reserve fund?

From: Baker, Joscelyn <jbaker@polyhomes.com>
To: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: April 22, 2021 3:50:47 PM PDT

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Thank you Veronica - I am available late next week from 1-5 pm Thursday and on Friday from 3-5 pm. Early in the week of May 3 I am available on Monday May 3 from 1-5 pm, on Tuesday from 1-2 pm and from 2:30 to 3:30, and on Wednesday from 1-5 pm.

If those times are not convenient, I can also change my morning schedule to make myself available from 8:30 to 11:30 am on any of those dates.

I would be interested in attending if possible. Thank you very much for this excellent discussion.

Best regards, Joscelyn.

Joscelyn Baker
General Counsel
Polygon Homes Ltd.

email: jbaker@polyhomes.com
tel: 604.871.4244 fax: 604.871.4280
polyhomes.com
900 - 1333 West Broadway,
Vancouver, BC V6H 4C2

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From: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Sent: April 22, 2021 3:25 PM
To: Baker, Joscelyn <jbaker@polyhomes.com>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Subject: RE: follow up meeting on contingency reserve fund?

Hi Joscelyn,

Carmina at CHABC and Tony at CHOA can meet late next week or early the week of May 3 to discuss developer's contributions to the contingency reserve fund for strata developments.

Is this something you or UDI would be interested in participating in? We've got some timelines to meet as the strata insurance issue is a sensitive one.

kind regards,
Veronica Barlee, MBA
Senior Policy Advisor
See the strata housing website or search for "BC strata housing"

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Cell: 778.679.9655 Email: Veronica.Barlee@gov.bc.ca

Offering acknowledgement in respect of the traditional territory of the WSÁNEĆ (Saanich), Lkwungen (Songhees), Wyomilth (Esquimalt) peoples of the Coast Salish Nation, traditional keepers of this land on which I live and dream.

From: Barlee, Veronica OHCS:EX
Sent: April 20, 2021 3:48 PM
To: Baker, Joscelyn <jbaker@polyhomes.com>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Subject: follow up meeting on contingency reserve fund?

Hi Joscelyn,

You had mentioned you would like a follow up meeting on the Contingency Reserve Fund.

Are you available next week for an hour? I will also check with CHABC and Tony at CHOA and send out a Doodle poll.

kind regards,
Veronica Barlee, MBA
Senior Policy Advisor
See the strata housing website or search for "BC strata housing"

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Cell: 778.679.9655 Email: Veronica.Barlee@gov.bc.ca

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Hugo, I shared my answers to the survey with a few folks on UDI Building Code Committee, and received the responses below

From: Jeff Fisher <jfisher@udi.org>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Cassandra McColman <cmccolman@udi.org>
Sent: April 23, 2021 5:28:07 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

- "Thanks Jeff. I think your answers capture how I would respond. The key is that we are still very much learning and COVID has slowed that down in a variety of ways. So thoughtful approaches to achieve our low carbon targets acknowledging the state we are in is key for affordability and the economy. Maybe I would just add to your points that the rise in lumber pricing hits the buildings that are achieving (and learning at) the highest ESC levels. Timing of further changes should acknowledge this."

- "Here are my comments:

1. Agree – we need to consider market transformation in relation to culture – for example gas cooktops – people want these – they don't understand that induction is possibly better with lower emissions – what about fuel supply where electrical power outs are common – gas is more reliable. Same issue exists for hot water – going electric costs more across the board for hot water and cooking.
2. I would recommend GHGI – this is a metric used elsewhere and will simplify adoption – don't create another metric unnecessarily as this creates challenges for understanding and interpretation. I think we need to stop beating up on housing and push industrial requirements, maybe institutional should lead…
   For d and e - GHG Performance levels – I agree with you.
3. Embodied carbon – oh dear – lets go one step at a time. Let's walk before we run – there is so much misinformation and a lack of understanding – plus if they push embodied carbon targets our construction costs will skyrocket – there are some items we use that cannot simply be substituted.
   District Energy – I don't get it – if we are going to net zero homes why do we still need DE? STOP – lets drop DE from the discussion… Municipalities have become hypocritical – they lower step code requirements to make DE work.
4. I agree with your notes. If they are going to GHG lets at least roll out a program that covers all AHJ's, is in one uniform format that goes from 0 to 100 in a structured process over a reasonable period of time.

Exhaustion – the Province needs to map out everything for all building types and then stop changing things and focus on transportation or something else – we are all getting exhausted by moving dials - our costs won't stabilize until the dial stops moving."

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

Energy Step Code Council

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: April 23, 2021 5:55:01 PM PDT
Attachments: image001.jpg

Hi Andrew,

In response to your suggestion to expand the Energy Step Code Council to include affordable housing developers/providers, and indigenous housing providers we are extending invitations to:

- AHMA (they are already involved in a subcommittee and we will be inviting them to join the council on Monday when Dale is back)
- FNHIC (Hugo is reaching out the HPB for an appropriate contact)
- BCNPHA (invitation sent)

As with UDI and CHBA, we will invite these groups to include several representatives to ensure we have a diversity of perspectives at the table (e.g. non-profit housing provider, affordable housing developer, etc.).

These new members will be involved in the upcoming Energy Step Code and GHG discussions in June. We will also offer an orientation session to familiarize them with our work to date and allow us to better understand the needs and perspectives they represent.

Please let me/Nicole know if you would like any further action or specific organizations beyond the ones identified above. Once membership is confirmed we will update the Terms of Reference and provide a briefing note regarding these changes for you and Cheryl.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 TOP WORK UNIT AWARD

RE: Sectoral Targets submissions from buildings sector

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 26, 2021 10:05:38 AM PDT

Hi Andrew,

Do you have time to touch base on this today?

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: April 26, 2021 9:59 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Sectoral Targets submissions from buildings sector

FYI

TIFFANY WARKENTIN, BDes, LLB | Manager, Policy and Regulation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: Monday, April 26, 2021 9:57 AM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: Sectoral Targets submissions from buildings sector

Tiffany, (Jessica, please prepare an eApp)

You may be aware that CHBA-BC and UDI provided submissions for the Sectoral Targets consultation that directly reference our work at the BSSB:

https://chbabc.org/wp-content/uploads/2021/01/CHBA-BC-Submission-to-B.C.-Sectoral-Targets-25-Jan-2021.pdf

https://udi.bc.ca/wp-content/uploads/2021/02/UDI-Letter-Discussion-Paper-on-Sectoral-Targets-for-GHG-Reductions_Jan.25.pdf

Please prepare a draft response letter to UDI and CHBA-BC for my signature, including our commitment to link our voluntary GHGi standards to specific energy efficiency requirements in order to support consumer affordability (beyond capital costs). Note that this may differ from our base energy efficiency requirements.

In other words, local governments can reference GHGi standards provided they also reference appropriate companion energy efficiency standards that reflect the cost of zero-carbon energy, in order to protect consumer affordability in life-cycle costs. This will align nicely with our “mitigative measures” to address the needs of the affordable housing development, and also support consumers’ interests.

This will put an end to the practice of trading off energy efficiency standards for carbon reduction, as referenced by CHBA-BC in their letter. They correctly state that this compromises the intent of the CleanBC Plan which is focused on energy efficiency.

Regards,
Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

RE: Sectoral Targets submissions from buildings sector

From: May, Zachary OHCS:EX
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: April 26, 2021 10:08:09 AM PDT

I've asked APS for an opportunity to discuss.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: April 26, 2021 9:59 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Sectoral Targets submissions from buildings sector

FYI

TIFFANY WARKENTIN, BDes, LLB | Manager, Policy and Regulation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: Monday, April 26, 2021 9:57 AM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: Sectoral Targets submissions from buildings sector

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This will put an end to the practice of trading off energy efficiency standards for carbon reduction, as referenced by CHBA-BC in their letter. They correctly state that this compromises the intent of the CleanBC Plan which is focused on energy efficiency.

Regards,
Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE

Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

Re: follow-up CRF consultation May 3 or May 4

From: Baker, Joscelyn <jbaker@polyhomes.com>
To: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>, Carmina Tupe - CHABC <carmina@chbabc.org>
Sent: April 27, 2021 1:34:02 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Veronica - May 3 also works for me - Best regards, Joscelyn

Joscelyn Baker
General Counsel
Polygon Homes Ltd.

email: jbaker@polyhomes.com
tel: 604.871.4244 fax: 604.871.4280
polyhomes.com
900 - 1333 West Broadway,
Vancouver, BC V6H 4C2

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From: tony@choa.bc.ca <tony@choa.bc.ca>
Sent: April 26, 2021 2:15 PM
To: 'Barlee, Veronica OHCS:EX' <Veronica.Barlee@gov.bc.ca>; Baker, Joscelyn <jbaker@polyhomes.com>
Cc: 'Page, Doug OHCS:EX' <Doug.Page@gov.bc.ca>; 'Carmina Tupe - CHABC' <carmina@chbabc.org>
Subject: RE: follow-up CRF consultation May 3 or May 4

May 3rd is perfect for me.

Tony Gioventu, Executive Director CHOA

Covid-19 Notice: As a precautionary measure to prevent the spread of COVID-19 CHOA staff are working remotely and our offices are temporarily closed. We understand these are challenging times for strata corporations and we are here to help. Even though CHOA advisors are working remotely we are only a phone call or email away and able to assist you with hosting meetings and notice preparation.

Tuesday Lunch & Learn Live with CHOA: CHOA is hosting a series of webinars once a week, for the next few months. Join us each Tuesday as we bring together industry experts to discuss the many issues affecting BC's strata community. For more information visit our website at: https://www.choa.bc.ca/seminars/

Please stay safe and healthy.

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From: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Sent: April 26, 2021 2:11 PM
To: Tony Gioventu, CHOA <tony@choa.bc.ca>; Baker, Joscelyn <jbaker@polyhomes.com>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Carmina Tupe - CHABC (carmina@chbabc.org) <carmina@chbabc.org>
Subject: follow-up CRF consultation May 3 or May 4

We're having a follow up CRF consultation with Carmina at CHABC.

Are you available for an hour either:

- Mon May 3 from 9 to 10:30 am or
- Tues May 4 from 10 to 12?

Thanks for considering,

kind regards,
Veronica Barlee, MBA
Senior Policy Advisor
See the strata housing website or search for "BC strata housing"

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Cell: 778.679.9655 Email: Veronica.Barlee@gov.bc.ca

Offering acknowledgement in respect of the traditional territory of the WSÁNEĆ (Saanich), Lkwungen (Songhees), Wyomilth (Esquimalt) peoples of the Coast Salish Nation, traditional keepers of this land on which I live and dream.

Follow up consultation on developer’s contribution to the CRF (contingency reserve fund)

Microsoft Teams meeting

Join on your computer or mobile app

s.15

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council
Part 3/Part 9 (Non-residential) Subcommittee
Metrics Research Report Update Steering Committee
Meeting #4: Kick-off Meeting with Consultants
MEETING NOTES

Date: Wednesday April 21, 2021 | **Time:** 1:00 to 3:00 p.m.
Steering Committee Chair: Scott Williams, Building and Safety Standards Branch
Microsoft Teams Meeting

Steering Committee Members Participating

Associations and Industry Hubs
Harshan Radhakrishnan, EGBC
Eoghan Hayes, IBPSA-Canada
Roberto Pecora, ZEBx

Crown Corporation
Remi Charron, BC Housing
Wilma Leung, BC Housing

Industry
Jeff Fisher, UDI-Pacific
Susan MacDougall, Focal Engineering

Local and Federal Governments
Greg McCall, City of Vancouver
Norm Connolly, City of Richmond, and Part 3/9 Subcommittee Co-Chair
Nicholas Heap, City of Richmond (and Part 9 Subcommittee Co-chair)
Iain MacDonald, National Research Council
Laura Sampliner, Port Moody and Local Govt. Peer Network

Part 9 Buildings
Pauline Rupp, Canadian Home Builders' Association B.C.
Mark Bernhardt, Bernhardt Contracting

Utilities
Toby Lau, BC Hydro and Part 3/9 Subcommittee Co-Chair
Pete Koepfgen and Tanya Rumak, FortisBC

Building and Safety Standards Branch
Scott Williams, Dale Andersson, Zachary May, Nicole Vukosavljevic

Regrets: Vanessa Joehl, Bob Deeks, Joe Hart, Kelly Reid, CHBA B.C.; Maya Chorobik, CEA and Local Govt. Peer Network; Patrick Enright, City of Vancouver; Dave Ramslie, UDI and Concert Properties; David Sargent, UDI-Okanagan and Davara Holdings; Maura Gatensby, AIBC; Sepehr Foroushani, City of Richmond

Guests: Consultants Alex Blue, Evoke Buildings Eng. Inc. and Einar Halbig, E3 Eco Group

~~~~~~~~~~~~

ACTION ITEMS

- **Steering Committee Members**
  - Provide early feedback on appropriate ECMs for the Part 9 analysis. What items should be included or excluded, and for which regions? Prepare for a discussion of ECMs at the next meeting. Please provide all feedback through the Steering Committee Teams channel. Contact Dale if you can't access it.
- **Consulting Team**
  - Consult with BSSB to determine how to present options for ECMs for discussion at next meeting.
  - Consult with BSSB about how to address COVID cost impacts.
  - Consult with BSSB re: feasibility (time/budget) of including LEED for Homes methodology in the Part 3 overheating analysis, per IBPSA BC request.
  - Determine an approach for the costing analysis for presentation at the next meeting.
- **BSSB**
~~~~~~~~~~~~

- BSSB: In consultation with Evoke/E3, identify what if any additional information we can obtain on the geometry of the 60 NRCan archetypes applicable in B.C. Consider which HTAP archetype options should be used for Part 9 analysis.
- Coordinate dates of next meetings with the Consultants: one in 2-3 weeks and another mid-June.
- Determine what files can be shared. IBPSA BC has requested the Model Geometry from the 2018 metrics report so members can replicate the metrics for quality and training purposes.

NOTES

Project Award: Alex Blue of Evoke Buildings Inc. and Einer Halbig of E3 Eco Group were the successful proponents of the RFP.

Scope of Work: Scott Williams reviewed the scope of work from the RFP and the consulting team reviewed their proposed approach to completing the analysis. For full details, please see the PPT deck presented at the meeting and distributed with the agenda. Points of discussion noted below.

INITIAL MODELLING APPROACH AND ECMs –PPT Slides 4 to 10

1. Part 3 Approach, weather files

- NECB 2020 baseline to assess initial results
- CWEC 2016 vs PCIC 2020's files – Historical weather data to be used for all analysis other than for overheating risk analysis which is to use PCIC 2020 and 2050 data.

2. Part 3 archetype starting point from 2018 report

- Five: low-rise MURB, high-rise MURB, hotel commercial, retail
- Program variations: Recommend keeping consistent with 2018 report unless strong reason to change

3. Part 3 ECMs starting point from 2018 report

- For discussion at next meeting

4. Part 9 approach, HTAP archetype selection

- Not necessary to run NRCan's 240 archetypes as only 60 apply in B.C.; need Steering Committee advice on which to include. BSSB/Evoke/E3 to discuss further with NRCan regarding approach to analysis.

5. Part 9 archetype starting point from 2018 report

- May be a need for modifications to the 2018 list: For example, separate out row homes and quadplexes into individual units rather than analyse as a single building? Typically, quadplexes are modelled first as individual units and then combined
- Not necessary to run NRCan's 240 archetypes as only 60 apply in B.C.; also, many challenges with analysis if assessing multiple different building types with varying ECMs (can't assess where differences are coming from)
- Consultants suggest taking existing archetypes and changing one item at a time to determine impact; run 2 to 3 archetypes in HTAP as a check rather than 60 different options
- Is the Small 102m2 SFD still relevant to include? Is it being build currently and in future? YES
- Laneway home size: Adjust size to better reflect current building practices (currently, analysis is required for a home with 50m2 of conditioned floor space which reflects the smallest house size for MEUI as per the BCBC)? In Vancouver typical size is 650 sq ft, 2 level, slab on grade in Vancouver
- Adjust size of archetypes? If the laneway size is adjusted, is there value in having other homes equi-distant in size?

- Remi notes: NRCan has done modelling to see how these Part 9 archetypes are impacted with the upcoming Code. Maybe flagging a few archetypes that were found to have more challenges in achieving targets would be a good place to look.

6. Part 9 ECMs starting point from 2018 report

- Steering Committee will need to help determine which ECMs should be included or excluded, examples:
  - Air-source heat pumps not needed in all regions?
  - 92% gas furnace or 95% AFUE – no longer relevant?
  - Drain water heat recovery – fewer options, not common in Part 9
  - Effective R values – could reduce options (e.g., R60 walls and R100 roof not needed)
  - Dual fuel systems, combination space and water heating or gas back-up systems, Fortis seeing dual fuel space heating
- Other considerations
  - **Best/Worst:** For each archetype, model the best and worse case scenarios to get a sense from those few models what range might be best for each from about 20 models; then, focus on the one with the most variation or pick the ones in the middle; identifying both highest and lowest helps determine where to focus attention
  - **Pair Like with Like:** Pair high ECMs with high, low ECMs with low, i.e., bundle ECMs that make sense rather than randomly select them, so they're meaningful and intuitive, and represent realistic construction practice
  - **Current baseline:** Some ECMs will be useful to represent current baseline
  - **Climate and Embodied Carbon:** Useful but likely for a subsequent study
  - **Ventilation:** Ventilation shifts anticipated in future due to COVID – flag as potential item to consider

Other

- Discussion of what baseline means for the 2022 Code
  - Current BCBC 2018 is based on NECB 2015; BCBC 2022 will be based on NECB 2020 which we need to assess to see if it is indeed 20% better than BCBC 2018 and how it aligns with what is currently Step 3 for Part 3 buildings
  - B.C. needs to determine the 20% better metric but also assess the current EUI metrics as the national code has no intensity metric

Inclusion of Building Pathfinder Tool? (please https://www.buildingpathfinder.com) this was a separate contract for previous metrics research work and won't be included in this contract. Note EUIs, TEDIs, etc are still relevant and can be used; just need to update target values you are looking to hit.

COSTING APPROACH – PPT Slides 11 - 13

Discussion of including or excluding COVID impacts on costs, points raised:

- 2018 metrics update was based on 2017 costs so is quite dated
- **Option 1 Same**: Use the same costing as in the 2018 report to provide a relative scale of improvements versus costs, and then make an adjustment for current costs
- **Option 2 Altus COVID Multiplier**: Start with Altus Guide which has a COVID multiplier, assess values and compare to the 2018 report (need to be clear on what the COVID multiplier includes – e.g., US demand for lumber is increasing prices which may not go down post-COVID)
- **Option 3 Blended Average:** Do a blend of a couple years' costs
- **Option 4 Update:** Do not use old prices as manufacturers increase prices no matter what
- **Option 5 Plug and Play**: Consider including an option whereby individual builders can 'plug in' their own costs as it will be more useful/believable by builders
- **Option 6 Pre-COVID:** Use 2019 Q4 costs as they would represent costs prior to any COVID impacts.
- Whatever pricing is used, be as transparent as possible or builders will question the numbers; all builders have different costs and will want to know how the costs were arrived at (e.g., supplies, labour, etc.)

- Reminder: It's the incremental cost that is most important, not the base cost; the report would stand on more solid ground if based on historical data; use the most recent data available as it's the incremental difference we are most interested in
- Agreement re: flattening impact of COVID on costs; fluctuations will always occur, so a 2 – 3 year rolling average or 2019 Q4 approach or inflation factor could all work; lumber is a standard part of any build and thus an 'embedded' cost, not necessarily an 'incremental' cost
- Note that we are looking at incremental costs of ECMs, which may not be as affected by fluctuations such as COVID

GHG ANALYSIS – PPT Slide 14

- Will include in output tables, both GHG intensity and absolute GHG, all operational GHG
- Won't be able to include every iteration of every heating source so will most likely take a book-end approach
- Embodied carbon is very complicated and will be given a qualitative discussion in the report and point to other resources
- BSSB will provide further updates on approach to GHGs based on engagement with the Step Code Council over the spring/summer which will help to inform desired outputs

OVERHEATING ANALYSIS – PPT Slide 15

- Will use 2020 climate data
- Will focus on building most likely not to have mechanical cooling, e.g., residential
- Potential measures to explore: Shading (various kinds); Operable windows; Night pre-cool; HRV bypass; addition of mechanical cooling, solar heat gain coefficient (SHGC)
- Explore including overheating hours produced along with TEDI, TEUI, GHGi, etc. May not be possible due to simulation time (may need to separate out the two analyses).
- Appliances in MURBS are noticeably underrepresented regarding internal gains and this underestimates current overheating
- Request from IBPSA:
    - Incorporate LEED for Homes for appliances in the analysis
    - ECB-2015 and Step Code underestimate plug load energy and therefore heat emission from appliances in MURB Buildings. IBPSA will share their Excel analysis. IBPSA proposes allowing a separate allowance for appliances as a separate energy and hours per appliances like the LEED for Homes methodology

RE: Energy Step Code Council

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Cc: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: April 28, 2021 8:53:05 AM PDT

We'll make that shift. I will also work with Tiffany and OSPG to clarify what role we do still have with EGBC on Step Code and other projects. I agree that we need to be engaging directly with professionals, but I would assume we still need to collaborate with EGBC on basic regulatory matters such as the duties of professionals in our regulations or things that impact letters of assurance.

Best,
Zac

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: April 28, 2021 8:47 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: Re: Energy Step Code Council

Thanks.

Please also shift the membership of the professional regulator EGBC, as they are prohibited from doing advocacy work.

Andrew Pape-Salmon
Cell 250-812-1933

> On Apr 23, 2021, at 5:55 PM, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca> wrote:
>
> Hi Andrew,
>
> In response to your suggestion to expand the Energy Step Code Council to include affordable housing developers/providers, and indigenous housing providers we are extending invitations to:
>
> - AHMA (they are already involved in a subcommittee and we will be inviting them to join the council on Monday when Dale is back)
> - FNHIC (Hugo is reaching out the HPB for an appropriate contact)
> - BCNPHA (invitation sent)
>
> As with UDI and CHBA, we will invite these groups to include several representatives to ensure we have a diversity of perspectives at the table (e.g. non-profit housing provider, affordable housing developer, etc.).
>
> These new members will be involved in the upcoming Energy Step Code and GHG discussions in June. We will also offer an orientation session to familiarize them with our work to date and allow us to better understand the needs and perspectives they represent.
>
> Please let me/Nicole know if you would like any further action or specific organizations beyond the ones identified above. Once membership is confirmed we will update the Terms of Reference and provide a briefing note regarding these changes for you and Cheryl.
>
> Best,

Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Follow up - Consultation on Contributions to a Strata Corporation's Contingency Reserve Fund

From: Baker, Joscelyn <jbaker@polyhomes.com>
To: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Sent: May 3, 2021 9:56:01 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thank you Veronica for the excellent meeting this morning. As promised, I outline below a way to use REDMA to address the rare case of a developer that refuses to fund the CRF.
There is an existing enforcement route under REDMA, Policy Statement 1, which already includes the requirement that interim budgets meet s. 13 of the SPA.

Strata Corporations or individual purchasers can submit a complaint that the developer is non-compliant because the developer has either: shown the CRF contribution in the budget in the Disclosure Statement and failed to pay it (misrepresentation); or has failed to show the CRF contribution in the interim budget (non-compliant).

While the OSRE may be inundated with complaints of all sorts, this kind of complaint merits an investigation because it is an objective question of non-compliance with both REDMA and the SPA, and because the investigation time should be quick - the developer can show a bank statement with a payment into the CRF if they paid. In addition to having to cover investigation costs, even small developers' directors probably don't want to have to report in future Disclosure Statements that they have been subject to a penalty or sanction by the OSRE.

I would be happy to discuss further or provide additional background if needed.

Best regards, Joscelyn.

PS - despite this email being from Polygon, it is sent in my capacity as a member of the UDI Legal Issues Committee, not as in-house counsel for Polygon Homes Ltd.

RE: School overheating images

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>, Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: May 3, 2021 1:15:26 PM PDT
Attachments: image001.jpg, image002.png, image003.png

Thanks Andy.

I will let you know once I have heard back from Code Canada.

From: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: Monday, May 3, 2021 11:40 AM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: RE: School overheating images

Even though we have not adopted the NBC's 2018 errata and revision package, it did not contain any newer editions of 62 or 62.1. (ANSI/ASHRAE 62 remains as the 2001 edition less addendum 'n' and ANSI/ASHRAE 62.1 remains as the 2007 edition.)

I'm not aware of any planned ASHRAE changes for the 2020 Codes but let's wait on your inquiry with Codes Canada to confirm.

Andy

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, April 30, 2021 3:25 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: School overheating images

OK, thanks. Last code cycle they did all the updates to referenced standards as a package for the first revisions to the NBC. Not ideal but that is what they did. I don't believe any PCF's are typically associated with this process, but I'm not sure how it is initiated and who is involved. I would assume technical committees will be assigned this at some point in the cycle but I don't know.

Jun'ichi Jensen
Director, Building Policy (Acting)
Building and Safety Standards
Ministry of Attorney General and Minister Responsible for Housing
Province of BC
250 858 1325
or 778 974-3910



From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: Friday, April 30, 2021 3:21 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: School overheating images

Juni and Andy,

Wanted to loop back regarding the email chain below and potential changes to ASHRAE 62. I have reached out to Codes Canada to get some more info on the proposed national changes. Nothing is showing up in the most recent PCFs.
Once I get some more info, we can discuss at next tech team meeting.
Long and the short – whatever is decided I need to let the consultant know that is working on the Metrics Research Report as this will affect their analysis.

Cheers,

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, August 26, 2020 11:27 AM
To: McCall, Gregory <Gregory.McCall@vancouver.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: School overheating images

Hi Greg,

I am going based on the work done for the 2020 (2021?) NBC, but I'm not sure what analysis they did.

Flagging for Juni's team to look into as we review for the 2022 BCBC.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: McCall, Gregory <Gregory.McCall@vancouver.ca>
Sent: August 26, 2020 10:46 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: RE: School overheating images

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Zach,
Interesting exchange.
With respect to the province considering 62.1-2016, has the province done an analysis to make sure the CO2 levels do not exceed the BC allowable level?
This was the reason no other versions were adopted subsequent to 62-2001 (except add'm n).

I suggest you speak with Curt Hepting who has performed various analysis of the CO2 levels and may be in the best position to continue.

Cheers,
G

M. Greg McCall
B.Sc.(Gen), P.Eng., LEED AP

Energy Policy Specialist
Office of the Chief Building Official (CBO)
Development, Buildings, and Licensing
City of Vancouver
Tel: 604.873.7531

Email: Gregory.McCall@vancouver.ca

Energy webpage: http://vancouver.ca/building-energy-requirements
Field Review webpage: http://vancouver.ca/home-property-development/field-review-inspection.aspx

Energy info document for Renovations: Present (June 2019) Version or Previous Version
Training Videos for Energy Checklists: http://vancouver.ca/home-property-development/energy-checklist-training-videos.aspx

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From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: Wednesday, August 26, 2020 10:41 AM
To: Eoghan Hayes; Williams, Scott B OHCS:EX
Cc: jfisher@udi.org; McCall, Gregory; Harshan Radhakrishnan
Subject: [EXT] RE: School overheating images

City of Vancouver security warning: Do not click on links or open attachments unless you were expecting the email and know the content is safe.

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1. Good catch on the 62.2 – I did mean 62.1. The next edition of the code is likely to use the 2016 version.
2. Interesting comments on the gaps that remain in the code regarding air exchanges. Hopefully further work on overheating risks will help us develop national and BC standards that manage this comfort and occupant health issue.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Eoghan Hayes <ehayes@edgec.ca>
Sent: August 26, 2020 10:37 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: jfisher@udi.org; McCall, Gregory <Gregory.McCall@vancouver.ca>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Subject: RE: School overheating images

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good question,

62.2 is a ventilation standard specific to residential buildings, this is a school so this standard would not apply here. 62.1-2001 w/o addendum N would apply.

62.1 w/o addendum N is a good standard in my opinion as it has higher ventilation rates then more recent versions of the standard. (Greg can fill you in on the history of why they stuck with this version of the standard as opposed to more recent versions). While the 62 standards address ventilation
minimum rates for occupants to breath it does not address air circulating in the space. The designer on the project did meet code minimums for ventilation but there is no code or standard for air circulation in the space, just ventilation.

The school board have now adapted our recommendation of ensuring all classrooms have 6 air changes per hour minimum in all classrooms. About 1.3 air changes of the 6 would be from ventilation air (outside air) the remainder would be from return circulating air in the space.

Cheers
E

Best regards,
Eoghan Hayes, P.Eng, BEMP, RESET AP , LEED AP BD&C
Managing Director
+1 (604) 338 1063 | www.edgesustainability.com [can01.safelinks.protection.outlook.com]
The Brickworks Building
304–1228 Hamilton St., Vancouver BC, V6B 6L2



From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: August 26, 2020 10:18 AM
To: Eoghan Hayes <ehayes@edgec.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: jfisher@udi.org; McCall, Gregory <Gregory.McCall@vancouver.ca>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Subject: RE: School overheating images

Hi Eoghan,

Do you know if the update to ASHRAE 62.2(2016) will address this at all? This sounds like a minimum code issue, not just Energy Step Code. Thanks for sharing.

Best,
Zac

Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Eoghan Hayes <ehayes@edgec.ca>
Sent: August 26, 2020 10:14 AM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: jfisher@udi.org; McCall, Gregory <Gregory.McCall@vancouver.ca>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Subject: School overheating images

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

As mentioned on the call today,

The school has excellent solar shading on the exterior south exposure.

Images taken at 10 am on September 10th 2018. Note this is surface temperature

Edge were brought in to do a full thermal analysis and come up with solutions to get reduce the inside temperatures. We explored

- Night cooling,
- Adding cooling to the existing HRV ducting (Limited to 16°C) as the existing ducting was not insulated
- Adding full cooling to the HRV to 12°C with insulating the ducting.
- Full mechanical cooling

The only solution especially with doing to analysis with future weather files was to add full mechanical cooling to the building.

Also the air movement in the space was very low, leading to a very stuffy classroom as the air circulating was for ventilation only, about 1.2 Air changes per hour. Typically you want about 6 air changes per hour in a space.



Figure 1



Figure 2

Conclusion: If we are going to mandate good envelopes and HRV's for schools in certain climate zones in BC we likely need some form of cooling to ensure the above situation does not occur again.

Cheers
E
Best regards,
Eoghan Hayes, P.Eng, BEMP, RESET AP , LEED AP BD&C
Managing Director
+1 (604) 338 1063 | www.edgesustainability.com [can01.safelinks.protection.outlook.com]
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edge airsset autodwell

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council
Part 3/Part 9 (Non-residential) Subcommittee
Metrics Research Report Update Steering Committee
Meeting #5: 2nd Meeting with Consultants
MEETING NOTES

Date: Wednesday May 5, 2021 | **Time:** 10:30 am to 12:30 p.m.
Steering Committee Chair: Scott Williams, Building and Safety Standards Branch
Microsoft Teams Meeting

Steering Committee Members Participating

Associations and Industry Hubs
Harshan Radhakrishnan, EGBC
Eoghan Hayes, IBPSA-Canada
Roberto Pecora, ZEBx

Crown Corporation
Remi Charron, BC Housing
Wilma Leung, BC Housing

Industry
Jonathan Meads for Jeff Fisher, UDI-Pacific

Local and Federal Governments
Greg McCall, City of Vancouver
Norm Connolly, City of Richmond, and Part 3/9 Subcommittee Co-Chair
Nicholas Heap, City of Richmond (and Part 9 Subcommittee Co-chair)
Iain MacDonald, National Research Council

Part 9 Buildings
Bob Deeks, Joe Hart and Pauline Rupp, Canadian Home Builders' Association B.C.

Utilities
Toby Lau, BC Hydro and Part 3/9 Subcommittee Co-Chair
Pete Koepfgen and Tanya Rumak, FortisBC

Building and Safety Standards Branch
Scott Williams, Dale Andersson, Nicole Vukosavljevic

Regrets: Mark Bernhardt, Bernhardt Contracting; Vanessa Joehl, Kelly Reid, CHBA B.C.; Maya Chorobik, CEA and Local Govt. Peer Network; Patrick Enright, City of Vancouver; Dave Ramslie, UDI and Concert Properties; David Sargent, UDI-Okanagan and Davara Holdings; Maura Gatensby, AIBC; Laura Sampliner, Port Moody and Local Govt. Peer Network; Susan MacDougall, Focal Engineering

Guests: Consultants Alex Blue, Evoke Buildings Eng. Inc. and Einar Halbig, E3 Eco Group

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ACTION ITEMS

- **Steering Committee Members**
  - All: Send additional comments on the proposed Part 9 ECMs (Excel document in meeting invite) by May 10 to Scott or post on the Teams channel. Comments re: surface area, window to wall ratios, quadplex parking especially appreciated
  - All: Send additional comments on the proposed Part 3 ECMs (PDF document in meeting invite) to Scott or post on the Teams channel as soon as possible.
  - Alex Ferguson: Share draft research report (looking at 240 archetypes and EUI) by colleague Sara Gilani with Einar
  - Toby: Discuss LPD with Alex Blue concerning Part 3/office archetypes and LPD
  - All: Overheating risk analysis – provide comments on proposed approach to Scott or post on the Teams channel by end of next week (May 14) at the latest
- **Consulting Team**
  - Einar: Discussion modelling options for row homes with Alex Ferguson and whether HTAP could assist with the whole building/per unit approaches
~~~~~~~~~~~~

- Einar: Review previous metrics studies to ascertain placement of windows in the Part 9 archetypes, and report back to the Steering Committee
- Einar: Confirm 'baseline' with Scott
- Alex: Look at what portion external lighting is part of total portion of TEUI for Part 3 buildings

- **BSSB**
  - BSSB: Reach out to Mark Bernhardt about form factor for his earlier suggestions on this
  - BSSB: Follow-up regarding ASHRAE 62, DHW and other clarifications

NOTES

Einar Halbig reviewed proposed Part 9 modelling, followed by Alex Blue who reviewed proposed Part 3 modelling (see Excel and PDF documents attached with meeting invite).

Einar Halbig – Part 9 Discussion

- Excel spreadsheet provided highlights questions for the Steering Committee in yellow
- Area and volume questions
  - Floor area: Keep floor area constant and vary envelope surface area
  - Form factor: 25% and 50%? Increases still TBD
    - See Rob Barnhardt's report related to this for guidance: - https://www.passivehousecanada.com/policy-series-5-the-reference-building-approach/
    - We are hoping to find the 10 best solutions that are also the most affordable; different options might not be both effective and affordable – the report could be useful in pointing out what doesn't work
    - For guidance, see also Alex Ferguson's 240 archetypes report which should indicate a reasonable and appropriate range
  - Window to wall ratio: Maintain the same ratios as envelope surface area increases
  - Window to wall ratio: bump up 5% and then 10% increase cognisant of potential issues with solar gain
- Modelling row homes
  - The previous metrics reports (2017, 2018) modelled row homes as one/whole building which follows BCBC but is contrary to EnerGuide Rating System which models individual units. Modelling as whole building using Hot2000 file in 'general mode' won't provide EnerGuide rating or auto generated reference case; therefore, won't be able to calculate % better. It's possible to run both whole building and by unit modelling but this adds to the time and complexity.
  - Option: Use whole building modelling but run a few by unit in relevant climate zones such as 5 or 6 to see the effects
  - Alex Ferguson reports HTAP may be able to help with this issue; Einar to discuss with Alex options to this dilemma
- Hot2000 current version is 11.10 but this analysis will use v 11.8 (was the current version just 8 months ago) for compatibility reasons with HTAP
- Quadplexes
  - Keep to previous report and base analysis? This is not necessarily typical across B.C. but would permit comparison with previous reports
  - Over parkade?
  - Interest in having archetypes that represent typical B.C buildings
  - Proposed solution: Slab on grade quadplex with attached garage
  - Einar to discuss with Alex F. HTAP analysis—240 architypes could address this issue and provide some variation.

- To be determined: placement of windows for analysis (i.e., north, south, east, west facing and in what amounts), as it's not clear what approach the previous 2017 and 2018 analysis took
- ACH: If Step 3 (representing 20% improvement and 2.5 ACH) will be 'base line' with BCBC 2022, is 3.0 ACH needed in current analysis? Suggest removing 3.0 and adding 0.6 ACH
- Baseline: Einar to clarify with Scott what base case represents

Alex Blue – Part 3 Discussion

- See PDF for details (discussion cut short due to time)
- Impact of NECB for analysis – see page 4 of PDF
- Office archetypes
    - Lighting power density (LPD)--changes significant; need to determine appropriate LPD - suggest leave out 50%/highest option; if reduce LPD too much it's like robbing Peter to pay Paul
- SHGC = 0.4, 0.3 = OK? Higher SHGC values may exacerbate overheating.
- Consideration of exterior lighting?
- Challenges with selecting ECMs: If run all low ECMs together, building may not meet Step Code but if run all high together, may be unaffordable. Wide range of ECMs has been selected to allow trade-offs to find the most economical solutions.
- Ventilation rates – ASHRAE 62.1 2001 used in initial analysis. Suggestion of using demand control ventilation
- MERV filtration will affect fan power – Alex will look into this.
- Fans will not be used as an ECM for MURBs
- Schedules – changes to office schedules need to be accounted for.
- Overheating analysis: See PDF, meeting ran out of time for discussion

Other Comments

- **Step Code numbering:** Do not change the Step Code numbers when BCBC 2022 is adopted as this will only cause confusion (e.g., Step 1 in BCBC 2018 would be significantly different to Step 1 in BCBC 2022 if the numbers are revised)

URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#1100 – 1050 West Pender Street
Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
www.udi.bc.ca

Agenda

1. **Municipal Housing Targets**
   There is a major opportunity to address the B.C.'s housing crisis by establishing clear and enforceable housing targets for municipalities.

   a. Rationale
   b. Implementation and focus on transit areas
   c. Changing local government incentive structures
      - Broadway Plan
      - Other municipalities
   d. Next steps

2. **Identifying Future Issues**
   The need for housing targets is paramount, however we have provided a list of some additional topics for consideration at our next meeting in June.

   a. Addressing the expansion of municipal powers over the management/operations of rental buildings (e.g. RRTZ and Business Licensing powers)
   b. Supporting tenants while allowing the renewal of exiting rental stock
   c. Streamlining the development review process (Municipal/Provincial)
   d. Actions the Province can take without UDI
   e. Other

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To: The Hon. David Eby, Q.C., Attorney General and Minister of Housing
From: Anne McMullin, President & CEO, Urban Development Institute (UDI)
Date: May 12, 2021
Re: Supporting Rental and Affordable Housing through Municipal Targets

UDI appreciates the collaborative discussions that we have had thus far, and we want to expand on those initial conversations, by discussing opportunities that will support the Province's goals. We believe that the greatest opportunity to build the rental and affordable housing that B.C. needs is through the establishment of clear and enforceable municipal housing targets.

Rationale
As builders, we regularly see that there are no incentives for municipalities to approve and build more housing. In fact, there are disincentives as growing communities are facing resistance to change. In order to achieve the housing that our province needs, it will require changing this incentive structure to create more support at the municipal level for growth, particularly around the mass transit networks where the Province has invested billions of dollars.

Setting enforceable targets for new homes based on regional population growth and housing demand would incentivize municipalities to support more housing. We would expect that targets would focus on areas well-served by transit where there are the greatest opportunities to improve affordability.

These overall housing targets could include an affordability component to support the government's overall goal of building 114,000 new affordable homes over ten years. To achieve this goal, we would need to add more than 10,000 new affordable homes annually, considerably more than what's currently being built. By comparison, last year CMHC recorded only about 5,600 new rental homes were added across the province. We recommend that the Province review the units needed to achieve its goal and allocate a component of municipal housing targets based on a yearly share of this overarching total. Those municipalities with more transit should have to achieve a higher share of the broader provincial housing goal.

Implementation and focus on areas well-served by transit
There are multiple mechanisms that could be used to develop overall municipal housing targets:

- The Ministry of Municipal Affairs mandated *Housing Needs Reports* – although municipalities would need to demonstrate how their housing needs would be met and the Province would need to sign-off on them the Reports;
- *Transit Supportive Agreements* for new transit lines, which would need be signed-off by the Province as well as be more robust and clearly apply to future Councils;
- The *Integrated Transportation and Development Strategy*; and/or
- The *Metro 2050 Regional Growth Strategy*.

Targets would need to be enforced by the Province, similar to the approach taken in several US states. In our previous memos, we outlined several potential mechanisms that the government could use such as:

- Limiting Government Funding to Local Governments that do not meet their targets;
- Increasing the share of the TransLink Tax that has to be paid; and/or
- Automatically increasing the densities in areas near transit (see below).

Even though there is overall public support for more housing options – especially near transit - the lengthy municipal approvals process and current neighbourhood sentiment in many communities towards growth - even in transit-oriented areas - threatens to delay or derail housing objectives. Applying pre-zoning with density bonuses for rental and affordable housing to defined areas, would improve housing outcomes in those areas.

The Province could require local governments adequately increase densities around stations through pre-zoning with density bonusing within a certain period to accommodate more new housing, including affordable homes. If this is not achieved, the Province could then adjust land-use designations accordingly. Precedent exists for the provincial regulation of municipal powers through current mechanisms, including the *Local Government Act* and Inspector of Municipalities, *Riparian Areas Regulation*, *Water Sustainability Act*, *Environmental Management Act (Contaminated Sites Regulation)*, *Building Act,* and Ministry of Transportation and Infrastructure referrals for developments near provincial highways among others.

The *Local Government Act* in particular establishes requirements around consultation processes, zoning bylaws and the creation of Official Community Plans and setting GHG emissions targets. It also requires municipalities to complete Housing needs Assessments and regulates the use of municipal zoning powers in certain circumstances, such as restricting the use of land for farming. Municipal zoning powers are also restricted through the Agricultural Land Reserve, which is regulated by the Province. The framework already exists for the Provincial government to provide direction to municipalities on zoning, and we suggest this be utilized to secure new rental and affordable housing through targets.

We fully understand that the Province will likely expect Purpose Built Rental (PBR) and/or units with a certain level of affordability in market strata projects. We would need to ensure through an economic analysis by a third-party consultant that enough additional density is provided to allow for the affordability desired by the Province while making projects viable. The municipalities of Coquitlam and Burnaby currently have density bonus programs that meet this threshold and are seeing growth in rental housing.

Municipal disincentives

For builders, it has become increasingly challenging to deliver rental and affordable homes, and we need to remove some of the roadblocks in order to get more homes built, quickly. 75% of new development in Metro Vancouver over the next thirty years will have to be in areas where people currently live and work (infill areas) because we are running out of land. At the same time, only two local governments in Metro Vancouver met their Regional Growth Strategy (RGS) housing targets between 2011 and 2018 – the City of North Vancouver and Richmond.

Councils are constantly requiring proposals to provide more or are inserting roadblocks to new projects in infill areas. Some Local Governments are also establishing standards, and

amenity requirements that are so high that projects do not proceed or are delayed. We've seen this across the region where municipal requirements, such as environmental policies, amenity or affordability targets become difficult to implement or even unachievable – especially since increases in density to fully offset the costs are not provided. If development stops, the impact can be minimal for Councils – or even positive, as the Region's housing crisis can be solved in other municipalities and neighbourhoods.

Builders are often faced with competing municipal policy priorities that delay or deter new housing proposals including shadowing, view corridors and potential building material requirements. We have also seen a troublingly preservationist attitude in some local governments which has appeared in early drafts of Vancouver's Broadway Area Plan or the use of Residential Rental Tenure Zoning (RRTZ) to prevent redevelopment of aging rental stock rather than support the creation of new homes - while fully protecting displaced tenants. It has even gone so far as to become outright objections to growth in some municipalities.

There is a growing sentiment that municipalities are not all willing to accept the growth needed to improve housing affordability or that it will only be accepted if it achieves what are largely unattainable requirements. Unfortunately, the current incentive structure in place doesn't create any impetus for municipalities to change, which is why targets are critical to incentivize the approval of new housing.

Positive outcomes - achieving affordability, transit and climate action goals

Some municipalities are not putting up the same roadblocks to new housing that are noted above. Some municipalities continue to provide opportunities to build the types of rental and affordable homes that we need. The few new market PBR buildings that are being built today are serving a range of incomes, largely within the definition of "workforce housing."

For new rental homes, particularly those in areas well-served by transit, affordability is further improved because households do not have added expense of owning a vehicle. By increasing ridership is supports the long-term growth of the transit network and ensures that Provincial investments are fully leveraged. In addition, it will contribute to achieving the Province's *CleanBC* climate action goals.

Based on the rationale and examples above, we believe that the greatest opportunity to achieve the rental and affordable housing that is needed in B.C. will be by establishing municipal housing targets, enforced by the Province. We look forward to discussing these ideas further with you in our upcoming meetings.

U40 Committee
Thursday, June 3, 2021
7:30 – 9:00 AM
Zoom

AGENDA

1. Roundtable Introductions
    - U40 Overview & Goals
    - Who We Are
    - Minister Eby
2. Building Communities for Everyone
3. Access to Workforce Housing
4. Regional Vision and Leadership
5. Open Discussion
    - How Can We Help
6. Next Steps

Andrew,

Please feel free to join the next Energy Step Code Council meeting. We can make time on the agenda if there is anything you would like to share with the group. I will follow up on Friday at our bilateral with the draft agenda.

Best,
Zac

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Sent: May 11, 2021 2:35 PM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; bea.bains@fortisbc.com<mailto:bea.bains@fortisbc.com>; pcaraher@ahma-bc.org<mailto:pcaraher@ahma-bc.org>; mchorobik@communityenergy.bc.ca<mailto:mchorobik@communityenergy.bc.ca>; NConnolly@richmond.ca<mailto:NConnolly@richmond.ca>; bdeeks@rdcfinehomes.com<mailto:bdeeks@rdcfinehomes.com>; diana@havan.ca<mailto:diana@havan.ca>; catherine.ernst@boabc.org<mailto:catherine.ernst@boabc.org>; jfisher@udi.org<mailto:jfisher@udi.org>; ruta.fluxgold@canada.ca<mailto:ruta.fluxgold@canada.ca>; MGatensby@aibc.ca<mailto:MGatensby@aibc.ca>; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com<mailto:joe.iconhomes@gmail.com>; nheap@richmond.ca<mailto:nheap@richmond.ca>; jjung@asttbc.org<mailto:jjung@asttbc.org>; toby.lau@bchydro.com<mailto:toby.lau@bchydro.com>; wileung@bchousing.org<mailto:wileung@bchousing.org>; mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>; J.Madden@ubc.ca<mailto:J.Madden@ubc.ca>; Lisa.Mak@bchydro.com<mailto:Lisa.Mak@bchydro.com>; May, Zachary OHCS:EX; mmcwilliam3@bcit.ca<mailto:mmcwilliam3@bcit.ca>; sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>; roberto@zebx.org<mailto:roberto@zebx.org>; warrenp@bccassn.com<mailto:warrenp@bccassn.com>; hradhakrishnan@egbc.ca<mailto:hradhakrishnan@egbc.ca>; kelly@hkrbuilders.com<mailto:kelly@hkrbuilders.com>; lsampliner@portmoody.ca<mailto:lsampliner@portmoody.ca>; muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>; Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>; tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Subject: Energy Step Code Council meeting (GHG mtg. #2)
When: June 9, 2021 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Calendar placeholder. Agenda to come.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

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Reducing carbon in new construction
Considerations for district energy systems

Date: Friday June 4, 2021
Time: 10:30 a.m. – 12:00 p.m. Pacific Time
Teleconference information: Click here to join the meeting

If technical difficulties persist, email Hugo Wong at hugo.wong@gov.bc.ca or call 236-478-1406

Agenda

1. Welcome, introductions (Zachary May, 10 mins)
2. Discussion questions (All, 60 mins.)

Attendees

Zachary May, Director, Strategic Policy, Building and Safety Standards Branch (BSSB), Ministry of Attorney General and Minister Responsible for Housing
Hugo Wong, Policy Analyst, Building and Safety Standards Branch
Alisa Holtz; Senior Policy Analyst; Electricity and Alternative Energy Division; Ministry of Energy, Mines and Low Carbon Innovation

Mauricio Acosta, Vancouver Coastal Health
Bea Bains, FortisBC
Patricia Bell, Community Energy Association
Will Cleveland and Gerard MacDonald, Reshape Strategies
Steve Faltas and Leya Behra, City of New Westminster
Jeff Fisher, Urban Development Institute
Bradford Griffin, Simon Fraser University
Jason Owen, Surrey City Energy (City of Surrey)
Alen Postolka, Lulu Island Energy Company (City of Richmond)
Charlene Rowan, Corix
Peter Russell, City of Richmond
Kerry Shaw, University of British Columbia
David Trigg, FVB Energy
Karsten Veng and Ivan Tang, Lonsdale Energy (City of North Vancouver)

Purpose

- This group was convened to discuss the implications of a carbon pollution standard for new buildings on district energy systems.
- At this initial meeting, the Building and Safety Standards Branch (BSSB) is seeking initial feedback and questions which we will consider and discuss with stakeholders on the Energy Step Code Council. We also want to identify any issues that would require, or would benefit from, further discussion and exploration with district energy providers.

Background

- In November 2020, the Mandate Letter for the Minister Responsible for Housing included direction to build on the government's work to require cleaner buildings by supporting local governments to set their own carbon pollution performance standards for new buildings.
- The *Building Act* limits Local Authorities to establish their own technical building requirements for carbon pollution and energy efficiency, requiring them to use the voluntary Energy Step Code in the BC Building Code (BCBC), which addresses energy efficiency but not carbon pollution.

- Following the structure of the BC Energy Step Code, requirements for GHG emissions will require a specific unit of measurement or metric, and specific performance levels using that metric.
- We have transparent, B.C.-specific emissions factors via the Greenhouse Gas Industrial Reporting and Control Act (GGIRCA) model for grid electricity and Canada's official greenhouse gas inventory for natural gas. However, quantifying emissions in district energy systems are less straightforward given the range of energy sources.
- This summer, BSSB is consulting with stakeholders like the Energy Step Code Council to understand policy and implementation preferences on a carbon pollution standard, with the goal to achieve consensus by the fall of 2021.
    - The goal is to focus on operational carbon emissions, although there will be some discussion of embodied carbon.
    - In April 2021, initial survey responses from the Energy Step Code Council members indicate that the group is most interested in using a GHGi metric for buildings, but most respondents wanted additional costing analysis before expressing a firm preference.

Discussion questions

- What is simplest, most effective way for the Province to determine the emissions factor for district energy systems in B.C. for use in building regulations?
- Is there a standardized approach for determining the emissions factor for district energy systems? Does this value change over time?
- What should the Province be aware of when setting a provincial carbon pollution standard for buildings connected to district energy systems?

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Alen, CoR – goal of DE, GHG

Bea, FortisBC
Brad – data centre at SFU (track DE across Canada). Most complete database on available DE facilities. Energy use.

Gerard – Reshape. Infrastructure consultants. DE policies integration with carbon codes. TGS with GHG req. CaGBC and zero carbon. Alisa. CleanBC

Ivan – Lonsdale . Want to know GHG space.

Karsten

Jeff – UDI. I have members who own DE systems. How does DE and ESC integrate?

Emily: Surrey City Energy. Lead planning/design. We're interested in (Jason is my manager) – interested in next phase of renewable energy plant, supply.

Jason Owen – want to bring in more low carbon supply. Working with Reshape. Overseeing sustainability office. How policie will put us on path for zero in net and existing bldgs..

Leya – city of new west. Manager of climate action. And Steven Faltas. New West.

Steven – electricity supply.

Linda – neighbourhood energy utility, CoV. Low-carbon heat and hot water to residents in False Creek up into Mount Pleasant.

Zac – satisfying minister's mandate. Agenda, brief background.

Pat Bell – CEA. Used to do pre-feasability studies.

Kerry Shaw – future neighbourhood developments.

Lloyd Jacobs (FAES)

Question from Gerard on GHGi on timeline: Does the Province have a timeline for introducing a GHGi requirement? Benchmark ourselves between fall 2021 and end of 2022. Given priority of this, likely closelr to fall 2021. We want to finish analysis for this fall. High-prorioty work.

Jeff: As BCBC moves up the Step Code, implications for DE. In what happened in the past, the BCBC will have GHGi targets as well. When we have this convo, has to be in the back of our minds. It might migrate over. As did the ESC. Zac: That's fair. Maybe EE in a parking lot. Implications on this group, EE, could follow up with that with this group.

Will: Will there be multiple Steps?

ZM: Almost certain we will have more than one level. We're trying to harmonize with field in a few ways. A few ways in a measure-only Step, doesn't satisfy policy goals. GHGi dominant but not forgone. Certainly more than one Step. One set of flexible standards.

Alen: Flexibility. A few DE systems started with base load as NG boilers, with longer term of implementation of LCES.

ZM: We're doing something similar…when does it rule out…start different places, different plans. V interested in what that is so any impacts we have on DE as voluntary standards…those LGs decide on right level is for them, what that means for buildings, hopefully local govs understand full implications. Starting with first measure only Step won't cut out anything. But depending on how low the GHGi is required.

Alen: Goal to bring some recommendation in the fall. How do you perceive this group? Another task group? How do you want us to be?

ZM: Primarily, we're running it through ESCC> When it comes to carbon pollution standards, there are other groups are implicated, like DE. We'll either maintain this as aagroup to check in on to ensure we have input. Also opportunity for anynone here to participate in larger ESCC group. Intent here is a group to focus on DE specific issues. As Jeff noted, might be worth tackling the carbon pollution thing, we can revisit EE ahead of 2022 to ensure we capture DE in there to.

Kerry: Any public sector building targets? Part 3 Part 9?

ZM: Defer, follow up with that. We're doing another version of the metrics report. Cost and technology at different levels of Step Code. And emissions outcoms. Off the top of my head, unsure if we have public sector buildings of any archetypes. I don't think there are any public sector buildings in there.

Any recommendations to…brad griffin…claim to have the most advanced understanding of DE systems. Suggestion. Emissions factor for nG and electricity in the grid. How can we gather something similar for DE, those owned and operated by LGs not under the purview of the BCUC? Do we have enough info to calculate emissions of DE?

Brad Griffin: Beyond the fuels that are being used for that energy? I don't. Info we collect is voluntary. Fuels are the most controversial info we get. If it's mandatory reporting, not see why you couldn't calculate it based on fuels going into your system and energy coming out.

ZM: Through this process, we can construct BUILDINGS, we DON"T regulate DE. We CAN"T regulate DE systems. That's our challenge. What's going INTO the building.

Jason Owen: There won't be one simple way to calculate emissions factor. Important to understand: unlike traditional energy networks, electricity/gas, DES primarily developed to facilitate flexible use of different energy inputs. That's the whole point. They'll evolve over time to consist of different fuel makeups. There shouldn't be one calculation for any given utility that's supplied to its whole customer base. It'll change over time. Depend on needs of the customer. As systems grow, new customers that come on will have different requirements that will need to be met. These utilities have the flexibility and utility to deliver different carbon intensity for different customers based on time of construction. Important for utilities to plan for that. But this standard needs to acknowledge evolution over time and diversity of services provided.

Lloyd: What's the definition of DE? Those considered Stream B under BCUC, LG systems, or on-site, too?

ZM: I'll ask the group.

Alen: Back in the DETG day, some definition…as a part of that. Step Code and Minister of the time did consider DE. What did we decide at the time?

Ivan: I want to echo Jason Owen. Our DE (Lonsdale) also envisioned to be flexible in fuel flexibility and fuel input. Cooling or heating service, it's complicated to see how much GHG should be assigned to a heating or cooling system. It's not something we've tackled yet.

ZM: Is it harder for heat recovery…is it easier for some DE systems vs others?

Ivan: Can't speak for others, but for Lonsdale in the node where we have heat recovery from cooling…do we attribute all of the GHG in the fuel that we go into the heat recovery back to heating side and would cooling service is completely zero carbon? If that's the case, can't compare that in apples to apples ways to standalone cooling building.

Brad: Comment/question. Last year, we did work for ECCC, assigning emissions factors for co-generation (electricity and heat). Six methodologies, pros/cons, industry standards, etc. We settled on the most common definition for industry as our recommendation. You could apply something similar for heat only systems. Ome up with std method to split fuels among final energy delivered. Works back to efficieis of different techs, split it up and attribute that way. Would you assign fixed GHG to a system, or would it evolve? Chase a standard as it declines?

ZM: In the Code, we'd love it if it would fixed permanently. But a fluid number that changes dy ot day is impractical. What's the interval of change we see in this system. Would an annual number ascribed, we could do a list like that, but when someone goes to build a building, what number to draw from, provide that for other…like climate info, but we change it every 5 years, we want a regular number, once a year at most, five years is nice, but it might be too long. System in your community?

ZM: We could have a long list. If we can't get info we need, what's a default? We'd ideally incentivize making a real number with update at the next interval, but we aren't looking for one number for all DE. We'll see. We could go through and ID each system if possible Provide a reasonable number.

Jeff: It isn't what the system is, it's for what it'd be for new buildings. In CoV, creative energy has diff GHG number for its current customers vs its new ones. We're only talking about new construction, not EB. Be aware. Next: we're concerned if munis develop different rules for their DE vs the ones for private sector. Some institutional, hospitals may have same view. Also question, will get to the ESCC, if standard is different for DE-buildings vs. other buildings, how fair is that?

ZM: Our desire is a transparent methodology to make that number. We don't want to leave it…needs to be transparent…as we've done for BC Hydro and Fortis on their fuels, distribution, emissions factor, it must be seen as fair. That ideally addresses non-LG-operated DE systems.

Gerard: How we talk about DE in same camp as gas/electricity, it's uncomfortable pairing. DE is a platform, it's not a energy source in itself. Could have wide variety of intensities. In 2019, we did survey of DE systems across Canada, intl, and BC. BC has yet to release that. We looked at 140 systems globally, 42 in Canada, 18 in BC. We asked system operators, got their data, we'll see, it's a wide range of carbon intensities. Vary by time, no one size-fits-all. What do you use as a default? If you assume it's on 100% gas, it's easy. Other regulators, check those who have GHGi in Codes. It'd make sense for all these code makers to get the same page. CaGBC has a zero carbon standard, check that. They're navigating this

very issue. In this convos, not just with CaGBC and Toronto, and Lower Mainland, is exactly Jeff's point, it's about service for new construction. What' we're seeing DE industry come up with is specific offerings for new customers. For what's carbon intensity for existing system. But it's a differen tissue in what the new customer is going to get. Offering for new customers, would be different than heat supply for existing customers. What other code makers thinking,,,they think, principles of allocating carbon for that new customer. Protocols should mirror: what are we doing for buildings. Bldgs need to demonstrate energy code, show spec sheet, show this heat pump, should be similar for DE. If they add some renewable supply, ask the DE provider for that supply. Harmonize. Framework for specific offering, not unlike Fortis' RNG offering…connect to the gas grid, but can buy RNG or green heat and specialized service. Those are being worked through and again, reach out to code making counterparts to see where they are with that.

THING: MAYBE GET GERARD'S THING to CAS for their modelling?

Onus goes to DE provider to demonstrate to their customer…ultimate to the regulator but to customer, robustness of the green heat. How you account for carbon, don't make it more or less stringent than what's required of buildings.

Finally, you invited us to offer any other suggestions. We keep pointing to CoV of an alternate compliance pathway, where some buildings meet a base-level of TEDI performance. They'll go to TEDI 40, but a lower GHGi. I can see how you have different tiers. What'll drive performance of Tiers? TEDI, GHGi? You could have a choice. Surrey and Richmond have similar frameworks in please. An LCES relaxation. Another thought to weave in there. Happy to connect you with…Toronto and CAGBC that are working on this.

ZM: We'll have contacts, we'll chat. How rigid/how flexible, that's what's happening at ESCC.

Constantino: Standardized emissions factor is not an issue. That's fairly easily. Issue: year-to-year and system variation. Maybe because system didn't fully develop. Peaking more natural gas boilers. Don't see how it'd be done without revising number year to year. Or a target GHGi for the system. Ivan's comment on heating/cooling, that's another layer of complication. It'll be significant different between heating only and heating/cooling both. Richmond has started to look into it. Tring to calculate it, but that's our first issue. Which year do we look into?

Jason: We're making our own offerings on this. We've asked Reshape and Gerard to think that through. We have similar concerns/objectives raised here. What we come up is simple, verifiable, scalable, fair. Trying to make principles that could be applied and relevant here. Happy to offer some of those…some thinking there. Framework we start to develop with help of ReShape that will meet those concerns and challenges. Helpful for us to get kind of feedback of a group like this to ensure we're hitting the mark. Not to too much on the spot, Gerard, but could you have that convo broadened, too? No time to get into those details today, but maybe for future.

ZM: That'd be great. Make some time to walk through that that'd be great.

JF: Question on how LCES is regulated by LGs now. What the bldg's modelled at time of occupancy. May be tracking occurring in future on what is energy use when ppl in the bldg. It's not regulated. It's tracked, initiative to push info sharing over time, but usu. It's what it's at at occupancy. How do LGs in

those arrangements, have a high Step Code or a lower Step Code with low-carbon ES, are you actually regulating it so every single year it's achieving this carbon target or it's at the time of modellign?

Jason: Good question Jeff. Challenge and it also exist for TEDI and TUEI.

Gerard: Could you expand that to include on-site systems? Agree shouldn't just be once. On-site, it's 20-30 years. If on building, RNG to comply, not making that commitment for nearly as long. With public sector systems, moving to lower carbon fuels over time. CoV says 100% renewable by 2030. Could transition over time downward. If we do it at modelled snapshop, but if you do it, it's true for DE and on-site systems.

ZM: Some consensus that methodology is achievable. Getting info to run that calculation is not always certain. How certain we need to be that's the case over time? Maybe we just need to pick some level of certainty and run with that. Not into long-term strategy in this. In LG-operated systems outside of BCUC, is it fair to assume it's harder to get info on what fuel is being used to run it through a methodology vs privately operated system or am I wrong?

Jason: Regulated systems have public record documentation of modelled performance of a system. They don't typically report annual operating parameters. Same issue. Matter of transparency and formal reporting structure that all utilities, LG owned, privately, comply the same way. Simple process for any utility. We track energy inputs carefully. We have the data. It's just requesting it in a transparent way.

ZM: Any sensitivy to disclose that? We're leaning towards modelled outcomes. If something happens, that's outside realm of building codes. Can we access that info?

Jason: We'll need these to be verifiable. It makes sense that we report as a necessary requirement.

Gerard: Some providers you won't get actual data as easily. All DE providers know how much fuel they buy. Default emissions factor you plug in based on 100% gas, and that's the number in absence of the building, in absence of other info. Just put it on onus on building to prove it. Building needs to comply, DE needs them as a customer, the incentives should align to demonstrate compliance.

Parkinson: To clarify, CoV's NEU is developing roadmap to 100 per cent renewable by 2030. Will take that to Council in 2023 for approval.

Gerard leaves at 11:28

Pat: We work with v. small communities and v. small systems. Enderby or Revelstoke folks here? They struggle sometimes with complex processes. Flag that for you.

ZM: May be one to follow up on, for sure. Even project-by-project basis on disclosure…sounds viable.

Kerry: a worry, a GHGi per metres squared metric. Makes sense for building. But as a DE provider, is that the best, or would like ton of carbon per megawatt hour. You're not designing the building. What's easier for providers to work with?

ZM: I think we're looking at the latter in intensity per unit of electricity provided. It's analogous on what we're doing for other fuels/energy sources. That's my assumption thought.

Ivan: Trying to calculate emissions per sq. m. or sq. ft. can get complicated. Everybody calculates floor area differently. As energy provider, assign number per unit of energy.

Jason: At building scale, the per metre metric is important as it normalizes different energy outputs and building performance. But not hard to go from per megawatt hour carbon intensity if you forecast energy needed in bldg., to the other, but that should be in building compliance process not the utility providing the info.

ZM: In practice, we need to know the number to plug into the energy model. It should be straightforward and responsibility of developer of the building. We' dlike to see in the Code or some regulated way, to say "here's what you assume for that DE system, : maybe there's a default with some process with AHJ, we'll need to review best practices and carve out something that has a default with exceptions as new info arises. They're innovative, so we need flexibility, but need simple info for buildesr, too.

At least internally, good next steps. Pull definition from 2017, whether on-site is in scope (probably not but take a look)_. CAGBC and Toronto follow up to ensure we align. Pat talk to you about small communities. Maybe we'll tee up a presentation from Gerard in future about work he's doing with Jason and his team. See what timing is for that.

Pat: Wonderful SFU study, Surrey work, if anything else referred to, please share with the group. Document things we look at, sounds like that's useful for many different purposes.

ZM: We'll set up mtg in coming weeks, maybe a month, after meetings with ESCC, if anyone wants to join ESCC discussion, tell us and we'll add you. Otherwise, continue with a DE-focused group to ensure we come up with consensus here as a group. Then take here into integrate the standard with ESCC process. Make sure we capture implications in the fall on EE after the GHG process is done.

JF: How would these regs apply in situation where broader public sector is involved? New hospital with DE system gets built. Existing hospital adds new bldg. with DE. How would what we talk about apply in that situation.

ZM: In an unclear way. Voluntary standards that LGs apply/not apply at their discretion. We've heard from LGs with Step Code that discretion is needed on public sector buildings. Also TB direction energy/efficiency outcomes that need balancing. Large public sector projects will probably still be unique projects that standardized process for other residential/commercial is more of a guidelines than a rule. We're designing this for private sector mostly, schools, courts, maybe not BC Housing buildings, but those weird archetypes.

JF: Probably need a clear statement on that.

ZM: CAS is developing that in the background and we're trying to harmonize as much as possible. But they write the guidelines from TB on that so we stay a far from that and cement it in the code in the future.

Can we go down list of takeaways:

Is on-site in and out of scope, use the 2017 DETG definition.

Hugo to reach out to Brad Griffin to find out who he did study for in the BC gov. We can track it down.

Hugo to reach out to Jason Owen…Jason, let us know when you have BG info on whether Gerard's team can present on the work they're doing.

Kerry Shaw: tell her if public sector is in the . Email Kerry and Scott, connect them. Kerry had questions on bldg. archetypes, Scott. Scott can forward that list to her.

Can we tee up phone call with Pat Bell two weeks from now. To talk about small communities. Week of 14th. To ensure we're not messing things up for them.

Book a meeting a month from now after we have the above done.

Conjecture: Maybe we provide a default. If you connect to DE and don't want to use this number, use a methodology and ensure LG accepts that new info. Punt it to LG. You guys figure this put. If thye want it to be low carbon. Treat it as NG if you don't know what to do. Up to you guys. At this point, it might be simple. It's reasonable to punt it to LGs to see how they manage it. If we do it provincially, maybe we have some guidance on hwo to that.

Alisa works with Guy. Maybe they have the report that Gerard did.

Leave a space for Step Code content throw in bullets on Monday. Give some thought to…template we have for the TCL.

Little tweak.s gEt the latest version. Where we going to add..easiest…HCL is grat. Concerns about ESC implementation, leave space.

ID that we continue to address those concerns on EA capacity, at federal level to increase incentives and in CleanBC and better homes BC. Ensure there's adequate access to energy advisors. They keep saying there aren't EAs, but there are. They presume there are no EAs. Need to nod that we hear you. Work with people,

CEA or LGPN? Reach out to LGPN if they want to collab with other communities working on solutions themselves, including small communities.

Check-in items to be discussed

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: June 7, 2021 11:53:01 AM PDT
Attachments: image003.jpg

Hi Andrew,

There are a few urgent items that we did not have time to address during our check-in, but still require your attention. The bullet points from my OneNote are below. Please let me know if you would prefer a meeting or email on these topics.

GHGi

- Meeting last Friday with district energy providers (+ Fortis, UDI) to determine a way to assign an emissions factor to their systems
- Meeting this week, mostly focused on summary of the survey feedback.
  - APS to review survey findings prior to discussion with the group?
  - APS to review speaking notes prior to meeting?
  - APS to speak at or attend meeting?
    - Discussed just now. I will send slides and notes for approval. Meeting will not proceed without your written approval of materials.

BeRT

- Briefing for decision - when do we want to go to Cheryl for decision?
- Contractor's report - near final draft
  - APS to review?
- Report will be included as an appendix to the business case, now looking like a decision between two preferred options: LTSA, and licensed platform (Dynamics)
- Anything else required for APS before we finalize the report and seek decision?

Jerome Rd

- Most recent report from GHL and Steve Craft report
- Steve Craft says he doesn't agree with the GHL report because it doesn't follow the methodology proposed.
  - Does believe an "alternative solutions type analysis" could allow the building to be considered acceptable.
    - Don does not have confidence in the quality of this report
    - Andy also disagrees with the approach Steve Craft has proposed.
- Sending this back to the proponent to arrive at consensus may be outside the scope of a typical peer review process for EGBC (Don is talking to their practice advisor to confirm), and may further delay the project.
- I have directed the team to send the reports to Keith Calder for his review, with a request to have him identify any risks with the proposed process and design, and produce a report that he can sign and seal (as per APS request).
- Decision required - are we ok to proceed if each engineer deems the design as acceptable/appropriate but uses a different methodology to arrive at that conclusion?
  - I believe our direction is to ensure we provide appropriate oversight while not creating any unecessary barriers or delays to the process. I believe sending the report back with a request for consensus may create such a delay. Accepting the report as is requires a certain level of risk. I'm hoping Keith Calder will provide us with guidance on the nature of the risk in the project before we send up to the Minister. Does this seem acceptable to AD/ADM/…?

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Package

Date and Time of Meeting: June 9, 2021 | Time: 1:00 to 4:00 p.m. Pacific Time
Webinar link: Click here to join the meeting

Note: There is no conventional dial-in option.

Chair: Zachary May, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Meeting Materials
1. Agenda

Contacts if You Require Assistance

- Hugo Wong, BSSB – 236 478 1406 (call only); hugo.wong@gov.bc.ca

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
1:00 p.m.	Welcome and Introductions	Zachary May, ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Approval of agenda
1:05 p.m.	FortisBC and CleanBC initiatives	Bea Bains and Brent Graham, FortisBC	▪ To discuss FortisBC's CleanBC initiatives
1:25 p.m.	Summary of April questionnaire on reducing carbon in new construction	Zachary May, Building and Safety Standards Branch	▪ To discuss initial feedback and areas of consensus ▪ Summary of work to date and seek input on next steps
3:30 p.m.	Adjournment	All	▪ Note: GHG mtg. #3 will be pushed to July to incorporate costing analysis and further information on embodied carbon. Doodle poll to come.

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Sent: May 11, 2021 2:35 PM
To: Wong, Hugo OHCS:EX; Vukosavljevic, Nicole OHCS:EX; May, Zachary OHCS:EX;
kveng@lonsdaleenergy.ca<mailto:kveng@lonsdaleenergy.ca>;
bthemens@LonsdaleEnergy.ca<mailto:bthemens@LonsdaleEnergy.ca>;
alen.postolka@richmond.ca<mailto:alen.postolka@richmond.ca>; Jowen@surrey.ca<mailto:Jowen@surrey.ca>;
sfaltas@newwestcity.ca<mailto:sfaltas@newwestcity.ca>; lbehra@newwestcity.ca<mailto:lbehra@newwestcity.ca>;
jfisher@udi.org<mailto:jfisher@udi.org>; XT:Acosta, Mauricio HLTH:IN;
J.Madden@ubc.ca<mailto:J.Madden@ubc.ca>;
pbell@communityenergy.bc.ca<mailto:pbell@communityenergy.bc.ca>;
dtrigg@fvbenergy.com<mailto:dtrigg@fvbenergy.com>;
wcleveland@reshapestrategies.com<mailto:wcleveland@reshapestrategies.com>;
gmacdonald@reshapestrategies.com<mailto:gmacdonald@reshapestrategies.com>;
bea.bains@fortisbc.com<mailto:bea.bains@fortisbc.com>;
Charlene.Rowan@corix.com<mailto:Charlene.Rowan@corix.com>;
bradford_griffin@sfu.ca<mailto:bradford_griffin@sfu.ca>; Holtz, Alisa EMLI:EX;
PRussell2@richmond.ca<mailto:PRussell2@richmond.ca>; kerry.shaw@ubc.ca<mailto:kerry.shaw@ubc.ca>;
linda.parkinson@vancouver.ca<mailto:linda.parkinson@vancouver.ca>; Andersson, Dale OHCS:EX;
pcaraher@ahma-bc.org<mailto:pcaraher@ahma-bc.org>;
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NConnolly@richmond.ca<mailto:NConnolly@richmond.ca>;
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catherine.ernst@boabc.org<mailto:catherine.ernst@boabc.org>;
ruta.fluxgold@canada.ca<mailto:ruta.fluxgold@canada.ca>; MGatensby@aibc.ca<mailto:MGatensby@aibc.ca>;
Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com<mailto:joe.iconhomes@gmail.com>;
nheap@richmond.ca<mailto:nheap@richmond.ca>; jjung@asttbc.org<mailto:jjung@asttbc.org>;
toby.lau@bchydro.com<mailto:toby.lau@bchydro.com>; wileung@bchousing.org<mailto:wileung@bchousing.org>;
mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>;
Lisa.Mak@bchydro.com<mailto:Lisa.Mak@bchydro.com>; mmcwilliam3@bcit.ca<mailto:mmcwilliam3@bcit.ca>;
sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>; roberto@zebx.org<mailto:roberto@zebx.org>;
warrenp@bccassn.com<mailto:warrenp@bccassn.com>;
hradhakrishnan@egbc.ca<mailto:hradhakrishnan@egbc.ca>; kelly@hkrbuilders.com<mailto:kelly@hkrbuilders.com>;
lsampliner@portmoody.ca<mailto:lsampliner@portmoody.ca>;
muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>;
Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>; Wacker, Holly MAH:EX;
Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>;
tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>; Williams, Scott B OHCS:EX;
Guido.Wimmers@unbc.ca<mailto:Guido.Wimmers@unbc.ca>
Cc: Vukosavljevic, Nicole OHCS:EX; tom.berkhout@bchydro.com<mailto:tom.berkhout@bchydro.com>; Pape-Salmon, Andrew OHCS:EX; Mohareb, Adrian ENV:EX
Subject: FW: Energy Step Code Council meeting (GHG mtg. #2)
When: June 9, 2021 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hello, everyone:

Thank you for attending last week's initial discussion on district energy systems and reducing carbon in new construction. We are still working on the follow-up items from the last meeting, and I will be working through that list in the days to come.

However, I wanted to use this opportunity to invite you to tomorrow afternoon's Energy Step Code Council meeting. We will be discussing feedback from an April survey circulated among the Council asking them for their early thoughts on how we could deliver the Ministerial mandate to create an opt-in carbon pollution standard.

I realize this is quite short notice, so this is entirely optional (it's only if you're interested in the broader discussion). You may also choose to attend a portion or send a delegate instead.

The two attachments are:

* Discussion questions dated April 1 2021 which outlines what we asked the Council at the time.
* The agenda for the meeting (2021 06 09)

Thanks very much.
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca<mailto:hugo.wong@gov.bc.ca>

-----Original Appointment-----
From: Wong, Hugo OHCS:EX
Sent: Tuesday, May 11, 2021 2:35 PM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; bea.bains@fortisbc.com<mailto:bea.bains@fortisbc.com>; pcaraher@ahma-bc.org<mailto:pcaraher@ahma-bc.org>; mchorobik@communityenergy.bc.ca<mailto:mchorobik@communityenergy.bc.ca>; NConnolly@richmond.ca<mailto:NConnolly@richmond.ca>; bdeeks@rdcfinehomes.com<mailto:bdeeks@rdcfinehomes.com>; diana@havan.ca<mailto:diana@havan.ca>; catherine.ernst@boabc.org<mailto:catherine.ernst@boabc.org>; jfisher@udi.org<mailto:jfisher@udi.org>; ruta.fluxgold@canada.ca<mailto:ruta.fluxgold@canada.ca>; MGatensby@aibc.ca<mailto:MGatensby@aibc.ca>; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com<mailto:joe.iconhomes@gmail.com>; nheap@richmond.ca<mailto:nheap@richmond.ca>; jjung@asttbc.org<mailto:jjung@asttbc.org>; toby.lau@bchydro.com<mailto:toby.lau@bchydro.com>; wileung@bchousing.org<mailto:wileung@bchousing.org>; mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>; J.Madden@ubc.ca<mailto:J.Madden@ubc.ca>; Lisa.Mak@bchydro.com<mailto:Lisa.Mak@bchydro.com>; May, Zachary OHCS:EX; mmcwilliam3@bcit.ca<mailto:mmcwilliam3@bcit.ca>; sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>; roberto@zebx.org<mailto:roberto@zebx.org>; warrenp@bccassn.com<mailto:warrenp@bccassn.com>; hradhakrishnan@egbc.ca<mailto:hradhakrishnan@egbc.ca>; kelly@hkrbuilders.com<mailto:kelly@hkrbuilders.com>; lsampliner@portmoody.ca<mailto:lsampliner@portmoody.ca>; muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>; Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>; Wacker, Holly MAH:EX; Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>; tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>; Williams, Scott B OHCS:EX; Guido.Wimmers@unbc.ca<mailto:Guido.Wimmers@unbc.ca>
Cc: Vukosavljevic, Nicole OHCS:EX; tom.berkhout@bchydro.com<mailto:tom.berkhout@bchydro.com>; Pape-Salmon, Andrew OHCS:EX; Mohareb, Adrian ENV:EX
Subject: Energy Step Code Council meeting (GHG mtg. #2)

When: Wednesday, June 9, 2021 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Calendar placeholder. Agenda to come.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting

Discussion questions
Reducing carbon emissions in new construction

1. We have heard that consistency, flexibility, predictability, and affordability are important values for all parties. Are there other values that are important to include? What does success look like to your organization and your members?

2. Following the structure of the BC Energy Step Code, requirements for GHG emissions will require a specific unit of measurement or metric, and specific performance levels using that metric. The following questions will guide our discussion for establishing standards for GHG emissions:

    Metrics:

    a. Which metric(s) should be considered? (GHG intensity; total GHG per house, dwelling unit, or building; others?)

    b. Should the same approach be considered for homes and small buildings as we consider for large complex buildings?

    c. Should we focus on building types addressed in the Metrics Research Report first, or do all building types have equal priority when establishing GHG requirements?

GHG performance levels:

    d. Should we apply a similar approach used for the Energy Step Code and establish a first step that only requires measurement of GHG emissions and increasing steps towards a specific long-term low-carbon outcome? Should we align the number of GHG steps with the number of energy efficiency steps expected in 2022: 3 steps?

    e. What should the highest step should be for GHG emissions?

    f. What should the relationship be between GHG steps and the energy efficiency steps in the Energy Step Code? Should there be flexibility to apply different levels of energy and GHG requirements or should the steps be aligned?

3. In addition to any regulation, there are several implementation and impact analysis issues that should be addressed, either as part of the Metrics Research Report or through separate analysis and discussion. What issues do you and your members see as important to address as we develop GHG emissions requirements? Based on preliminary discussions the following issues have been identified:

    a. Consideration of embodied carbon

    b. Consideration of renewable natural gas

    c. Analysis of the incremental capital cost and operation cost implications of achieving different GHG steps alongside energy efficiency steps (in scope for Metrics Research Report) as well as the equipment and systems required to achieve GHG steps in different regions of the province

    d. Consideration of district energy and other local or site energy systems

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
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3:30 p.m.	Adjournment	All	▪ Note: GHG mtg. #3 will be pushed to July to incorporate costing analysis and further information on embodied carbon. Doodle poll to come.

Back Pocket on Consequential Losses

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>

To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>

Sent: June 14, 2021 11:11:12 AM PDT

A few background bullets speaking to what steps have been taken to investigate and the (national) code work that's ongoing, in case they're useful.

- BSSB is participating in the ongoing strata insurance consultations led by HPB.
- External participants include:
  - Insurance Bureau of Canada, Insurance Brokers and Home Warranty Providers
  - Condo Home Owners' Association (CHOA) and Vancouver Island Strata Owners Association (VISOA) and a Solicitor Whose Primary Practice Areas are Strata Property Matters and Infrastructure
  - Property Managers and Appraisers
  - Developers, UDI and BC Construction Association
  - Canada Mortgage and Housing Corporation (CMHC), Mortgage Brokers and Lenders
  - British Columbia Real Estate Association (BCREA).
- BSSB continues to monitor consultation discussions for comments relating to consequential losses, internal water damage, and construction quality.
- With the help of BC Housing and CHOA inquiries have been made attempting to verify the insurers' claim and ascertain the root cause of the higher number of water damage claims in strata properties age 0-5 years old.
  - Property managers, strata counsels and homeowners' association have been unable to confirm specific incidences of internal water damage related to defects in regulated construction workmanship or standards, nor have they been able to confirm experiencing numerous internal water damage events.
  - A very small number of anecdotes, collected primarily from property managers, describe scenarios leading to internal water damage such as improper (homeowner) installation of plumbed appliances such as dishwashers, or occupants forgetting to shut taps off thereby overflowing sinks and tubs.
- At the national level, more detailed analysis has been carried out in Quebec attempting to ascertain root causes of internal water damage in condos, leading to an ongoing review of CSA standards for flexible connectors (braided metal hoses).
  - There is not currently consensus that an issue with the connectors exists.

TIFFANY WARKENTIN, BDes, LLB | Manager, Policy and Regulation

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
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To: The Hon. David Eby, Q.C., Attorney General and Minister of Housing
From: Anne McMullin, President & CEO, Urban Development Institute (UDI)
Date: June 14, 2021
Re: City of Vancouver *Broadway Area Plan*

Issue

At the end of this year, Vancouver Council will be asked to approve a *Broadway Area Plan* (*BAP*) to support the new Millennium Line Extension to Arbutus Street. However, the *Emerging Directions* (Phase 2 of the *BAP*) released earlier this year were disappointing because they ignore the Province's objective to provide more workforce housing options – especially near transit.

It is important that growth opportunities for housing under the *BAP* be commensurate with the $2.83 billion investment being made in the subway by senior governments. Otherwise, the potential extension of the Millennium Line to UBC (which UDI has supported) may be called into question by other Metro municipalities such as Burnaby, Coquitlam, and Surrey, which have embraced Transit-Oriented Development.

Many stations along the Expo line still have single-family homes next to them 35 years after it's the line's construction. UDI is concerned about the lack of housing options along the Expo Line and the current Millennium Line stations. The Cambie Corridor Plan also has many missed opportunities. The City has been slow in the implementation of the Plan, and most of Cambie Street has been limited to six-storey buildings with only low-density projects allowed off of the arterial.

Preservation in the *BAP*

One of the objectives of the Plan is "… *retaining and reinvesting in existing older rental housing* …," even though the vast majority of these buildings are old and near the end of their lifecycle. These rental buildings are low-density, 3-4 storey walk-up apartments, lacking modern seismic and energy efficient construction. Instead of upgrading this rental housing while protecting tenants, Vancouver is proposing "… *retention and careful long-term renewal of the older rental housing by considering a modest increase in height and density for secured market and below-market rental* …". We believe it is critical to protect tenants, and ensure there are secure rental homes available for the future.

UDI has recommended the City adopt the approach Burnaby took with Metrotown and other Town Centres to achieve below market housing. This approach focused on protecting tenants (not buildings) by substantially increasing the floor area of projects. An additional 1.1 FAR of strata density has been provided to builders, but they must allow tenants to return (at their old rents) when the new projects are complete.

Builders are also required to assist tenants with temporary accommodations. Burnaby has been able to leverage the strata FAR density bonus to mandate that 20% of units be below-

market housing for redevelopments of non-rental buildings. As a result of this policy, Burnaby is renewing and expanding its affordable rental housing stock.

There are other areas in the *BAP* where there are restrictions on new housing. Only low-density projects would be allowed in the Villages (West 4th, South Granville and Main Street), and no housing would be allowed in Uptown as well as the industrial and mixed-employment areas.

Viability of Projects in the *BAP*

In the limited areas where growth would be allowed, it is not clear how viable it will be. The *BAP* is being asked to resolve too many issues when much of the area is being reserved for rental or below market housing. At the same time, the *BAP* is being asked to deliver on a number of City objectives, including:

- *"Affordable Housing (e.g. social and supportive housing)*
- *Renewal and expansion of community facilities:*
    - *Recreational facilities;*
    - *Libraries;*
    - *Social facilities (e.g. neighbourhood houses, non-profit spaces)*
- *New childcare facilities;*
- *Renewal and expansion of cultural facilities;*
- *New plazas and commercial street sidewalk improvements, including enhancing Broadway as a Great Street;*
- *Renewal and expansion of park space;*
- *New and upgraded bikeways and greenways; and*
- *Green infrastructure, Blue-Green Systems and utilities upgrades*."

As noted above, only modest increases in height and FAR would be allowed in the rental apartment zones, with density reserved for rental, social or below market housing. In the low-density areas, where additional FAR is allowed, it is reserved for rental and below market housing. At the same time, the *BAP* is being asked to deliver on a number of City objectives, including:

- It is difficult to build market rental housing in today's high land/construction cost environment. Adding to the cost of providing affordable units by requiring Community Amenity Contributions (CACs) to deliver on the objectives noted above would quickly render projects unviable.

Staff have indicated they are "… *exploring innovative funding options and tools for Growth needs that do not rely on CACs typically provided with additional strata density*." There is concern that the vast majority of the costs for these amenities will still be funded by new development; projects that will mostly be Purpose Built Rental (PBR) housing where there is less leeway for added costs. As noted in our June 10 meeting, Vancouver has been requesting CACs for some rental projects.

Lack of Market Ownership Opportunities

Although UDI has expressed concerns about the negotiated CAC process in Vancouver, our members expect, and can accommodate, CACs for their strata projects in the City. If the *BAP* includes the amenities noted above, additional areas for strata projects will be needed in the Plan, as the Development Cost Expectations (i.e. CACs) for strata projects in the *BAP* range from $330 to $425 per square foot.

In terms of providing affordable housing units, Coriolis found in a 2019 *Report* for Metro Vancouver that providing builders with additional strata density for their projects "… *has been the most prevalent and successful means to obtain affordable housing in Metro Vancouver*," for municipalities. It is almost impossible for builders to provide any CACs or below-market housing if the projects and the additional FAR offered is for rental.

Creating a diversity of housing types and tenures in the *BAP* is critical to meet current and future housing needs. While UDI has been a strong advocate for rental housing, the *BAP* is unbalanced. With the exception of a few areas, it is largely focused on rental housing, and lacks significant opportunities for homeownership. As part of the full spectrum of housing, strata apartments offer opportunities for new and existing households to enter the market. These will likely include thousands of new Vancouverites joining B.C.'s growing tech sector.

BAP **Centres**

In our meetings with the City, staff have stated that they expect substantial market housing opportunities to occur in the *BAP* Centres (with the exception of Uptown) - "… *the newer mixed-use and commercial areas*," along Broadway. UDI is pleased that these Centres surround the new stations, but their size is very limited relative to the rest of the *BAP*.

In other parts of Metro Vancouver, this could be addressed by substantially increasing the heights of new buildings. However, this option is more difficult along Broadway due to Vancouver's view cones and shadowing policy. Although the City is exploring opportunities for increased heights as part of the *BAP*, the last time the staff conducted a substantial review of the view cones (which was intended to increase opportunities for housing in the Downtown South to offset the removal of residential zoning in other parts of Downtown), Council chose instead to strengthen the policy and add protection for new view corridors. It should be noted the City is also considering "… *potential new protected views, e.g. street-end views of the downtown and North Shore Mountains*," as part of the *BAP*.

We are very concerned that the amount of growth to be allowed in the Centres will not be nearly enough to offset the lost opportunities for growth in the rest of the Broadway Corridor, or address the need for more affordable housing in the City.

Recommendation

UDI recommends that the Province (and Federal Government) become more involved in the *Broadway Area Plan*, and establish mandatory annual housing targets as part of their funding of the Millennium Line extension. This is critical because there are presently no housing targets in the *Plan*. Senior Government targets would also provide a backstop for the City as they move to the final stages of the *BAP*. This approach to create targets around new transit is supported by the public, as demonstrated in the polling we discussed on June 10. Establishing annual targets would also ensure the viability of policy proposals contained within the *BAP*.

Potential Questions for Vancouver

- What are the City's housing targets for the *BAP* and how do they compare to other municipal transit corridors such as Burnaby?
- What is the breakdown between Rental Housing and Strata Housing both market and affordable?
- What are the City's targets for new Job Space in the *BAP*?

- How much housing do they expect to be built along the Broadway Corridor each year?
- CBRE estimates that there are 3.5 million square feet of office space being built in Downtown Vancouver, which will result in additional 15,000 to 20,000 new employees; many of whom will be well paid and want to live in or near Downtown. What are the City's plans to house these new workers? How many will be able to move to the Broadway Corridor.
- If the City is not relying on CACs from strata projects to cover the costs of the amenities and affordable housing in the *BAP*, what is there alternative funding approach to pay for growth and affordable housing?

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Notes

Date and Time of Meeting: Wednesday June 9, 2021 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Chair: Zachary May, Building and Safety Standards Branch, Attorney General and Minister Responsible for Housing
Co-Vice Chairs: Bob Deeks, CHBA BC/RDC Fine Homes and Robyn Wark, BC Hydro
Virtual Microsoft Teams meeting

Participants

1. Bea Bains, FortisBC
2. Pat Caraher, AHMA
3. Maya Chorobik and Laura Sampliner, LGPN
4. Norm Connolly, Part 3/Part 9 Non-Residential Subco, PIBC
5. Bob Deeks, RDC Fine Homes, CHBA-BC
6. Diana Dilworth, HAVAN
7. Catherine Ernst, BOABC
8. Jeff Fisher, UDI
9. Nicholas Heap, Part 9 Residential Subco co-chair
10. Wilma Leung and Remi Charron, BC Housing
11. John Madden, UBC
12. Roberto Pecora, ZEBx
13. Warren Perks, BCCA
14. Harshan Radhakrishnan, EGBC
15. Muneesh Sharma, BOMA
16. Maxwell Sykes, City of Surrey, UBCM
17. Robyn Wark, BC Hydro
18. Scott Williams and Hugo Wong, BSSB
19. **Guests:** Brent Graham and Jason Wolfe, FortisBC; Steve Faltas, Energy New West; Constantino Reytas, Lulu Island Energy; Pauline Rupp and Carmina Tupe, CHBA BC; Katherine Muncaster and Alisa Holtz, EMLI; Adrian Mohareb, Climate Action Secretariat; Tom Berkhout, BC Hydro; Ralph Wells, UBC
20. **Regrets:** Lisa Mak, BC Hydro; Tyler Wightman, BOABC

ACTION ITEMS

1. **BSSB:**
2. **ESCC Members:**

NOTES

This meeting was the second of four proposed between now and the summer of 2021 to address GHGs and buildings.

Introduction highlights

- Initial technical and costing analysis from the updated Metrics Research Report will be ready to present to the Energy Step Code Council in July. It is a similar format to the 2018 Metrics Research Report.
- The electricity emissions factor for grid electricity under the Greenhouse Gas Industrial Reporting and Control Act (GGIRCA) model changes each year, which will be challenging in a building code/regulation context. BSSB will continue to consult with provincial government colleagues who set these policies, to ideally create a building regulation that does not fluctuate year to year. This issue will be brought back to the Council at a later date.

Presentation from FortisBC on their CleanBC initiatives

- Brent Graham, Senior Manager, Government Relations and Public Policy, walked the Council through key FortisBC initiatives and how they interrelate with the Energy Step Code Council's work.
- Key takeaways:
    - Understand the progress made in RNG and new construction
    - Significant work done with partners to date
    - Eventual Clean Portfolio Standard
- There is more RNG. Increased supply cap to 30 PJ (15% RNG content in the system), whereas previous cap was one-third that. To increase the cap, the Province expanded their definition of anything in a gaseous state that flows through FortisBC's infrastructure), including hydrogen.
- There is direction to revisit a tariff from new construction, existing buildings, transportation, and other desired uses. FortisBC will create an integrated supply outlook to answer questions about the supply of renewable gases. Outstanding question on how RNG will be allocated among different segments for greatest emissions reductions (new construction, existing buildings, or something else).
- FortisBC is mindful of the desire for permanency and long-term contracts of RNG to buildings to ensure long-term use of RNG. They will work with the BCUC on this.
- Developing the Clean Portfolio Standard is of great importance to FortisBC, with significant dependencies with the work being done at the Energy Step Code Council. They recognize a sense of urgency.
- FortisBC hopes to report back to the Council in mid-summer on how best to allocate RNG between new construction, existing buildings, and other gas users.
- FortisBC has studies coming out with UVic, and a more regional Pathways report for the Metro Vancouver area.
- Questions:
    - Updated feedstock information is being developed.
    - What are other gas utilities in North America doing with RNG/hydrogen? The Quebec utility is interested now in traditional RNG, and some in Alberta, where there is RNG potential from oil and gas.
    - The 15% target was chosen by market potential, supply studies in different feed stocks, but the Province would have more info on that.
    - Has the GGRR or other legislation redefined "natural gas" so it's no longer 95% methane, or has natural gas been replaced with a new term that is defined as 85% methane? No, but the increased allowance lets us displace conventional natural gas with other energy, like hydrogen, lignin, and syngas.
    - How will you convince people to pay the premium for RNG? We should compare RNG to electricity to change the thinking. There will be further conversations with the regulator. Current model is 10,000 customers who pay for most of it. BCUC is asking us to address this, and the RNG business model could change.



- Zac thanked FortisBC for their presentation and congratulated them on their regulatory milestone.

Survey report out, Zachary May

- GHGI seems popular, measure-only with no minimum outcome seems popular. For all construction.
- Consensus that some energy efficiency improvements will be a prerequisite for any carbon reduction. Being overly ambitious in one aspect while ignoring another is undesirable.
- Considerations to be made for the low-carbon energy system relaxation offered by many local governments.
- Focus on operational carbon this time, but notes significant industry interest. Colleagues at OMTI can lead this and tell us where to go, possibly a best practices guide.
- No decision made on whether to lock energy efficiency reduction with corresponding GHGI targets.
- Consider fall timelines to coincide with local government building bylaw updates.
- Climate Action Secretariat is working on regulations for new public sector buildings, including developing public sector archetypes, particularly those owned by public sector organizations. That's Crown corps and core government, residential, office, care facilities, hospitals, and schools.
- **Group discussion**
  - Surrey is interested in a density bonus incentive to consider embodied carbon or cooling, and grandfathering in the existing requirements or a transition plan.
  - Consider presenting to the building officials or other LG staff on this subject.
  - Provincial consistency is hard given wide range of climate zones, so uncertainty on how achievable consistency is. HAVAN letter details this.
  - Zero, or near zero carbon, seems to be the end goal.
  - Most stringent Step still being developed. Low or no carbon.
  - Affordability is important to this government, along with more housing. Consensus will be important.
  - Technical research will focus on Step Code occupancies first, with parallel work happening at CAS regarding the broader public sector.
  - Getting to zero, and an ambitious final step, will provide an important market signal.
  - Want to keep this separate from the province-wide minimums in the 2022 BCBC. These are opt-in carbon pollution standards for local government. There is a window of opportunity we don't want to miss.
  - Transition for local governments current using a low-carbon energy system relaxation. Idea is to make the opt-in carbon pollution standards attractive enough to local governments to entice them towards the more consistent approach.
  - Will possibly cancel the mid-July meeting until we get more information. We will send options soon.
- **Meeting adjourned at 4 p.m.**

Reducing carbon in new construction
Considerations for district energy systems

Date: Friday June 4, 2021
Time: 10:30 a.m. – 12:00 p.m. Pacific Time
Microsoft Teams meeting

If technical difficulties persist, email Hugo Wong at hugo.wong@gov.bc.ca or call 236-478-1406

Agenda

1. Welcome, introductions (Zachary May, 10 mins)
2. Discussion questions (All, 60 mins.)

Attendees

Zachary May, Director, Strategic Policy, Building and Safety Standards Branch (BSSB), Ministry of Attorney General and Minister Responsible for Housing
Hugo Wong, Policy Analyst, Building and Safety Standards Branch
Alisa Holtz; Senior Policy Analyst; Electricity and Alternative Energy Division; Ministry of Energy, Mines and Low Carbon Innovation

Mauricio Acosta, Fraser Health
Bea Bains and Lloyd Jacobs, FortisBC/FortisBC Alternative Energy Services Inc.
Patricia Bell, Community Energy Association
Will Cleveland and Gerard MacDonald, Reshape Strategies
Steven Faltas and Leya Behra, City of New Westminster
Jeff Fisher, Urban Development Institute
Bradford Griffin, Canadian Energy and Emissions Data Centre (CEEDC) at Simon Fraser University
Jason Owen and Emily Kwok, Surrey City Energy (City of Surrey)
Linda Parkinson, City of Vancouver
Alen Postolka and Constantino Retes, Lulu Island Energy Company (City of Richmond)
Peter Russell, City of Richmond
Kerry Shaw, University of British Columbia
David Trigg, FVB Energy
Karsten Veng and Ivan Tang, Lonsdale Energy (City of North Vancouver)

Initial questions and context setting

- Internal staff timeline to introduce it between fall 2021 and end of 2022 (priority of mandate item means we are aiming for closer to fall 2021).
- We can discuss any implications of increasing energy efficiency with this group at a later meeting.
- Most likely more than one Step. A measure-only Step is likely but does not achieve emissions reductions on its own. GHGi is the dominant methodology in discussion but conclusion is not forgone. Goal is one set of flexible standards.
- Alen: Consider flexibility. Some DE systems start with natural gas boilers with long-term plans to implement low-carbon energy systems.
- Goal of this meeting is to determine the impact of voluntary carbon pollution standards on district energy systems so local governments understand the full implications. An initial measure-only Step for carbon pollution won't exclude any types of energy, but any Step above that might.
- Consultations on opt-in carbon pollution standards for new construction are mainly being held through the Energy Step Code Council, but there are other groups that are implicated, like district energy providers. This will group is an opportunity to discuss DE-specific issues related to the

carbon pollution standard, and as time passes, we can revisit energy efficiency ahead of the 2022 code change through this group as well.
- BSSB to follow up on progress for public sector building targets, which are being created by staff at Climate Action Secretariat. We are updating the 2018 Metrics Research Report which considers cost and technology at different Steps of the Step Code.

Discussion questions

Is there a standardized approach for determining the emissions factor for district energy systems? Does this value change over time?

- We have emission factors for natural gas and grid electricity. Is there a way we can do this for district energy, especially those owned and operated by local governments outside the purview of the BC Utilities Commission? Do we have enough information to calculate emissions of district energy?
- Study done by Brad Griffin was based on voluntary disclosure. Fuel mix is somewhat sensitive. If mandatory reporting is required, it is plausible to calculate it based on fuels going in and energy going out.
- Note: the Building Act and Code regulates buildings, not district energy systems.
- No single, simple way to calculate emissions factors. DES facilitate flexible use of different energy inputs, to evolve over time. Shouldn't be a single number. New customers may come onto the system with different requirements, and one DES can provide energy of differing carbon intensity to different customers based on time of construction.
- Lloyd: Does our working definition of DE considered under Stream B of the BCUC, local government systems, and on-site?
- Alen: In 2016, the Energy Efficiency Working Group created a definition. What was that?
- Ivan: Lonsdale envisioned fuel flexibility and inputs. We provide cooling and heating service, so it's complicated to assign emissions to a heating or cooling system. We have not started that work yet. In the Lonsdale note with heat recovery from cooling, we are not yet sure if we attribute all the GHG necessary for heat recovery back to the heating side, leading to a zero-carbon cooling service? If so, we can't compare that in a fair way to a building with standalone cooling.
- Brad Griffin did work for Environment and Climate Change Canada assigning emission factors for co-generation. They looked at six methodologies, pros/cons, and industry standards. They settled on the most common industry definition as their recommendation. Could take a similar approach for heat-only systems. Create a standard method to split fuels among final energy delivered. Works back to efficiencies of different technologies which can be split up and attributed. Question from Brad: Would you assign a fixed GHG to a system, or would it evolve?
- ZM: Code users would love a permanent, fixed number in general, but that is not practical in this context. Yet, a fluid number that changes daily is also not practical. Is it possible to set a number that changes every five years or so? Annually at the most? A long list of emissions factors is possible. But what is an acceptable default emissions factor if a number cannot be determined?
- Jeff: In City of Vancouver, Creative Energy has different emissions factors for current customers vs new ones. Remember that this group is only talking about new construction, not existing buildings. We are concerned if local governments create different rules for their DE systems vs the private sector. Some institutions like hospitals may have the same view. If this is in a Step

Code context, consider the fairness if providing a different emissions factor for DE-buildings vs. other buildings.

- ZM: Our desire is a transparent methodology to create that figure, as is done for BC Hydro and Fortis on their fuels, distribution, and emissions factor. That ideally addresses non-local government-operated DE systems.
- Gerard: Reshape did a survey of DE systems across Canada, internationally, and in B.C, which the Province has yet to release. We examined 140 systems globally, 42 in Canada, 18 in B.C. We asked system operators for their data and there is a wide range of carbon intensities, varying by time. If we assume it's 100% gas, it's easy. CaGBC has a zero-carbon standard which you should check. They're navigating this very issue. Other code makers are consider allocating lower carbon fuels for new customers. If buildings need to demonstrate a spec sheet and ability to meet an energy code, it should be similar if DE is included. If the DES adds renewable supply, they should ask the DE provider for that supply. Onus should be on the DE provider to demonstrate that to their customer and the regulator.
- Gerard: We also point to City of Vancouver's alternate compliance pathway, where some buildings meet a base level of TEDI performance (e.g. a TEDI of 40, but a lower GHGi). Different tiers could be possible. There is a decision to be made on whether TEDI or GHGi drives the performance of the tiers. Surrey and Richmond also have similar frameworks (an LCES relaxation). I'm happy to connect you with City of Toronto and CaGBC who are working on this.
- Constantino: Standardized emissions factor isn't an issue, but year-to-year fluctuations and system variation is an issue. It can be attributed to many things: using natural gas boilers for peaking, system hasn't fully developed, etc. Ivan's comment on heating/cooling adds another layer of complication. Richmond has started to examine this.
- Jason: We've asked Reshape and Gerard to consider these issues, and we have raised similar concerns/objectives as the ones raised at this meeting. We're seeking to come up with a simple, verifiable, scalable, fair solution. The framework we're developing with Reshape will hopefully meet those concerns and challenges, and it would be helpful for us to get feedback on our strategy from this group to ensure we are hitting the mark.
- ZM: Sounds great; we can make time for that.
-

What is simplest, most effective way for the Province to determine the emissions factor for district energy systems in B.C. for use in building regulations?

What should the Province be aware of when setting a provincial carbon pollution standard for buildings connected to district energy systems?

Metrics Research Report Steering Committee - Progress update June 15

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>

To: mark@bernhardtcontracting.com, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick.enright@vancouver.ca, Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe.iconhomes@gmail.com, ehayes@edgec.ca, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, Pete.Koepfgen@fortisbc.com, Toby.Lau@bchydro.com, Wilma Leung wileung@bchousing.org <wileung@bchousing.org>, Iain.Macdonald@nrc-cnrc.gc.ca, susan@focaleng.com, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory.McCall@vancouver.ca, roberto@zebx.org, Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya.Rumak@fortisbc.com, pauline@chbabc.org, lsampliner@portmoody.ca, David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>

Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>, Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>

Sent: June 15, 2021 4:09:59 PM PDT

Hello Steering Committee members,

Just to let you know we anticipate being able to **share initial results of the analysis** (prepared by the consultants) on June 24, and will book a meeting **Wed. June 30 from 2 to 4 p.m. to discuss them** (invite to come shortly).

After that, any additional comments can be added to the Matrix Teams Channel during the week of July 5th.

Thank you. We look forward to speaking with you June 30.

Kind regards,
Dale

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

Postponing the next Energy Step Code Council meeting

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, ruta.fluxgold@canada.ca, sfralin@ahma-bc.org, MGatensby@aibc.ca, hgoodland@scius.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communitvenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, s.22 May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, sean.pander@vancouver.ca, roberto@zebx.org, warrenp@bccassn.com, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, lsampliner@portmoody.ca, muneesh@boma.bc.ca, Maxwell.Sykes@surrey.ca, rthe@wesgroup.ca, Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

Sent: June 15, 2021 4:57:49 PM PDT

Hello, members of the Energy Step Code Council:

Thank you for attending the meeting on June 9.

As mentioned, we would like to move the next meeting from June 24 to mid-July so our consultants working on the Metrics Research Report can provide some technical and costing analysis for us to discuss.

We will select dates in mid-July and send a Doodle poll shortly.

Please feel free to reach out directly if you have any questions.

Thanks very much.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Calendar placeholder. Agenda to come.

Microsoft Teams meeting

Join on your computer or mobile app

s.15

Fwd: BC Public Service Week

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 16, 2021 8:50:25 AM PDT
Attachments: image001.jpg

This was one of five responses I received

Andrew Pape-Salmon
Cell 250-812-1933

Begin forwarded message:

From: Peter Mitchell <MITCHELL@egbc.ca>
Date: June 14, 2021 at 5:43:00 PM PDT
To: "Pape-Salmon, Andrew OHCS:EX" <Andrew.PapeSalmon@gov.bc.ca>
Subject: RE: BC Public Service Week

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Andrew, thanks for providing me with the opportunity to convey to your staff Engineers and Geoscientists BC's sentiments on the important and excellent work they do. As identified below please feel free to attribute the quote to me.

Andrew, Engineers and Geoscientists BC has had a longstanding relationship with staff at the Building and Safety Standards Branch and as a result we see you as a trusted partner when it comes to the regulation of the design and construction of buildings in BC. I would like to provide a particular shout out to the following individuals at BSSB that my department has dealt with in the last year: Andrew Pape-Salmon P.Eng., Jun'ichi Jensen, Zachary May, Jim Baker AScT, Andy Chase, Don Pedde, Scott Williams P.Eng., Dale Andersson, Katy Dillon, Aman Gill, Nicole Vukosuvljevic and last but not least Kylie Sandham. I apologize if I missed someone as BSSB provides great service and we really appreciate and value the important contribution you make to the protection of public safety.
Thanks,
Peter Mitchell , P.Eng. – Engineers and Geoscientists BC Director, Professional Practice, Standards and Development

Peter R. Mitchell, P.Eng. | Director, Professional Practice, Standards & Development
Engineers and Geoscientists British Columbia
200 - 4010 Regent Street, Burnaby, BC, V5C 6N2
Tel: 604.412-4853 | **Toll-Free:** 1.888.430.8035 ext. 4853 | **Web:** egbc.ca
The Professional Governance Act will soon be in force. Learn more about what's changing, including new obligations and requirements for registrants, at egbc.ca/pga

To meet the latest advice from public health officials, our office is temporarily closed to help prevent the spread of COVID-19. We will continue to work remotely to support our operations. For the latest information, please visit our website at egbc.ca/COVID-19.

The information in this email and any attachments are for the intended recipient(s) only and may be confidential. Any unauthorized use is strictly prohibited. If you have received this e-mail in error, or are not an intended recipient, please notify the sender and delete or destroy all copies immediately.

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: June 14, 2021 3:46 PM
To: (JFisher@udi.org) <JFisher@udi.org>; tony@choa.bc.ca; David Hutniak <davidh@landlordbc.ca>; Peter Mitchell <MITCHELL@egbc.ca>; Alycia Coulter <alycia@chbabc.org>; Clint Abbott <Clint.Abbott@technicalsafetybc.ca>; mvernon@aibc.ca; Chris Atchison <chris.atchison@bccassn.com>; marika@bcnpha.ca; ian@bcnpha.ca; Damian Stathonikos <dstathonikos@boma.bc.ca>
Subject: BC Public Service Week

Greetings industry and non-profit colleagues,

On this first day of our annual "Public Service Week" I am informally writing to you to request a short quote with me that I could read out to the Office of Housing and Construction Standards staff to acknowledge the positive impact of their work in the housing, buildings and construction sectors.

If you feel comfortable, could you share with me a sentence or two on the impact of our work in your sector? I won't attribute it to you unless you want me to.

I need some quotes by first thing tomorrow morning (sorry for the short notice).

As you well know, the OHCS has a lot of touchpoints with your organizations through our four Branches:

- Housing Policy Branch
- Residential Tenancy Branch
- Building and Safety Standards Branch
- Homelessness Policy and Partnerships Branch

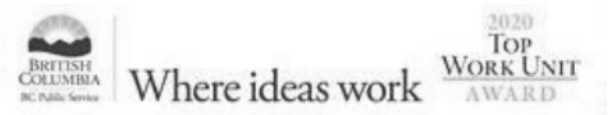
Since I joined the Division in 2017 I have frequently mentioned the positive impact of our work in the buildings, housing and construction industry. In this difficult period with the global pandemic and state of emergency I think some positive reinforcement and recognition is warranted – coming from some of you.

Here is a listing of all our staff
https://dir.gov.bc.ca/gtds.cgi?show=Branch&organizationCode=AG&organizationalUnitCode=AG%2DOHCS
https://dir.gov.bc.ca/gtds.cgi?show=Branch&organizationCode=SDPR&organizationalUnitCode=46610

Thanks in advance,

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Cell/Text: 250.812.1933
Office: 250.387.3133
Email: Andrew.PapeSalmon@gov.bc.ca

Please see our website: www.gov.bc.ca/buildingcodes



I acknowledge with respect the Lkwungen-speaking peoples on whose traditional territory the Ministry of Attorney General and Minister Responsible for Housing stands, and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

From:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To:	Kelly Reid <kelly@hkrbuilders.com>, mark@bernhardtcontracting.com
Cc:	Heap,Nicholas <NHeap@richmond.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, Connolly,Norm <NConnolly@richmond.ca>, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, Einar Halbig - E3 Eco Group Inc. <einar@e3ecogroup.com>, ablue@EvokeBuildings.com
Sent:	June 21, 2021 9:55:56 AM PDT

Thanks everyone for your responses to this question.

Given the comments provided, I have instructed the consultants to model regular heat pumps for all climate zones with back up heat has necessary.
Should we wish to look at a comparison between cold climate heat pumps and regular heat pumps in colder climates, this could be done under a separate study.

Cheers,

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Kelly Reid <kelly@hkrbuilders.com>
Sent: Monday, June 7, 2021 8:26 PM
To: mark@bernhardtcontracting.com
Cc: 'Heap,Nicholas' <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; 'Connolly,Norm' <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com

Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Nick
I agree with Mark and would go further. It's the Builders and home owners who will feel this burden in colder climates if we eliminate back up systems. The home owners who could be left in a bad situation in very cold temperatures without any back up system.The Builders who will get the call when a system goes down in the middle of winter.

Kelly Reid
HKR Builders LTD
----- Original Message -----
From: mark@bernhardtcontracting.com
To: 'Heap,Nicholas' <NHeap@richmond.ca>, 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>, 'Remi Charron' <rcharron@bchousing.org>, 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>, 'Connolly,Norm' <NConnolly@richmond.ca>, 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, 'Jeff Fisher' <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>
Cc: 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>, 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>, ablue@EvokeBuildings.com
Sent: Mon, 07 Jun 2021 20:12:49 -0700 (PDT)
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Nick

We may need to define what cold climate heat pump means for this that
definition gets pretty loose these days. Many of the basic model heat
pumps are now good down to -21. That would easily satisfy anything in
Climate zone 4. CZ 5 in some cases may get that cold but not for very long.
Last I checked the cold climate heat pumps were a premium price so it was still worth it in a lot of cases to heat with electric for a couple weeks a year rather than get the better gear.

Mark Bernhardt B.Sc. CEA CPHC
President
BERNHARDT CONTRACTING Ltd.

1535 Oak Crest Dr.

Victoria BC V8P 1K7

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CJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=fCY7L%2BdmP3euynq5tko844bsFgsmOrwYg1fWx%2FNyxwE%3D&reserved=0>
https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.bernhardtcontracting.com%2F&data=04%7C01%7CScott.B.Williams%40gov.bc.ca%7C1f873b2952854dda98a108d92a2d1792%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637587195455224904%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=fCY7L%2BdmP3euynq5tko844bsFgsmOrwYg1fWx%2FNyxwE%3D&reserved=0

250.857.2432

From: Heap,Nicholas <NHeap@richmond.ca>
Sent: June 7, 2021 5:47 PM
To: 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; 'joe.iconhomes@gmail.com' <joe.iconhomes@gmail.com>; 'ehayes@edgec.ca' <ehayes@edgec.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; 'susan@focaleng.com' <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott:

Re: question #2, my understanding is that a cold-climate heat pump in CZ4 (and 5?) would remove the need for back-up heating on peak heating load days, avoiding any need for an ancillary natural gas system (or less efficient baseboard heaters that will run up electricity demand on those days).

If I understand correctly, I think local governments will be motivated to encourage installation of cold-climate ASHPs even in CZ4 for this reason.

Regards,

Nicholas Heap

Sustainability Project Manager

City of Richmond

T: 604 276-4267 | C: 604 783-8050

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From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca <mailto:Dale.Andersson@gov.bc.ca> >
Sent: June 7, 2021 2:32 PM
To: 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com <mailto:mark@bernhardtcontracting.com> >; 'Remi Charron'
<rcharron@bchousing.org <mailto:rcharron@bchousing.org> >; Chorobik, Maya (Community Energy Association)
<mchorobik@communityenergy.bc.ca <mailto:mchorobik@communityenergy.bc.ca> >; Connolly,Norm
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<susan@focaleng.com <mailto:susan@focaleng.com> >; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca
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'kelly@hkrbuilders.com'
<kelly@hkrbuilders.com <mailto:kelly@hkrbuilders.com> >; Tanya.Rumak@fortisbc.com
<mailto:Tanya.Rumak@fortisbc.com> <Tanya.Rumak@fortisbc.com <mailto:Tanya.Rumak@fortisbc.com> >;
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<ablue@EvokeBuildings.com <mailto:ablue@EvokeBuildings.com> >
Subject: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hello Steering Committee members,

Last week Scott put two questions (below) about the Part 9 analysis in the Steering Committee Teams channel for feedback ASAP or by Friday June 11 at the latest. If you have comments, please add them to Teams.

If you can't access the Teams channel, please email comments to Scott and me directly.

QUESTIONS

1. For the Quadplex archetype, we had a targeted discussion regarding potential variations last meeting with some suggesting that they quadplex be modelled over a parkade, over a single car garage or over a slab on grade.
To be representative of a 'typical' scenario across BC, I believe we were leaning towards modelling the slab-on-grade scenario. We will proceed with this unless there are any strong objections.

2. For 9 Part ASHPs and accommodating for colder climates, E3 has suggested that non cold climate ASHPs for climate zones 4 and 5 and cold climate ASHPs for CZs 6 and up. Please provide comment. Thanks!

Thank you,

Dale

Dale Andersson, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9653 | Email: <mailto:dale.andersson@gov.bc.ca> dale.andersson@gov.bc.ca

RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

From:	Heap,Nicholas <NHeap@richmond.ca>
To:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, Connolly,Norm <NConnolly@richmond.ca>, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, Einar Halbig - E3 Eco Group Inc. <einar@e3ecogroup.com>, ablue@EvokeBuildings.com, Kelly Reid <kelly@hkrbuilders.com>, mark@bernhardtcontracting.com
Sent:	June 21, 2021 1:03:49 PM PDT

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Hi Scott:

I don't think anyone was objecting to modelling cold climate Heat Pumps in Climate Zones 6 - 8; there were concerns noted about modelling cold climate HPs for Climate ones 4 and 5.

As such, I think the consensus is that we should go with the consultant's initial suggestion: model standard heat pumps for Climate Zones 4 and 5, and cold climate heat pumps for Climate Zones 6 to 8.

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
T: 604 276-4267 | C: 604 783-8050

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-----Original Message-----
From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 21, 2021 9:56 AM
To: 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Cc: Heap,Nicholas <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson

<alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Thanks everyone for your responses to this question.

Given the comments provided, I have instructed the consultants to model regular heat pumps for all climate zones with back up heat has necessary.
Should we wish to look at a comparison between cold climate heat pumps and regular heat pumps in colder climates, this could be done under a separate study.

Cheers,

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Kelly Reid <kelly@hkrbuilders.com>
Sent: Monday, June 7, 2021 8:26 PM
To: mark@bernhardtcontracting.com
Cc: 'Heap,Nicholas' <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; 'Connolly,Norm' <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Nick

I agree with Mark and would go further. It's the Builders and home owners who will feel this burden in colder climates if we eliminate back up systems. The home owners who could be left in a bad situation in very cold temperatures without any back up system.The Builders who will get the call when a system goes down in the middle of winter.

Kelly Reid
HKR Builders LTD
----- Original Message -----
From: mark@bernhardtcontracting.com
To: 'Heap,Nicholas' <NHeap@richmond.ca>, 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>, 'Remi Charron' <rcharron@bchousing.org>, 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>, 'Connolly,Norm' <NConnolly@richmond.ca>, 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, 'Jeff Fisher' <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>
Cc: 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>, 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>, ablue@EvokeBuildings.com
Sent: Mon, 07 Jun 2021 20:12:49 -0700 (PDT)
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Nick

We may need to define what cold climate heat pump means for this that
definition gets pretty loose these days. Many of the basic model heat
pumps are now good down to -21. That would easily satisfy anything in
Climate zone 4. CZ 5 in some cases may get that cold but not for very long.
Last I checked the cold climate heat pumps were a premium price so it was still worth it in a lot of cases to heat with electric for a couple weeks a year rather than get the better gear.

Mark Bernhardt B.Sc. CEA CPHC
President
BERNHARDT CONTRACTING Ltd.

1535 Oak Crest Dr.

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https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.bernhardtcontracting.com%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7Cf780d02a5dfd4e2251f808d934efe09e%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637599027128752406%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=zYxZr6YVzzlWEAx3cXxeXamQdytgTp2oZDA

Z6CC57bM%3D&reserved=0

250.857.2432

From: Heap,Nicholas <NHeap@richmond.ca>
Sent: June 7, 2021 5:47 PM
To: 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; 'joe.iconhomes@gmail.com' <joe.iconhomes@gmail.com>; 'ehayes@edgec.ca' <ehayes@edgec.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; 'susan@focaleng.com' <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott:

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If I understand correctly, I think local governments will be motivated to encourage installation of cold-climate ASHPs even in CZ4 for this reason.

Regards,

Nicholas Heap

Sustainability Project Manager

City of Richmond

T: 604 276-4267 | C: 604 783-8050

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From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca <mailto:Dale.Andersson@gov.bc.ca> >
Sent: June 7, 2021 2:32 PM
To: 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com <mailto:mark@bernhardtcontracting.com> >; 'Remi Charron'
<rcharron@bchousing.org <mailto:rcharron@bchousing.org> >; Chorobik, Maya (Community Energy Association)
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<mailto:ehayes@edgec.ca> >; Heap,Nicholas <NHeap@richmond.ca <mailto:NHeap@richmond.ca> >;
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<ablue@EvokeBuildings.com <mailto:ablue@EvokeBuildings.com> >
Subject: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

City of Richmond Security Warning: This email was sent from an external source outside the City. Please do not click or open attachments unless you recognize the source of this email and the content is safe.

Hello Steering Committee members,

Last week Scott put two questions (below) about the Part 9 analysis in the Steering Committee Teams channel for feedback ASAP or by Friday June 11 at the latest. If you have comments, please add them to Teams.

If you can't access the Teams channel, please email comments to Scott and me directly.

QUESTIONS

1. For the Quadplex archetype, we had a targeted discussion regarding potential variations last meeting with some suggesting that they quadplex be modelled over a parkade, over a single car garage or over a slab on grade.
To be representative of a 'typical' scenario across BC, I believe we were leaning towards modelling the slab-on-grade scenario. We will proceed with this unless there are any strong objections.

2. For 9 Part ASHPs and accommodating for colder climates, E3 has suggested that non cold climate ASHPs for climate zones 4 and 5 and cold climate ASHPs for CZs 6 and up. Please provide comment. Thanks!

Thank you,

Dale

Dale Andersson, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9653 | Email: <mailto:dale.andersson@gov.bc.ca> dale.andersson@gov.bc.ca

RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

From:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To:	Heap,Nicholas <NHeap@richmond.ca>
Cc:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, Connolly,Norm <NConnolly@richmond.ca>, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, Einar Halbig - E3 Eco Group Inc. <einar@e3ecogroup.com>, ablue@EvokeBuildings.com, Kelly Reid <kelly@hkrbuilders.com>, mark@bernhardtcontracting.com
Sent:	June 21, 2021 1:22:31 PM PDT

Thanks Nick.

A number of comments indicated that CCHPs come at a premium with potential risks of not meeting demands during the coldest days of the year. Back up heat reduces those risks and given costs of CCHPs, may be more practical to model regular HPs with back-up.

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
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Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Heap,Nicholas <NHeap@richmond.ca>
Sent: Monday, June 21, 2021 1:04 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hi Scott:

I don't think anyone was objecting to modelling cold climate Heat Pumps in Climate Zones 6 - 8; there were concerns noted about modelling cold climate HPs for Climate ones 4 and 5.

As such, I think the consensus is that we should go with the consultant's initial suggestion: model standard heat pumps for Climate Zones 4 and 5, and cold climate heat pumps for Climate Zones 6 to 8.

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
T: 604 276-4267 | C: 604 783-8050

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-----Original Message-----
From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 21, 2021 9:56 AM
To: 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Cc: Heap,Nicholas <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

City of Richmond Security Warning: This email was sent from an external source outside the City. Please do not click or open attachments unless you recognize the source of this email and the content is safe.

Thanks everyone for your responses to this question.

Given the comments provided, I have instructed the consultants to model regular heat pumps for all climate zones with back up heat has necessary.
Should we wish to look at a comparison between cold climate heat pumps and regular heat pumps in colder climates, this could be done under a separate study.

Cheers,

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Kelly Reid <kelly@hkrbuilders.com>
Sent: Monday, June 7, 2021 8:26 PM
To: mark@bernhardtcontracting.com
Cc: 'Heap,Nicholas' <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; 'Connolly,Norm' <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Nick
I agree with Mark and would go further. It's the Builders and home owners who will feel this burden in colder climates if we eliminate back up systems. The home owners who could be left in a bad situation in very cold temperatures without any back up system.The Builders who will get the call when a system goes down in the middle of winter.

Kelly Reid
HKR Builders LTD
----- Original Message -----
From: mark@bernhardtcontracting.com
To: 'Heap,Nicholas' <NHeap@richmond.ca>, 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>, 'Remi Charron' <rcharron@bchousing.org>, 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>, 'Connolly,Norm' <NConnolly@richmond.ca>, 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, 'Jeff Fisher' <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>
Cc: 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>, 'Einar Halbig - E3 Eco Group Inc.'

<einar@e3ecogroup.com>, ablue@EvokeBuildings.com
Sent: Mon, 07 Jun 2021 20:12:49 -0700 (PDT)
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Nick

We may need to define what cold climate heat pump means for this that
definition gets pretty loose these days. Many of the basic model heat
pumps are now good down to -21. That would easily satisfy anything in
Climate zone 4. CZ 5 in some cases may get that cold but not for very long.
Last I checked the cold climate heat pumps were a premium price so it was still worth it in a lot of cases to heat with electric for a couple weeks a year rather than get the better gear.

Mark Bernhardt B.Sc. CEA CPHC
President
BERNHARDT CONTRACTING Ltd.

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https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.bernhardtcontracting.com%2F&data=04%7C01%7CScott.B.Williams%40gov.bc.ca%7Cf780d02a5dfd4e2251f808d934efe09e%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637599027132040542%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=5l3bGKwHjuxH4aeIQNVFK8EWqerEseep1JvVMn4oIVY%3D&reserved=0

250.857.2432

From: Heap,Nicholas <NHeap@richmond.ca>
Sent: June 7, 2021 5:47 PM
To: 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; 'joe.iconhomes@gmail.com' <joe.iconhomes@gmail.com>; 'ehayes@edgec.ca' <ehayes@edgec.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; 'susan@focaleng.com' <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com'

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Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott:

Re: question #2, my understanding is that a cold-climate heat pump in CZ4 (and 5?) would remove the need for back-up heating on peak heating load days, avoiding any need for an ancillary natural gas system (or less efficient baseboard heaters that will run up electricity demand on those days).

If I understand correctly, I think local governments will be motivated to encourage installation of cold-climate ASHPs even in CZ4 for this reason.

Regards,

Nicholas Heap

Sustainability Project Manager

City of Richmond

T: 604 276-4267 | C: 604 783-8050

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From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca <mailto:Dale.Andersson@gov.bc.ca> >
Sent: June 7, 2021 2:32 PM
To: 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com <mailto:mark@bernhardtcontracting.com> >; 'Remi Charron' <rcharron@bchousing.org <mailto:rcharron@bchousing.org> >; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca <mailto:mchorobik@communityenergy.bc.ca> >; Connolly,Norm <NConnolly@richmond.ca <mailto:NConnolly@richmond.ca> >; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com <mailto:bdeeks@rdcfinehomes.com>

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<ablue@EvokeBuildings.com <mailto:ablue@EvokeBuildings.com> >
Subject: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hello Steering Committee members,

Last week Scott put two questions (below) about the Part 9 analysis in the Steering Committee Teams channel for feedback ASAP or by Friday June 11 at the latest. If you have comments, please add them to Teams.

If you can't access the Teams channel, please email comments to Scott and me directly.

QUESTIONS

1. For the Quadplex archetype, we had a targeted discussion regarding potential variations last meeting with some suggesting that they quadplex be modelled over a parkade, over a single car garage or over a slab on grade.
To be representative of a 'typical' scenario across BC, I believe we were leaning towards modelling the slab-on-grade scenario. We will proceed with this unless there are any strong objections.

2. For 9 Part ASHPs and accommodating for colder climates, E3 has suggested that non cold climate ASHPs for climate zones 4 and 5 and cold climate ASHPs for CZs 6 and up. Please provide comment. Thanks!

Thank you,

Dale

Dale Andersson, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9653 | Email: <mailto:dale.andersson@gov.bc.ca> dale.andersson@gov.bc.ca

RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

From:	Heap,Nicholas <NHeap@richmond.ca>
To:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, Connolly,Norm <NConnolly@richmond.ca>, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, Einar Halbig - E3 Eco Group Inc. <einar@e3ecogroup.com>, ablue@EvokeBuildings.com, Kelly Reid <kelly@hkrbuilders.com>, mark@bernhardtcontracting.com
Sent:	June 21, 2021 2:24:12 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Scott:

Maybe I've misunderstood, but my original comment was that with a CCHP in Climate Zone 4, a back-up heating system might not be required.
Folks said no, that would be risky, there should be a back-up heating system for an HP, even if it is an CCHP in CZ4.
I don't think anyone questioned the appropriateness of installing Cold Climate HPs, with a back-up system, in Climate Zone 6 to 8
I also think folks were OK with having a regular HP and a back-up system in CZ 4 and 5.

What people disagreed with was the specific idea that by having a _CCHP in CZ 4 and 5_, you might safely go without having a back-up heating system.

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
T: 604 276-4267 | C: 604 783-8050

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-----Original Message-----
From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 21, 2021 1:23 PM
To: Heap,Nicholas <NHeap@richmond.ca>

Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Thanks Nick.

A number of comments indicated that CCHPs come at a premium with potential risks of not meeting demands during the coldest days of the year. Back up heat reduces those risks and given costs of CCHPs, may be more practical to model regular HPs with back-up.

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Heap,Nicholas <NHeap@richmond.ca>
Sent: Monday, June 21, 2021 1:04 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hi Scott:

I don't think anyone was objecting to modelling cold climate Heat Pumps in Climate Zones 6 - 8; there were concerns noted about modelling cold climate HPs for Climate ones 4 and 5.

As such, I think the consensus is that we should go with the consultant's initial suggestion: model standard heat pumps for Climate Zones 4 and 5, and cold climate heat pumps for Climate Zones 6 to 8.

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
T: 604 276-4267 | C: 604 783-8050

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-----Original Message-----
From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 21, 2021 9:56 AM
To: 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Cc: Heap,Nicholas <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Thanks everyone for your responses to this question.

Given the comments provided, I have instructed the consultants to model regular heat pumps for all climate zones with back up heat has necessary.
Should we wish to look at a comparison between cold climate heat pumps and regular heat pumps in colder climates, this could be done under a separate study.

Cheers,

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Kelly Reid <kelly@hkrbuilders.com>
Sent: Monday, June 7, 2021 8:26 PM
To: mark@bernhardtcontracting.com
Cc: 'Heap,Nicholas' <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; 'Connolly,Norm' <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Nick
I agree with Mark and would go further. It's the Builders and home owners who will feel this burden in colder climates if we eliminate back up systems. The home owners who could be left in a bad situation in very cold temperatures without any back up system.The Builders who will get the call when a system goes down in the middle of winter.

Kelly Reid
HKR Builders LTD
----- Original Message -----
From: mark@bernhardtcontracting.com
To: 'Heap,Nicholas' <NHeap@richmond.ca>, 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>, 'Remi Charron' <rcharron@bchousing.org>, 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>, 'Connolly,Norm' <NConnolly@richmond.ca>, 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, 'Jeff Fisher' <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>
Cc: 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>, 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>, ablue@EvokeBuildings.com
Sent: Mon, 07 Jun 2021 20:12:49 -0700 (PDT)

Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Nick

We may need to define what cold climate heat pump means for this that
definition gets pretty loose these days. Many of the basic model heat
pumps are now good down to -21. That would easily satisfy anything in
Climate zone 4. CZ 5 in some cases may get that cold but not for very long.
Last I checked the cold climate heat pumps were a premium price so it was still worth it in a lot of cases to heat with electric for a couple weeks a year rather than get the better gear.

Mark Bernhardt B.Sc. CEA CPHC
President
BERNHARDT CONTRACTING Ltd.

1535 Oak Crest Dr.

Victoria BC V8P 1K7

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https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.bernhardtcontracting.com%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C43db973e45b342c5603708d934fb1bec%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637599075368186153%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=KqA8JKg1T0iCTBpir4RcQLoCJUnC5utZlYNlF8aDXNg%3D&reserved=0

250.857.2432

From: Heap,Nicholas <NHeap@richmond.ca>
Sent: June 7, 2021 5:47 PM
To: 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; 'joe.iconhomes@gmail.com' <joe.iconhomes@gmail.com>; 'ehayes@edgec.ca' <ehayes@edgec.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; 'susan@focaleng.com' <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent

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Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Einar Halbig -
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<ablue@EvokeBuildings.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott:

Re: question #2, my understanding is that a cold-climate heat pump in CZ4 (and 5?) would remove the need for back-up heating on peak heating load days, avoiding any need for an ancillary natural gas system (or less efficient baseboard heaters that will run up electricity demand on those days).

If I understand correctly, I think local governments will be motivated to encourage installation of cold-climate ASHPs even in CZ4 for this reason.

Regards,

Nicholas Heap

Sustainability Project Manager

City of Richmond

T: 604 276-4267 | C: 604 783-8050

_____

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From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca <mailto:Dale.Andersson@gov.bc.ca> >
Sent: June 7, 2021 2:32 PM
To: 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com <mailto:mark@bernhardtcontracting.com> >; 'Remi Charron'
<rcharron@bchousing.org <mailto:rcharron@bchousing.org> >; Chorobik, Maya (Community Energy Association)
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; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca

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<Iain.Macdonald@nrc-cnrc.gc.ca <mailto:Iain.Macdonald@nrc-cnrc.gc.ca> >; 'susan@focaleng.com'
<susan@focaleng.com <mailto:susan@focaleng.com> >; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca
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'kelly@hkrbuilders.com'
<kelly@hkrbuilders.com <mailto:kelly@hkrbuilders.com> >; Tanya.Rumak@fortisbc.com
<mailto:Tanya.Rumak@fortisbc.com> <Tanya.Rumak@fortisbc.com <mailto:Tanya.Rumak@fortisbc.com> >;
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Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca <mailto:Scott.B.Williams@gov.bc.ca> >; Einar Halbig -
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<ablue@EvokeBuildings.com <mailto:ablue@EvokeBuildings.com> >
Subject: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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QUESTIONS

1. For the Quadplex archetype, we had a targeted discussion regarding potential variations last meeting with some suggesting that they quadplex be modelled over a parkade, over a single car garage or over a slab on grade.
To be representative of a 'typical' scenario across BC, I believe we were leaning towards modelling the slab-on-grade scenario. We will proceed with this unless there are any strong objections.

2. For 9 Part ASHPs and accommodating for colder climates, E3 has suggested that non cold climate ASHPs for climate zones 4 and 5 and cold climate ASHPs for CZs 6 and up. Please provide comment. Thanks!

Thank you,

Dale

Dale Andersson, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9653 | Email: <mailto:dale.andersson@gov.bc.ca> dale.andersson@gov.bc.ca

U40 Committee
Tuesday, June 22, 2021
8:00 – 8:45 AM
Zoom

AGENDA
Meeting with Minister Eby

1. Brief Presentation
    - Municipal case studies
2. Q & A / Open Discussion with Group
3. Next steps / Follow-up

Re: [External Email] - RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

From: Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Remi Charron <rcharron@bchousing.org>, Heap,Nicholas <NHeap@richmond.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, Connolly,Norm <NConnolly@richmond.ca>, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Toby Lau <Toby.Lau@bchydro.com>, Wilma Leung <wileung@bchousing.org>, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, Susan MacDougall <susan@focaleng.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, Rumak, Tanya <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, Einar Halbig <einar@e3ecogroup.com>, ablue@EvokeBuildings.com, Kelly Reid <kelly@hkrbuilders.com>, Mark Bernhardt <mark@bernhardtcontracting.com>
Sent: June 21, 2021 6:40:57 PM PDT

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From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: Monday, June 21, 2021 4:32:19 PM
To: 'Remi Charron' <rcharron@bchousing.org>; Heap,Nicholas <NHeap@richmond.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca <ehayes@edgec.ca>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org <roberto@zebx.org>; hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; reception@concertproperties.com <reception@concertproperties.com>; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org <pauline@chbabc.org>; lsampliner@portmoody.ca <lsampliner@portmoody.ca>; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: [External Email] - RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Thanks Remi and Nick,

Sorry for the misunderstanding. It appears that I conflated the comments of CCHPs in CZ4 and 5 with the use of CCHPs in CZ6 to 8.
So, for CZs 4 and 5, regular HPs (with back-up heat) will be analyzed.
For CZs 6-8 CCHPs (with back-up heat) will be analyzed.

Any preference regarding type of back-up heating system?

Scott Williams P.Eng, CPHD, LEED AP^{BD+C} | Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Remi Charron <rcharron@bchousing.org>
Sent: Monday, June 21, 2021 3:10 PM
To: Heap,Nicholas <NHeap@richmond.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: Re: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hi Nicholas,
You summarized what I had understood.[s.13]
s.13

Regards,

Remi Charron, Ph.D., P.Eng
Consultant, Technical Research & Education
BC Housing
1701- 4555 Kingsway | Burnaby, BC, V5H 4V8
778-231-7888
www.bchousing.org

From: Heap,Nicholas <NHeap@richmond.ca>
Sent: June 21, 2021 2:24 PM
To: Scott.B.Williams <Scott.B.Williams@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <dale.andersson@gov.bc.ca>; Remi Charron <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca <ehayes@edgec.ca>; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org <roberto@zebx.org>;

hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; reception@concertproperties.com <reception@concertproperties.com>; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org <pauline@chbabc.org>; lsampliner@portmoody.ca <lsampliner@portmoody.ca>; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott:

Maybe I've misunderstood, but my original comment was that with a CCHP in Climate Zone 4, a back-up heating system might not be required.
Folks said no, that would be risky, there should be a back-up heating system for an HP, even if it is an CCHP in CZ4.
I don't think anyone questioned the appropriateness of installing Cold Climate HPs, with a back-up system, in Climate Zone 6 to 8
I also think folks were OK with having a regular HP and a back-up system in CZ 4 and 5.

What people disagreed with was the specific idea that by having a _CCHP in CZ 4 and 5_, you might safely go without having a back-up heating system.

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
T: 604 276-4267 | C: 604 783-8050

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-----Original Message-----
From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 21, 2021 1:23 PM
To: Heap,Nicholas <NHeap@richmond.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Thanks Nick.

A number of comments indicated that CCHPs come at a premium with potential risks of not meeting demands during the coldest days of the year. Back up heat reduces those risks and given costs of CCHPs, may be more practical to model regular HPs with back-up.

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Heap,Nicholas <NHeap@richmond.ca>
Sent: Monday, June 21, 2021 1:04 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hi Scott:

I don't think anyone was objecting to modelling cold climate Heat Pumps in Climate Zones 6 - 8; there were concerns noted about modelling cold climate HPs for Climate ones 4 and 5.

As such, I think the consensus is that we should go with the consultant's initial suggestion: model standard heat pumps for Climate Zones 4 and 5, and cold climate heat pumps for Climate Zones 6 to 8.

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
T: 604 276-4267 | C: 604 783-8050

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-----Original Message-----
From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>

Sent: June 21, 2021 9:56 AM
To: 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Cc: Heap,Nicholas <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Thanks everyone for your responses to this question.

Given the comments provided, I have instructed the consultants to model regular heat pumps for all climate zones with back up heat has necessary.
Should we wish to look at a comparison between cold climate heat pumps and regular heat pumps in colder climates, this could be done under a separate study.

Cheers,

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Kelly Reid <kelly@hkrbuilders.com>
Sent: Monday, June 7, 2021 8:26 PM
To: mark@bernhardtcontracting.com
Cc: 'Heap,Nicholas' <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; 'Connolly,Norm' <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Nick
I agree with Mark and would go further. It's the Builders and home owners who will feel this burden in colder climates if we eliminate back up systems. The home owners who could be left in a bad situation in very cold temperatures without any back up system.The Builders who will get the call when a system goes down in the middle of winter.

Kelly Reid
HKR Builders LTD
----- Original Message -----
From: mark@bernhardtcontracting.com
To: 'Heap,Nicholas' <NHeap@richmond.ca>, 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>, 'Remi Charron' <rcharron@bchousing.org>, 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>, 'Connolly,Norm' <NConnolly@richmond.ca>, 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, 'Jeff Fisher' <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>
Cc: 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>, 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>, ablue@EvokeBuildings.com
Sent: Mon, 07 Jun 2021 20:12:49 -0700 (PDT)
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Nick

We may need to define what cold climate heat pump means for this that
definition gets pretty loose these days. Many of the basic model heat
pumps are now good down to -21. That would easily satisfy anything in
Climate zone 4. CZ 5 in some cases may get that cold but not for very long.
Last I checked the cold climate heat pumps were a premium price so it was still worth it in a lot of cases to heat with electric for a couple weeks a year rather than get the better gear.

Mark Bernhardt B.Sc. CEA CPHC
President
BERNHARDT CONTRACTING Ltd.

1535 Oak Crest Dr.

Victoria BC V8P 1K7

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https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.bernhardtcontracting.com%2F&data=04%7C01%7CScott.B.Williams%40gov.bc.ca%7Cf780d02a5dfd4e2251f808d934efe09e%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637599027132040542%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=5l3bGKwHjuxH4aeIQNVFK8EWqerEseep1JvVMn4oIVY%3D&reserved=0

250.857.2432

From: Heap,Nicholas <NHeap@richmond.ca>
Sent: June 7, 2021 5:47 PM
To: 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; 'joe.iconhomes@gmail.com' <joe.iconhomes@gmail.com>; 'ehayes@edgec.ca' <ehayes@edgec.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; 'susan@focaleng.com' <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott:

Re: question #2, my understanding is that a cold-climate heat pump in CZ4 (and 5?) would remove the need for back-up heating on peak heating load days, avoiding any need for an ancillary natural gas system (or less efficient baseboard heaters that will run up electricity demand on those days).

If I understand correctly, I think local governments will be motivated to encourage installation of cold-climate ASHPs even in CZ4 for this reason.

Regards,

Nicholas Heap

Sustainability Project Manager

City of Richmond

T: 604 276-4267 | C: 604 783-8050

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From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca <mailto:Dale.Andersson@gov.bc.ca> >
Sent: June 7, 2021 2:32 PM
To: 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com <mailto:mark@bernhardtcontracting.com> >; 'Remi Charron'
<rcharron@bchousing.org <mailto:rcharron@bchousing.org> >; Chorobik, Maya (Community Energy Association)
<mchorobik@communityenergy.bc.ca <mailto:mchorobik@communityenergy.bc.ca> >; Connolly,Norm
<NConnolly@richmond.ca <mailto:NConnolly@richmond.ca> >; Bob Deeks - rdcfinehomes.com
<bdeeks@rdcfinehomes.com <mailto:bdeeks@rdcfinehomes.com>
>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca
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<jfisher@udi.org <mailto:jfisher@udi.org> >; 'MGatensby@aibc.ca'
<MGatensby@aibc.ca <mailto:MGatensby@aibc.ca> >; 'joe.iconhomes@gmail.com'
<joe.iconhomes@gmail.com <mailto:joe.iconhomes@gmail.com> >; 'ehayes@edgec.ca' <ehayes@edgec.ca
<mailto:ehayes@edgec.ca> >; Heap,Nicholas <NHeap@richmond.ca <mailto:NHeap@richmond.ca> >;
'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com <mailto:Pete.Koepfgen@fortisbc.com> >;
Toby.Lau@bchydro.com <mailto:Toby.Lau@bchydro.com> <Toby.Lau@bchydro.com <mailto:Toby.Lau@bchydro.com>
>; Wilma Leung wileung@bchousing.org <mailto:wileung@bchousing.org> <wileung@bchousing.org
<mailto:wileung@bchousing.org> >; 'Iain.Macdonald@nrc-cnrc.gc.ca'
<Iain.Macdonald@nrc-cnrc.gc.ca <mailto:Iain.Macdonald@nrc-cnrc.gc.ca> >; 'susan@focaleng.com'
<susan@focaleng.com <mailto:susan@focaleng.com> >; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca
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'roberto@zebx.org' <roberto@zebx.org <mailto:roberto@zebx.org> >; Harshan - hradhakrishnan@egbc.ca
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'reception@concertproperties.com' <reception@concertproperties.com <mailto:reception@concertproperties.com> >;
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<mailto:Tanya.Rumak@fortisbc.com> <Tanya.Rumak@fortisbc.com <mailto:Tanya.Rumak@fortisbc.com> >;
'pauline@chbabc.org' <pauline@chbabc.org <mailto:pauline@chbabc.org> >; 'lsampliner@portmoody.ca'
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Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca <mailto:Scott.B.Williams@gov.bc.ca> >; Einar Halbig - E3 Eco Group Inc.
(einar@e3ecogroup.com <mailto:einar@e3ecogroup.com>) <einar@e3ecogroup.com <mailto:einar@e3ecogroup.com>
>; Alex Blue ablue@EvokeBuildings.com <mailto:ablue@EvokeBuildings.com> <ablue@EvokeBuildings.com
<mailto:ablue@EvokeBuildings.com> >
Subject: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

City of Richmond Security Warning: This email was sent from an external source outside the City. Please do not click or open attachments unless you recognize the source of this email and the content is safe.

Hello Steering Committee members,

Last week Scott put two questions (below) about the Part 9 analysis in the Steering Committee Teams channel for feedback ASAP or by Friday June 11 at the latest. If you have comments, please add them to Teams.

If you can't access the Teams channel, please email comments to Scott and me directly.

QUESTIONS

1. For the Quadplex archetype, we had a targeted discussion regarding potential variations last meeting with some suggesting that they quadplex be modelled over a parkade, over a single car garage or over a slab on grade.
To be representative of a 'typical' scenario across BC, I believe we were leaning towards modelling the slab-on-grade scenario. We will proceed with this unless there are any strong objections.

2. For 9 Part ASHPs and accommodating for colder climates, E3 has suggested that non cold climate ASHPs for climate zones 4 and 5 and cold climate ASHPs for CZs 6 and up. Please provide comment. Thanks!

Thank you,

Dale

Dale Andersson, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9653 | Email: <mailto:dale.andersson@gov.bc.ca> dale.andersson@gov.bc.ca

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FW: Please Read - Due Tues June 22 - Review/Direction: Engagement Schedule - BC Economic Plan 2021

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 22, 2021 7:25:49 AM PDT

From: Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>
Sent: Monday, June 21, 2021 10:12 PM
To: Ramsay, Launa P OHCS:EX <Launa.Ramsay@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Fieltsch, Raymond OHCS:EX <Raymond.Fieltsch@gov.bc.ca>; Elder, Kathy A OHCS:EX <Kathy.Elder@gov.bc.ca>
Subject: Re: Please Read - Due Tues June 22 - Review/Direction: Engagement Schedule - BC Economic Plan 2021

I can see five housing related stakeholders:
UBCM
UDI
BC Housing
BCNPHA
Concert Properties

I did not see LanlordBC or other landlord/tenancy groups, Technical Safety BC or any of the community homeless serving agencies.

John Thomson
ED Housing Policy
250.812.1915

Sent from my iPhone.

> On Jun 21, 2021, at 18:48, Ramsay, Launa P OHCS:EX <Launa.Ramsay@gov.bc.ca> wrote:
>
> Hi All,
> Apologies, I overlooked this requests Friday afternoon. Can you please review the attached and do two things:
> 1. Identify any of your main stakeholders already included in the session
> 2. Advise of any stakeholders that are missing
>
> I would appreciate having this as soon as possible on Tuesday. Thanks so much!
> Launa
>
> Begin forwarded message:
>
> > **From:** "May, Cheryl OHCS:EX" <Cheryl.May@gov.bc.ca>
> > **Date:** June 18, 2021 at 11:16:55 AM PDT
> > **To:** "Ramsay, Launa P OHCS:EX" <Launa.Ramsay@gov.bc.ca>
> > **Subject: FW: Review/Direction: Engagement Schedule - BC Economic Plan 2021**
> >
> > Please work with the EDs on this. A number of our key stakeholders are already in here already.
> >
> > Thanks,

Cheryl

From: Pearson, Barbera AG:EX <Barbera.Pearson@gov.bc.ca>
Sent: Thursday, June 17, 2021 4:41 PM
To: Cooke, Angela AG:EX <Angela.Cooke@gov.bc.ca>; May, Cheryl OHCS:EX <Cheryl.May@gov.bc.ca>
Cc: Ramsay, Launa P OHCS:EX <Launa.Ramsay@gov.bc.ca>; Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>; Pearson, Barbera AG:EX <Barbera.Pearson@gov.bc.ca>
Subject: Review/Direction: Engagement Schedule - BC Economic Plan 2021

Good Afternoon:
For your review/direction/comments.

Thank you.
Barb

"Be Kind, Be Calm & Stay Safe"
Barbera Pearson, Manager, Business Operations
Associate Deputy Minister's Office
Housing, Construction Standards & Multiculturalism

From: Engelbrecht, Maya AG:EX <Maya.Engelbrecht@gov.bc.ca>
Sent: Thursday, June 17, 2021 3:05 PM
To: Pearson, Barbera AG:EX <Barbera.Pearson@gov.bc.ca>
Subject: Engagement Schedule - BC Economic Plan 2021

Hi Barb, I was chatting with Tara Cameron today from JERI and she advised that they are looking for 5 or so of our key Housing stakeholders that we would like to be invited to participate in an upcoming engagement session with Minister Kahlon.

Their current list is attached the current list for reference, and Tara advises it is fine for me to share with your office and Cheryl's office for review. Please could you check and advise?

Thanks,
-M

<image001.jpg>
<Engagement Schedule - BC Economic Plan 2021 v1.0.docx>

RE: [External Email] - RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

From:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To:	Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>, Eoghan Hayes <ehayes@edgec.ca>, Heap,Nicholas <NHeap@richmond.ca>, Alex Blue <ablue@EvokeBuildings.com>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Remi Charron <rcharron@bchousing.org>
Cc:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, Connolly,Norm <NConnolly@richmond.ca>, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, Maura Gatensby <MGatensby@aibc.ca>, joe iconhomes <joe.iconhomes@gmail.com>, Toby Lau <Toby.Lau@bchydro.com>, Wilma Leung <wileung@bchousing.org>, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, Z (16/17 Council) Susan MacDougall <susan@focaleng.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, reception@concertproperties.com, Rumak, Tanya <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, Einar Halbig <einar@e3ecogroup.com>, Kelly Reid <kelly@hkrbuilders.com>, Mark Bernhardt <mark@bernhardtcontracting.com>
Sent:	June 23, 2021 10:47:25 AM PDT
Attachments:	image003.png, image005.png, image006.png, image007.jpg, image004.png, image001.jpg, image002.jpg

Thanks so much for everyone's input on this topic. A lot of great information and insight.

Discussing the HOT2000 process with Alex, it would appear that the easiest approach moving forward regarding back-up heat would be match the back-up heat fuel source to that of the reference case. So, if the reference house has electric baseboard, then the back-up would be electric resistance, conversely, should space heat for the reference house be via natural gas, then the back-up would be natural gas.
We can see how this shakes out in the initial analysis and can discuss further as necessary.

Thanks again for all of your input.

Cheers,

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>
Sent: Wednesday, June 23, 2021 9:53 AM
To: Eoghan Hayes <ehayes@edgec.ca>; Heap,Nicholas <NHeap@richmond.ca>; 'Alex Blue' <ablue@EvokeBuildings.com>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>

Subject: RE: [External Email] - RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

That makes sense Eoghan. Increases in runtime of any piece of equipment generally lowers it's lifespan, or increases maintenance costs. Canada probably has a colder climate than Japan where their built, and most of the US, who've been using them. So I'd expect the run times and therefore lifespan should drop vs. those markets.. the more you use it.. just like kms on a vehicle. Although, admittedly, I don't have data on that.

From: Eoghan Hayes <ehayes@edgec.ca>
Sent: Wednesday, June 23, 2021 9:16 AM
To: Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>; Heap,Nicholas <NHeap@richmond.ca>; 'Alex Blue' <ablue@EvokeBuildings.com>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: RE: [External Email] - RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Thanks Pete for confirm, we also heard the same thing. This is to protect the heat pump compressors and air source heat pump technology goes into defrost mode more frequently as the outside air temperature drops as two things are happening. The heat loss of the building is increase and the energy the heat pump can absorb is decreasing.

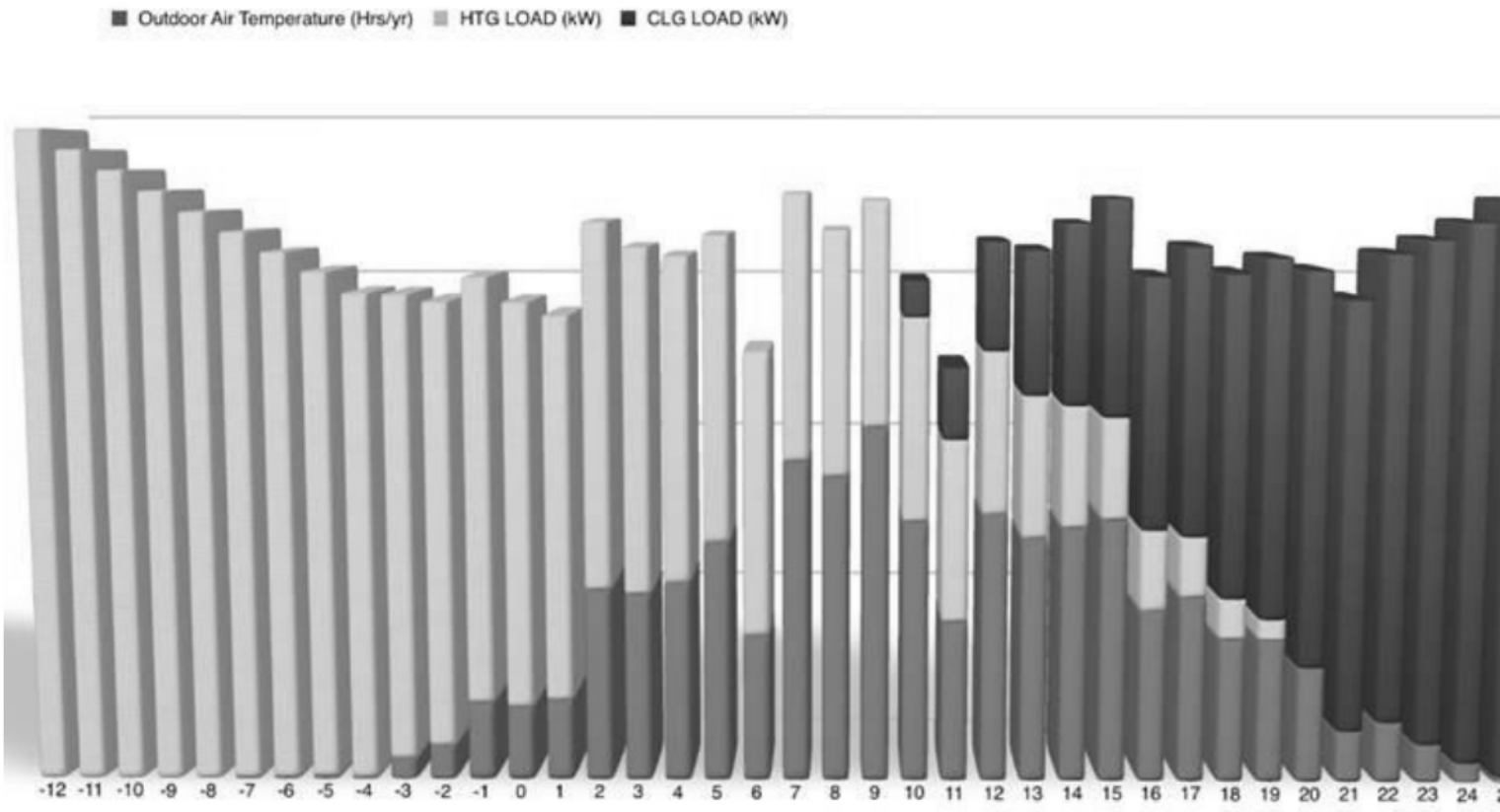
See graphics below of Vancouver's CWEC 2016 weather data and the load profiles for a typical MURB building in this instance. In Vancouver, it's less than 5°C for approximately 25 % of the year, below this 25 % is also the coldest meaning we're not capturing a significant portion of the heating energy utilizing heat pump technology and instead must rely on back up heating which is costly to the home owner and will result in higher BC Hydro bills during these periods.

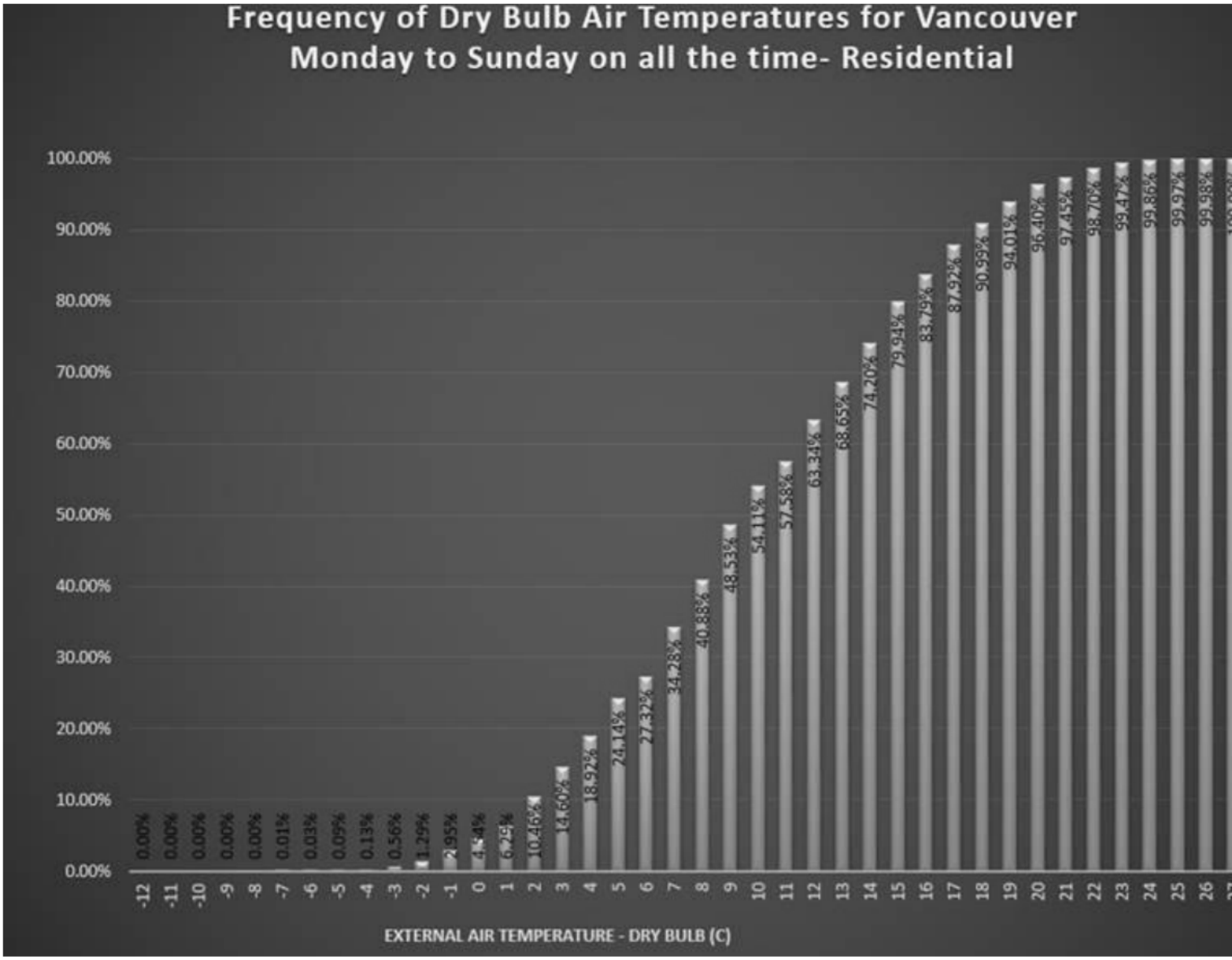
On the last graphic we provided Vancouver and Kelowna, Kelowna is way worse, it's less than 5°C for over 40 % of the year.

To conclude the back up heating is not minimal it's significant, especially in Kelowna. We need back up heat to protect the heat pump technology from being overexerted and reducing the unit life span.

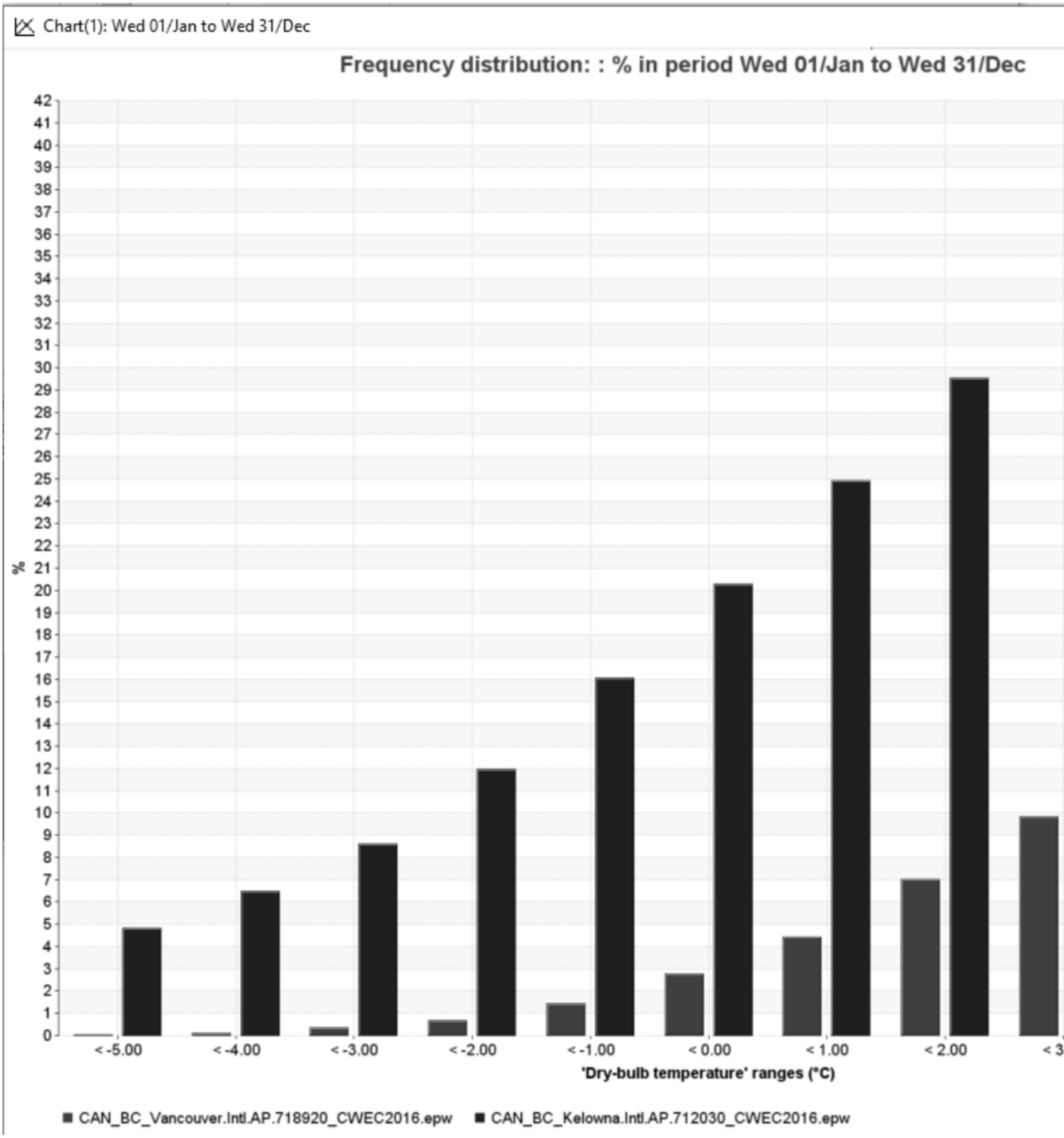
There is no point in putting in heat pump technology that is not designed for the climate in which it is installed. This means looking at extended range heat pump technology or other sources such as Geox (very costly) in cold climates and or cost wise, back up sources like natural gas or electrical that will operate during these colder periods. Natural gas is 1/3rd the cost of electrical so from a cost perspective this makes sense to the consumer but not for green gas emissions. I hope this info helps.

VANCOUVER - HEATING, COOLING AND OUTDOOR AIR TEMPERATURE





It's less than 5°C for 24.14 % of the year. Kelowna is worse, it's less than 5°C for over 40 % of the year.



Best regards,
Eoghan Hayes, P.Eng, BEMP, RESET AP , LEED AP BD&C
Managing Director
+1 (604) 338 1063 | www.edgesustainability.com
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From: Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>

Sent: June 23, 2021 8:13 AM
To: Heap,Nicholas <NHeap@richmond.ca>; 'Alex Blue' <ablue@EvokeBuildings.com>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; Eoghan Hayes <ehayes@edgec.ca>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: Re: [External Email] - RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

From asking contractors, typical switchover temps to backup heating are usually 5degC in BC.

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From: Heap,Nicholas <NHeap@richmond.ca>
Sent: Tuesday, June 22, 2021 5:19:08 PM
To: 'Alex Blue' <ablue@EvokeBuildings.com>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca <ehayes@edgec.ca>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org <roberto@zebx.org>; reception@concertproperties.com <reception@concertproperties.com>; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org <pauline@chbabc.org>; lsampliner@portmoody.ca <lsampliner@portmoody.ca>; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: [External Email] - RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hello all:

My understanding is that the back-up system would be in place for low-frequency cold weather events, and as (literally) the back-up in case the primary system is non-functional.

If so, the average annual heating energy contributed by the back-up system would appear to be minimal.
That said, I'll defer to the experts regarding current design practices on the targeted amount of annual load to be provided by a back-up system.

Regards,

Nicholas Heap
Sustainability Project Manager

City of Richmond
T: 604 276-4267 | C: 604 783-8050

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From: Alex Blue <ablue@EvokeBuildings.com>
Sent: June 22, 2021 4:12 PM
To: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; Heap,Nicholas <NHeap@richmond.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Ok – sounds like I misunderstood the question about backup systems initially; the ASHP will request additional heat from the existing system if required, and we are not readily able to change it within HOT 2000, so we will plan to do that.

Sorry for the confusion.

Thanks for the input on the cold climate vs regular HPs, we are running with cold climate ones for the colder zones, and regular for the warmer zones.

Alex Blue, P.Eng., LEED AP BD+C, BEMP
Principal, Building Energy Specialist
O : 604.260.1124 ext. 803
C : 604.715.5886
250 - 997 Seymour Street, Vancouver BC



From: Alex Blue
Sent: June 22, 2021 3:46 PM
To: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; Heap,Nicholas <NHeap@richmond.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau

<Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi all,

The backup heating in this case would be used during cold weather; it is not a true "backup" that would be excluded from the model; it would operate under typical operations when needed (i.e. when it's cold out). We can provide more detail on the temperatures/conditions where the switchover happens in the report, I don't have them offhand.

Bob's note that the two typical options would be electric furnace or natural gas furnace aligns with what we would anticipate.

I think the question for us is: if the base case model has electric baseboard, and we apply an ECM to switch to HP + backup, do we use electric furnace to maintain the same fuel source as the base case? Or do we fuel switch to natural gas? I know in Part 3 world I would generally expect to see a fuel switch there to reduce operating costs, but I'm not sure what the more likely scenario would be for Part 9. I believe the likely outcome of a fuel switch would be to increase GHGs but improve payback of the measure. Based on that, any strong views before we send our draft Thursday? You will have further opportunity for comments once we send.

Best,

Alex Blue, P.Eng., LEED AP BD+C, BEMP
Principal, Building Energy Specialist
O : 604.260.1124 ext. 803
C : 604.715.5886
250 - 997 Seymour Street, Vancouver BC

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From: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Sent: June 22, 2021 3:00 PM
To: 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; Heap,Nicholas <NHeap@richmond.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; Alex Blue <ablue@EvokeBuildings.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott,

It would be good to get some definition around Backup Heating Requirements or at least understand the assumptions made in modelling. Back-up space heating is excluded from the energy model, if it is equipped with controls and is not

required to meet the space-conditioning load of the house, i.e., it is ok for the back-up to be not factored into the model if controls are there to prevent back up heater operation when the heating load can be met by the heat pump alone.

If that is not the case (e.g. if simultaneous operation of ASHP and backup heating is anticipated), it will be good to note the control strategy assumed for the two cases (CCHP+ backup and regular HP+ backup). Pasted below as an example is one of many control strategies that serves to identify the economic balance point from the NRCan Heat Pump Sizing and Design Guide:

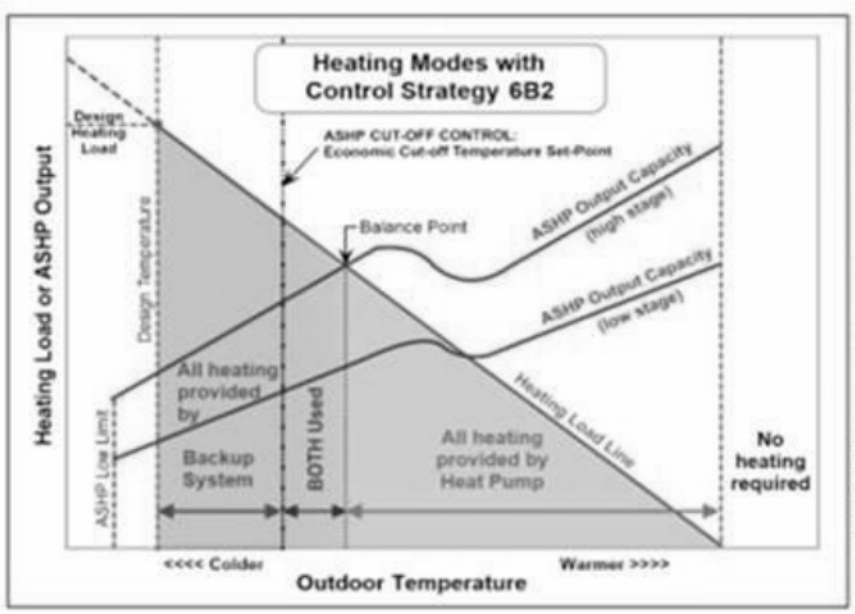

Figure 28: Example of Heating Modes with Control Strategy 6B2

Look forward to the analysis.

Best,
Harshan

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 21, 2021 4:32 PM
To: 'Remi Charron' <rcharron@bchousing.org>; Heap,Nicholas <NHeap@richmond.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Thanks Remi and Nick,

Sorry for the misunderstanding. It appears that I conflated the comments of CCHPs in CZ4 and 5 with the use of CCHPs in CZ6 to 8.
So, for CZs 4 and 5, regular HPs (with back-up heat) will be analyzed.
For CZs 6-8 CCHPs (with back-up heat) will be analyzed.

Any preference regarding type of back-up heating system?

Scott Williams P.Eng, CPHD, LEED AP^{BD+C}| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Remi Charron <rcharron@bchousing.org>
Sent: Monday, June 21, 2021 3:10 PM
To: Heap,Nicholas <NHeap@richmond.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: Re: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hi Nicholas,
You summarized what I had understood. s.13
s.13

Regards,

Remi Charron, Ph.D., P.Eng
Consultant, Technical Research & Education
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778-231-7888
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From: Heap,Nicholas <NHeap@richmond.ca>
Sent: June 21, 2021 2:24 PM
To: Scott.B.Williams <Scott.B.Williams@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <dale.andersson@gov.bc.ca>; Remi Charron <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca <MGatensby@aibc.ca>; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca <ehayes@edgec.ca>; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; Wilma Leung <wileung@bchousing.org>; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org <roberto@zebx.org>; hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; reception@concertproperties.com

<reception@concertproperties.com>; Rumak, Tanya <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org <pauline@chbabc.org>; lsampliner@portmoody.ca <lsampliner@portmoody.ca>; dave sargent <dave.sargent@davara.ca>; Einar Halbig <einar@e3ecogroup.com>; ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>; 'Kelly Reid' <kelly@hkrbuilders.com>; Mark Bernhardt <mark@bernhardtcontracting.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott:

Maybe I've misunderstood, but my original comment was that with a CCHP in Climate Zone 4, a back-up heating system might not be required.
Folks said no, that would be risky, there should be a back-up heating system for an HP, even if it is an CCHP in CZ4.
I don't think anyone questioned the appropriateness of installing Cold Climate HPs, with a back-up system, in Climate Zone 6 to 8
I also think folks were OK with having a regular HP and a back-up system in CZ 4 and 5.

What people disagreed with was the specific idea that by having a _CCHP in CZ 4 and 5_, you might safely go without having a back-up heating system.

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
T: 604 276-4267 | C: 604 783-8050

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-----Original Message-----
From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 21, 2021 1:23 PM
To: Heap,Nicholas <NHeap@richmond.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Thanks Nick.

A number of comments indicated that CCHPs come at a premium with potential risks of not meeting demands during the coldest days of the year. Back up heat reduces those risks and given costs of CCHPs, may be more practical to model regular HPs with back-up.

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
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Email: Scott.B.Williams@gov.bc.ca

-----Original Message-----
From: Heap,Nicholas <NHeap@richmond.ca>
Sent: Monday, June 21, 2021 1:04 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com; 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Hi Scott:

I don't think anyone was objecting to modelling cold climate Heat Pumps in Climate Zones 6 - 8; there were concerns noted about modelling cold climate HPs for Climate ones 4 and 5.

As such, I think the consensus is that we should go with the consultant's initial suggestion: model standard heat pumps for Climate Zones 4 and 5, and cold climate heat pumps for Climate Zones 6 to 8.

Regards,

Nicholas Heap
Sustainability Project Manager
City of Richmond
T: 604 276-4267 | C: 604 783-8050

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From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 21, 2021 9:56 AM

To: 'Kelly Reid' <kelly@hkrbuilders.com>; mark@bernhardtcontracting.com
Cc: Heap,Nicholas <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Thanks everyone for your responses to this question.

Given the comments provided, I have instructed the consultants to model regular heat pumps for all climate zones with back up heat has necessary.
Should we wish to look at a comparison between cold climate heat pumps and regular heat pumps in colder climates, this could be done under a separate study.

Cheers,

Scott Williams P.Eng, CPHD, LEED APBD+C| Senior Energy Codes Administrator

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
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-----Original Message-----
From: Kelly Reid <kelly@hkrbuilders.com>
Sent: Monday, June 7, 2021 8:26 PM
To: mark@bernhardtcontracting.com
Cc: 'Heap,Nicholas' <NHeap@richmond.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Remi Charron' <rcharron@bchousing.org>; 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>; 'Connolly,Norm' <NConnolly@richmond.ca>; 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; patrick enright <patrick.enright@vancouver.ca>; alex ferguson <alex.ferguson@canada.ca>; 'Jeff Fisher' <jfisher@udi.org>; MGatensby@aibc.ca; joe iconhomes <joe.iconhomes@gmail.com>; ehayes@edgec.ca; Pete Koepfgen <Pete.Koepfgen@fortisbc.com>; Toby Lau <Toby.Lau@bchydro.com>; wileung@bchousing.org; Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>; susan@focaleng.com; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory McCall <Gregory.McCall@vancouver.ca>; roberto@zebx.org; hradhakrishnan@egbc.ca; reception@concertproperties.com; Tanya Rumak <Tanya.Rumak@fortisbc.com>; pauline@chbabc.org; lsampliner@portmoody.ca; dave sargent <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>; ablue@EvokeBuildings.com
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

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Nick
I agree with Mark and would go further. It's the Builders and home owners who will feel this burden in colder climates if we eliminate back up systems. The home owners who could be left in a bad situation in very cold temperatures without any back up system.The Builders who will get the call when a system goes down in the middle of winter.

Kelly Reid
HKR Builders LTD
----- Original Message -----
From: mark@bernhardtcontracting.com
To: 'Heap,Nicholas' <NHeap@richmond.ca>, 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>, 'Remi Charron' <rcharron@bchousing.org>, 'Chorobik, Maya (Community Energy Association)' <mchorobik@communityenergy.bc.ca>, 'Connolly,Norm' <NConnolly@richmond.ca>, 'Bob Deeks - rdcfinehomes.com' <bdeeks@rdcfinehomes.com>, patrick enright <patrick.enright@vancouver.ca>, alex ferguson <alex.ferguson@canada.ca>, 'Jeff Fisher' <jfisher@udi.org>, MGatensby@aibc.ca, joe iconhomes <joe.iconhomes@gmail.com>, ehayes@edgec.ca, Pete Koepfgen <Pete.Koepfgen@fortisbc.com>, Toby Lau <Toby.Lau@bchydro.com>, wileung@bchousing.org, Iain Macdonald <Iain.Macdonald@nrc-cnrc.gc.ca>, susan@focaleng.com, 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>, Gregory McCall <Gregory.McCall@vancouver.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya Rumak <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, dave sargent <dave.sargent@davara.ca>, 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>
Cc: 'Williams, Scott B OHCS:EX' <Scott.B.Williams@gov.bc.ca>, 'Einar Halbig - E3 Eco Group Inc.' <einar@e3ecogroup.com>, ablue@EvokeBuildings.com
Sent: Mon, 07 Jun 2021 20:12:49 -0700 (PDT)
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Nick

We may need to define what cold climate heat pump means for this that
definition gets pretty loose these days. Many of the basic model heat
pumps are now good down to -21. That would easily satisfy anything in
Climate zone 4. CZ 5 in some cases may get that cold but not for very long.
Last I checked the cold climate heat pumps were a premium price so it was still worth it in a lot of cases to heat with electric for a couple weeks a year rather than get the better gear.

Mark Bernhardt B.Sc. CEA CPHC
President
BERNHARDT CONTRACTING Ltd.

1535 Oak Crest Dr.

Victoria BC V8P 1K7

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https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.bernhardtcontracting.com%2F&data=04%7C01%7CScott.B.Williams%40gov.bc.ca%7Cf780d02a5dfd4e2251f808d934efe09e%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637599027132040542%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=5l3bGKwHjuxH4aeIQNVFK8EWqerEseep1JvVMn4oIVY%3D&reserved=0

250.857.2432

From: Heap,Nicholas <NHeap@richmond.ca>
Sent: June 7, 2021 5:47 PM
To: 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; Connolly,Norm <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; 'joe.iconhomes@gmail.com' <joe.iconhomes@gmail.com>; 'ehayes@edgec.ca' <ehayes@edgec.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; 'susan@focaleng.com' <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>
Subject: RE: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

Hi Scott:

Re: question #2, my understanding is that a cold-climate heat pump in CZ4 (and 5?) would remove the need for back-up heating on peak heating load days, avoiding any need for an ancillary natural gas system (or less efficient baseboard heaters that will run up electricity demand on those days).

If I understand correctly, I think local governments will be motivated to encourage installation of cold-climate ASHPs even in CZ4 for this reason.

Regards,

Nicholas Heap

Sustainability Project Manager

City of Richmond

T: 604 276-4267 | C: 604 783-8050

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From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca <mailto:Dale.Andersson@gov.bc.ca> >
Sent: June 7, 2021 2:32 PM
To: 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com <mailto:mark@bernhardtcontracting.com> >; 'Remi Charron'
<rcharron@bchousing.org <mailto:rcharron@bchousing.org> >; Chorobik, Maya (Community Energy Association)
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'kelly@hkrbuilders.com'
<kelly@hkrbuilders.com <mailto:kelly@hkrbuilders.com> >; Tanya.Rumak@fortisbc.com
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Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca <mailto:Scott.B.Williams@gov.bc.ca> >; Einar Halbig - E3 Eco Group Inc.
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>; Alex Blue ablue@EvokeBuildings.com <mailto:ablue@EvokeBuildings.com> <ablue@EvokeBuildings.com
<mailto:ablue@EvokeBuildings.com> >
Subject: Metrics Research Steering Committee: Questions re Part 9 quadplex and ASHPs/colder climates

City of Richmond Security Warning: This email was sent from an external source outside the City. Please do not click or open attachments unless you recognize the source of this email and the content is safe.

Hello Steering Committee members,

Last week Scott put two questions (below) about the Part 9 analysis in the Steering Committee Teams channel for feedback ASAP or by Friday June 11 at the latest. If you have comments, please add them to Teams.

If you can't access the Teams channel, please email comments to Scott and me directly.

QUESTIONS

1. For the Quadplex archetype, we had a targeted discussion regarding potential variations last meeting with some suggesting that they quadplex be modelled over a parkade, over a single car garage or over a slab on grade.
To be representative of a 'typical' scenario across BC, I believe we were leaning towards modelling the slab-on-grade scenario. We will proceed with this unless there are any strong objections.

2. For 9 Part ASHPs and accommodating for colder climates, E3 has suggested that non cold climate ASHPs for climate zones 4 and 5 and cold climate ASHPs for CZs 6 and up. Please provide comment. Thanks!

Thank you,

Dale

Dale Andersson, PhD | Senior Policy Advisor

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9653 | Email: <mailto:dale.andersson@gov.bc.ca> dale.andersson@gov.bc.ca

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Draft results, Step Code Metrics Report update

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, mark@bernhardtcontracting.com, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick.enright@vancouver.ca, Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe.iconhomes@gmail.com, ehayes@edgec.ca, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, Pete.Koepfgen@fortisbc.com, Toby.Lau@bchydro.com, Wilma Leung wileung@bchousing.org <wileung@bchousing.org>, Iain.Macdonald@nrc-cnrc.gc.ca, susan@focaleng.com, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory.McCall@vancouver.ca, roberto@zebx.org, Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya.Rumak@fortisbc.com, pauline@chbabc.org, lsampliner@portmoody.ca, David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>, Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>

Sent: June 25, 2021 8:58:46 AM PDT

Attachments: image001.png

Hello, everyone:

I'm passing on a message from Alex Blue, copied below.

Please see the link below for draft results for review for the Step Code Metrics Report Update.
s.15

Please contact Alex if you have any issues with the link.

Our focus has been on the data – you'll see a fair number of spreadsheets in there. The report is still more of an outline with some bullet points, but has a few sections populated. One section I will draw your attention to is "Results – Part 3". It has some graphs and discussion on the impact of NECB 2020 vs 2015.

In the meantime, I have given all of you edit access to the files in the folder above; feel free to use the review features in Word to add comments directly within.

I've started with the spreadsheets for one climate zone for each archetype for Part 3; I'll be looking to add most climate zones for most Part 3 archetypes (except hotel due to long model runtimes) by the end of the weekend so feel free to check back. E3 has provided spreadsheet listing all the Part 9 Archetype Parameters, Part 9 cost data spreadsheet, and one sample spreadsheet for the Small SFD Archetype to demonstrate how they have programmed the HTAP run output data into an organizable form. They had some hiccups with a couple of the other output spreadsheets but will add more as they come in.

Alex Blue, P.Eng., LEED AP BD+C, BEMP
Principal, Building Energy Specialist
O : 604.260.1124 ext. 803
C : 604.715.5886
250 - 997 Seymour Street, Vancouver BC

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-----Original Appointment-----
From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Thursday, June 24, 2021 4:24 PM

To: Andersson, Dale OHCS:EX; Wong, Hugo OHCS:EX; 'mark@bernhardtcontracting.com'; 'Remi Charron'; Chorobik, Maya (Community Energy Association); 'NConnolly@richmond.ca'; Bob Deeks - rdcfinehomes.com; 'patrick.enright@vancouver.ca'; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca; Jeff Fisher; 'MGatensby@aibc.ca'; joe.iconhomes@gmail.com; 'ehayes@edgec.ca'; Nicholas Heap - NHeap@richmond.ca; 'Pete.Koepfgen@fortisbc.com'; Toby.Lau@bchydro.com ; Wilma Leung wileung@bchousing.org; 'Iain.Macdonald@nrc-cnrc.gc.ca'; 'susan@focaleng.com'; May, Zachary OHCS:EX; Gregory.McCall@vancouver.ca; 'roberto@zebx.org'; Harshan - hradhakrishnan@egbc.ca; 'reception@concertproperties.com'; 'kelly@hkrbuilders.com'; Tanya.Rumak@fortisbc.com ; 'pauline@chbabc.org'; 'lsampliner@portmoody.ca'; David Sargent dave.sargent@davara.ca ; Williams, Scott B OHCS:EX; Alex Blue ablue@EvokeBuildings.com; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com)
Subject: FW: Metrics Steering Committee Meeting - Please reserve time - discussion of draft results
When: Wednesday, June 30, 2021 2:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

-----Original Appointment-----
From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Tuesday, June 15, 2021 4:11 PM
To: Andersson, Dale OHCS:EX; 'mark@bernhardtcontracting.com'; 'Remi Charron'; Chorobik, Maya (Community Energy Association); 'NConnolly@richmond.ca'; Bob Deeks - rdcfinehomes.com; 'patrick.enright@vancouver.ca'; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca; Jeff Fisher; 'MGatensby@aibc.ca'; joe.iconhomes@gmail.com; 'ehayes@edgec.ca'; Nicholas Heap - NHeap@richmond.ca; 'Pete.Koepfgen@fortisbc.com'; Toby.Lau@bchydro.com ; Wilma Leung wileung@bchousing.org; 'Iain.Macdonald@nrc-cnrc.gc.ca'; 'susan@focaleng.com'; May, Zachary OHCS:EX; Gregory.McCall@vancouver.ca; 'roberto@zebx.org'; Harshan - hradhakrishnan@egbc.ca; 'reception@concertproperties.com'; 'kelly@hkrbuilders.com'; Tanya.Rumak@fortisbc.com ; 'pauline@chbabc.org'; 'lsampliner@portmoody.ca'; David Sargent dave.sargent@davara.ca ; Williams, Scott B OHCS:EX; Alex Blue ablue@EvokeBuildings.com; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com)
Subject: Metrics Steering Committee Meeting - Please reserve time - discussion of draft results
When: Wednesday, June 30, 2021 2:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hello Metrics Research Report Steering Committee members,

Please reserve this time for our next meeting. Agenda and draft results to come prior to June 30.

Thank you,
Dale

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

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RE: Draft results, Step Code Metrics Report update

From: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, mark@bernhardtcontracting.com, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick.enright@vancouver.ca, Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, Maura Gatensby <MGatensby@aibc.ca>, joe.iconhomes@gmail.com, ehayes@edgec.ca, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, Pete.Koepfgen@fortisbc.com, Toby.Lau@bchydro.com, Wilma Leung wileung@bchousing.org <wileung@bchousing.org>, Iain.Macdonald@nrc-cnrc.gc.ca, Z (16/17 Council) Susan MacDougall <susan@focaleng.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory.McCall@vancouver.ca, roberto@zebx.org, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya.Rumak@fortisbc.com, pauline@chbabc.org, lsampliner@portmoody.ca, David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>, Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>
Sent: June 25, 2021 10:01:14 AM PDT
Attachments: image001.png

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Thanks Hugo,

Is there a suggested deadline for feedback comments on the draft results?

Have a nice weekend.

Best,
Harshan

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: June 25, 2021 8:59 AM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe.iconhomes@gmail.com; 'ehayes@edgec.ca' <ehayes@edgec.ca>; Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>
Subject: Draft results, Step Code Metrics Report update

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Please see the link below for draft results for review for the Step Code Metrics Report Update.

s.15

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O : 604.260.1124 ext. 803
C : 604.715.5886
250 - 997 Seymour Street, Vancouver BC

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To: Andersson, Dale OHCS:EX; Wong, Hugo OHCS:EX; 'mark@bernhardtcontracting.com'; 'Remi Charron'; Chorobik, Maya (Community Energy Association); 'NConnolly@richmond.ca'; Bob Deeks - rdcfinehomes.com; 'patrick.enright@vancouver.ca'; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca; Jeff Fisher; 'MGatensby@aibc.ca'; joe.iconhomes@gmail.com; 'ehayes@edgec.ca'; Nicholas Heap - NHeap@richmond.ca; 'Pete.Koepfgen@fortisbc.com'; Toby.Lau@bchydro.com ; Wilma Leung wileung@bchousing.org; 'Iain.Macdonald@nrc-cnrc.gc.ca'; 'susan@focaleng.com'; May, Zachary OHCS:EX; Gregory.McCall@vancouver.ca; 'roberto@zebx.org'; Harshan - hradhakrishnan@egbc.ca; 'reception@concertproperties.com'; 'kelly@hkrbuilders.com'; Tanya.Rumak@fortisbc.com ; 'pauline@chbabc.org'; 'lsampliner@portmoody.ca'; David Sargent dave.sargent@davara.ca ; Williams, Scott B OHCS:EX; Alex Blue ablue@EvokeBuildings.com; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com)
Subject: FW: Metrics Steering Committee Meeting - Please reserve time - discussion of draft results
When: Wednesday, June 30, 2021 2:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

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Dale

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Re: Draft results, Step Code Metrics Report update

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To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Mark Bernhardt <mark@bernhardtcontracting.com>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick.enright@vancouver.ca, Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe.iconhomes@gmail.com, ehayes@edgec.ca, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, Pete.Koepfgen@fortisbc.com, Toby.Lau@bchydro.com, Wilma Leung <wileung@bchousing.org>, Iain.Macdonald@nrc-cnrc.gc.ca, Susan MacDougall <susan@focaleng.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory.McCall@vancouver.ca, roberto@zebx.org, Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>, reception@concertproperties.com, kelly@hkrbuilders.com, Rumak, Tanya <Tanya.Rumak@fortisbc.com>, pauline@chbabc.org, lsampliner@portmoody.ca, David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>, Einar Halbig <einar@e3ecogroup.com>
Sent: June 25, 2021 10:05:35 AM PDT
Attachments: image001.png

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Thanks.

s.13

Regards,

Remi Charron, Ph.D., P.Eng
Consultant, Technical Research & Education
BC Housing
1701- 4555 Kingsway | Burnaby, BC, V5H 4V8
778-231-7888
www.bchousing.org

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Dale

Microsoft Teams meeting

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RE: Draft results, Step Code Metrics Report update

From: Alex Blue <ablue@EvokeBuildings.com>

To: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, mark@bernhardtcontracting.com, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick.enright@vancouver.ca, Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, Maura Gatensby <MGatensby@aibc.ca>, joe.iconhomes@gmail.com, ehayes@edgec.ca, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, Pete.Koepfgen@fortisbc.com, Toby.Lau@bchydro.com, Wilma Leung wileung@bchousing.org <wileung@bchousing.org>, Iain.Macdonald@nrc-cnrc.gc.ca, Z (16/17 Council) Susan MacDougall <susan@focaleng.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory.McCall@vancouver.ca, roberto@zebx.org, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya.Rumak@fortisbc.com, pauline@chbabc.org, lsampliner@portmoody.ca, David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>

Sent: June 25, 2021 10:38:46 AM PDT

Attachments: image001.png, image002.png

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We will be meeting next Wednesday, June 30, so there will be an opportunity to discuss then and would be helpful to have reviewed by then.

Final deadline for comments is July 7th, to Scott.

Thanks,

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Sent: June 25, 2021 10:01 AM
To: 'Wong, Hugo OHCS:EX' <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe.iconhomes@gmail.com; 'ehayes@edgec.ca' <ehayes@edgec.ca>; Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca;

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Subject: RE: Draft results, Step Code Metrics Report update

Thanks Hugo,

Is there a suggested deadline for feedback comments on the draft results?

Have a nice weekend.

Best,
Harshan

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Where: Microsoft Teams Meeting

-----Original Appointment-----
From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Tuesday, June 15, 2021 4:11 PM
To: Andersson, Dale OHCS:EX; 'mark@bernhardtcontracting.com'; 'Remi Charron'; Chorobik, Maya (Community Energy Association); 'NConnolly@richmond.ca'; Bob Deeks - rdcfinehomes.com; 'patrick.enright@vancouver.ca'; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca; Jeff Fisher; 'MGatensby@aibc.ca'; joe.iconhomes@gmail.com; 'ehayes@edgec.ca'; Nicholas Heap - NHeap@richmond.ca; 'Pete.Koepfgen@fortisbc.com'; Toby.Lau@bchydro.com ; Wilma Leung wileung@bchousing.org; 'Iain.Macdonald@nrc-cnrc.gc.ca'; 'susan@focaleng.com'; May, Zachary OHCS:EX; Gregory.McCall@vancouver.ca; 'roberto@zebx.org'; Harshan - hradhakrishnan@egbc.ca; 'reception@concertproperties.com'; 'kelly@hkrbuilders.com'; Tanya.Rumak@fortisbc.com ; 'pauline@chbabc.org'; 'lsampliner@portmoody.ca'; David Sargent dave.sargent@davara.ca ; Williams, Scott B OHCS:EX; Alex Blue ablue@EvokeBuildings.com; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com)
Subject: Metrics Steering Committee Meeting - Please reserve time - discussion of draft results
When: Wednesday, June 30, 2021 2:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hello Metrics Research Report Steering Committee members,

Please reserve this time for our next meeting. Agenda and draft results to come prior to June 30.

Thank you,
Dale

Microsoft Teams meeting

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Pick a time: July Energy Step Code Council meetings

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, ruta.fluxgold@canada.ca, sfralin@ahma-bc.org, MGatensby@aibc.ca, hgoodland@scius.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, s.22 , May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, sean.pander@vancouver.ca, roberto@zebx.org, warrenp@bccassn.com, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, lsampliner@portmoody.ca, muneesh@boma.bc.ca, Maxwell.Sykes@surrey.ca, rthe@wesgroup.ca, Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

Sent: June 25, 2021 3:59:51 PM PDT

Hello, members and alternates of the Energy Step Code Council:

We are looking to set a date for two July meetings (one on the week of July 12, and the next at the end of the month).

Please pick from a list of times here: https://doodle.com/poll/synvvc6hzt36bkhx?utm_source=poll&utm_medium=link

Agenda TBD, but we will have initial results from the Metrics Research Report to share.

Thanks very much.
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Hello Metrics Research Report Steering Committee members,

Update June 28: Info below was emailed to you Friday June 28. Including it here to keep everything in one place.

Please see the link below provided by Alex Blue for draft results for discussion at our meeting.

s.15

Please contact Alex if you have any issues with the link.

Message from Alex: Our focus has been on the data – you'll see a fair number of spreadsheets in there. The report is still more of an outline with some bullet points, but has a few sections populated. One section I will draw your attention to is "Results – Part 3". It has some graphs and discussion on the impact of NECB 2020 vs 2015.

In the meantime, I have given all of you edit access to the files in the folder above; feel free to use the review features in Word to add comments directly within.

I've started with the spreadsheets for one climate zone for each archetype for Part 3; I'll be looking to add most climate zones for most Part 3 archetypes (except hotel due to long model runtimes) by the end of the weekend so feel free to check back. E3 has provided spreadsheet listing all the Part 9 Archetype Parameters, Part 9 cost data spreadsheet, and one sample spreadsheet for the Small SFD Archetype to demonstrate how they have programmed the HTAP run output data into an organizable form. They had some hiccups with a couple of the other output spreadsheets but will add more as they come in."

Thank you,
Dale

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s.15

RE: [External Email] - Pick a time: July Energy Step Code Council meetings

From: Bains, Bea <Bea.Bains@fortisbc.com>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: June 28, 2021 4:55:15 PM PDT

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Zac and Hugo,

We would like to request some time on the agenda at the first scheduled July meeting to provide an overview of the scope and framework of the Dunsky study.

In addition, given the GHG scope of work in buildings largely impacts FortisBC, we would kindly request the second "July" meeting be shifted out to mid- August to enable time for completion of the Dunsky study and thereby an opportunity the bring the results to BSSB and the Step Code Council.

Would you have some insights as to agenda, scope and recommendations being brought forward at these meetings? At the last Step code council meeting there was discussion around carbon emissions regulation, rather than in the context of the building code, could you elaborate on how that mechanism would function?

Kind regards,
Bea

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, June 25, 2021 4:00 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Bains, Bea <Bea.Bains@fortisbc.com>; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 : May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: [External Email] - Pick a time: July Energy Step Code Council meetings

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Hugo Wong (he/him)
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Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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Hi Bea,

Thanks for the message. I'm just coordinating the meeting content/strategy with Zac right now, and can get back to you next week.

Best,

Hugo

Hugo Wong (he/him)

Policy Analyst, Building and Safety Standards Branch

Office of Housing and Construction Standards

Ministry of Attorney General and Minister Responsible for Housing

Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418

Email:hugo.wong@gov.bc.ca

From: Bains, Bea <Bea.Bains@fortisbc.com>
Sent: Monday, June 28, 2021 4:55 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: [External Email] - Pick a time: July Energy Step Code Council meetings

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

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From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, June 25, 2021 4:00 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Bains, Bea <Bea.Bains@fortisbc.com>;

alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: [External Email] - Pick a time: July Energy Step Code Council meetings

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Hugo

Hugo Wong (he/him)

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Email:hugo.wong@gov.bc.ca

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RE: Draft results, Step Code Metrics Report update

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To: Jeff Fisher <jfisher@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: June 30, 2021 2:53:21 PM PDT
Attachments: image001.png, image002.png

Thanks Jeff.

From: Jeff Fisher <jfisher@udi.org>
Sent: Wednesday, June 30, 2021 2:49 PM
To: 'Jonathan Meads' <JMeads@qualico.com>; Ryan Thé (rthe@third.space) <rthe@third.space>; 'Rick Bortolussi' <Rick.Bortolussi@tlhousingsolutions.ca>
Cc: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Heather Park <hpark@udi.org>; Cassandra McColman <cmccolman@udi.org>
Subject: FW: Draft results, Step Code Metrics Report update

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

FYI, the Province is updating the *Energy Step Code Metrics Report* they did in 2018, but the focus is on what will be mandated for energy efficiency in the upcoming Building Code. Below is a link to the information, and they are asking for comments. If you have time, can you take a look and let me know if you have any questions/comments. Also, because this is draft, please keep it confidential at this point.

Hello, everyone:

I'm passing on a message from Alex Blue, copied below.

Please see the link below for draft results for review for the Step Code Metrics Report Update.

s.15

Please contact Alex if you have any issues with the link.

Our focus has been on the data – you'll see a fair number of spreadsheets in there. The report is still more of an outline with some bullet points, but has a few sections populated. One section I will draw your attention to is "Results – Part 3". It has some graphs and discussion on the impact of NECB 2020 vs 2015.

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Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street

Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: Alex Blue <ablue@EvokeBuildings.com>
Sent: June 25, 2021 10:39 AM
To: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'Wong, Hugo OHCS:EX' <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe.iconhomes@gmail.com; 'ehayes@edgec.ca' <ehayes@edgec.ca>; Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>
Subject: RE: Draft results, Step Code Metrics Report update

We will be meeting next Wednesday, June 30, so there will be an opportunity to discuss then and would be helpful to have reviewed by then.

Final deadline for comments is July 7th, to Scott.

Thanks,

Alex Blue, P.Eng., LEED AP BD+C, BEMP
Principal, Building Energy Specialist
O : 604.260.1124 ext. 803
C : 604.715.5886
250 - 997 Seymour Street, Vancouver BC



From: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Sent: June 25, 2021 10:01 AM
To: 'Wong, Hugo OHCS:EX' <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe.iconhomes@gmail.com; 'ehayes@edgec.ca' <ehayes@edgec.ca>; Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>;

'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Alex Blue <ablue@EvokeBuildings.com>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>
Subject: RE: Draft results, Step Code Metrics Report update

Thanks Hugo,

Is there a suggested deadline for feedback comments on the draft results?

Have a nice weekend.

Best,
Harshan

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: June 25, 2021 8:59 AM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'mark@bernhardtcontracting.com' <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; Maura Gatensby <MGatensby@aibc.ca>; joe.iconhomes@gmail.com; 'ehayes@edgec.ca' <ehayes@edgec.ca>; Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; Z (16/17 Council) Susan MacDougall <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>
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s.15

Please contact Alex if you have any issues with the link.

Our focus has been on the data – you'll see a fair number of spreadsheets in there. The report is still more of an outline with some bullet points, but has a few sections populated. One section I will draw your attention to is "Results – Part 3". It has some graphs and discussion on the impact of NECB 2020 vs 2015.

In the meantime, I have given all of you edit access to the files in the folder above; feel free to use the review features in Word to add comments directly within.

I've started with the spreadsheets for one climate zone for each archetype for Part 3; I'll be looking to add most climate zones for most Part 3 archetypes (except hotel due to long model runtimes) by the end of the weekend so feel free to check back. E3 has provided spreadsheet listing all the Part 9 Archetype Parameters, Part 9 cost data spreadsheet, and one sample spreadsheet for the Small SFD Archetype to demonstrate how they have programmed the HTAP run output

data into an organizable form. They had some hiccups with a couple of the other output spreadsheets but will add more as they come in.

Alex Blue, P.Eng., LEED AP BD+C, BEMP
Principal, Building Energy Specialist
O : 604.260.1124 ext. 803
C : 604.715.5886
250 - 997 Seymour Street, Vancouver BC



-----Original Appointment-----
From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Thursday, June 24, 2021 4:24 PM
To: Andersson, Dale OHCS:EX; Wong, Hugo OHCS:EX; 'mark@bernhardtcontracting.com'; 'Remi Charron'; Chorobik, Maya (Community Energy Association); 'NConnolly@richmond.ca'; Bob Deeks - rdcfinehomes.com; 'patrick.enright@vancouver.ca'; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca; Jeff Fisher; 'MGatensby@aibc.ca'; joe.iconhomes@gmail.com; 'ehayes@edgec.ca'; Nicholas Heap - NHeap@richmond.ca; 'Pete.Koepfgen@fortisbc.com'; Toby.Lau@bchydro.com ; Wilma Leung wileung@bchousing.org; 'Iain.Macdonald@nrc-cnrc.gc.ca'; 'susan@focaleng.com'; May, Zachary OHCS:EX; Gregory.McCall@vancouver.ca; 'roberto@zebx.org'; Harshan - hradhakrishnan@egbc.ca; 'reception@concertproperties.com'; 'kelly@hkrbuilders.com'; Tanya.Rumak@fortisbc.com ; 'pauline@chbabc.org'; 'lsampliner@portmoody.ca'; David Sargent dave.sargent@davara.ca ; Williams, Scott B OHCS:EX; Alex Blue ablue@EvokeBuildings.com; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com)
Subject: FW: Metrics Steering Committee Meeting - Please reserve time - discussion of draft results
When: Wednesday, June 30, 2021 2:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

-----Original Appointment-----
From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Tuesday, June 15, 2021 4:11 PM
To: Andersson, Dale OHCS:EX; 'mark@bernhardtcontracting.com'; 'Remi Charron'; Chorobik, Maya (Community Energy Association); 'NConnolly@richmond.ca'; Bob Deeks - rdcfinehomes.com; 'patrick.enright@vancouver.ca'; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca; Jeff Fisher; 'MGatensby@aibc.ca'; joe.iconhomes@gmail.com; 'ehayes@edgec.ca'; Nicholas Heap - NHeap@richmond.ca; 'Pete.Koepfgen@fortisbc.com'; Toby.Lau@bchydro.com ; Wilma Leung wileung@bchousing.org; 'Iain.Macdonald@nrc-cnrc.gc.ca'; 'susan@focaleng.com'; May, Zachary OHCS:EX; Gregory.McCall@vancouver.ca; 'roberto@zebx.org'; Harshan - hradhakrishnan@egbc.ca; 'reception@concertproperties.com'; 'kelly@hkrbuilders.com'; Tanya.Rumak@fortisbc.com ; 'pauline@chbabc.org'; 'lsampliner@portmoody.ca'; David Sargent dave.sargent@davara.ca ; Williams, Scott B OHCS:EX; Alex Blue ablue@EvokeBuildings.com; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com)
Subject: Metrics Steering Committee Meeting - Please reserve time - discussion of draft results
When: Wednesday, June 30, 2021 2:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hello Metrics Research Report Steering Committee members,

Please reserve this time for our next meeting. Agenda and draft results to come prior to June 30.

Thank you,
Dale

Microsoft Teams meeting

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Learn More | Meeting options

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello everyone,

Based on the responses so far, this appears to be the best time for our call to discuss the survey. Happy of course to receive feedback via email as well though, for anyone who prefers.

The agenda will be pretty simple – just walking through the attached as a group to gather your thoughts and input.

Thank you,
Sarah

Microsoft Teams meeting
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s.15

Page 081 of 309

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-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Sent: Tuesday, July 6, 2021 10:43 AM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; bea.bains@fortisbc.com<mailto:bea.bains@fortisbc.com>;
Tom.Berkhout@bchydro.com<mailto:Tom.Berkhout@bchydro.com>;
alexandre.bigonesse@canada.ca<mailto:alexandre.bigonesse@canada.ca>; pcaraher@ahma-
bc.org<mailto:pcaraher@ahma-bc.org>;
mchorobik@communityenergy.bc.ca<mailto:mchorobik@communityenergy.bc.ca>;
NConnolly@richmond.ca<mailto:NConnolly@richmond.ca>;
bdeeks@rdcfinehomes.com<mailto:bdeeks@rdcfinehomes.com>; diana@havan.ca<mailto:diana@havan.ca>;
patrick.enright@vancouver.ca<mailto:patrick.enright@vancouver.ca>;
catherine.ernst@boabc.org<mailto:catherine.ernst@boabc.org>; jfisher@udi.org<mailto:jfisher@udi.org>;
ruta.fluxgold@canada.ca<mailto:ruta.fluxgold@canada.ca>; sfralin@ahma-bc.org<mailto:sfralin@ahma-bc.org>;
MGatensby@aibc.ca<mailto:MGatensby@aibc.ca>; hgoodland@scius.ca<mailto:hgoodland@scius.ca>; Gosman, Nat
EMLI:EX; joe.iconhomes@gmail.com<mailto:joe.iconhomes@gmail.com>;
nheap@richmond.ca<mailto:nheap@richmond.ca>; SHorsburgh@rdn.bc.ca<mailto:SHorsburgh@rdn.bc.ca>;
vanessa@chbabc.org<mailto:vanessa@chbabc.org>; jjung@asttbc.org<mailto:jjung@asttbc.org>;
toby.lau@bchydro.com<mailto:toby.lau@bchydro.com>; wileung@bchousing.org<mailto:wileung@bchousing.org>;
Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>;
J.Madden@ubc.ca<mailto:J.Madden@ubc.ca>; Lisa.Mak@bchydro.com<mailto:Lisa.Mak@bchydro.com>;
s.22 ı>; May, Zachary OHCS:EX;
christopher.mclellan@canada.ca<mailto:christopher.mclellan@canada.ca>;
mmcwilliam3@bcit.ca<mailto:mmcwilliam3@bcit.ca>; Mohareb, Adrian ENV:EX;
sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>; roberto@zebx.org<mailto:roberto@zebx.org>;
warrenp@bccassn.com<mailto:warrenp@bccassn.com>;
hradhakrishnan@egbc.ca<mailto:hradhakrishnan@egbc.ca>; ron@havan.ca<mailto:ron@havan.ca>;
kelly@hkrbuilders.com<mailto:kelly@hkrbuilders.com>; lsampliner@portmoody.ca<mailto:lsampliner@portmoody.ca>;
muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>;
Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>; rthe@wesgroup.ca<mailto:rthe@wesgroup.ca>;
Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>;
ralph.wells@ubc.ca<mailto:ralph.wells@ubc.ca>; tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>;
Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Subject: Energy Step Code Council meeting (GHG mtg. #3)
When: Wednesday, July 14, 2021 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

Page 083 of 309

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-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Sent: Tuesday, July 6, 2021 10:57 AM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; bea.bains@fortisbc.com<mailto:bea.bains@fortisbc.com>;
Tom.Berkhout@bchydro.com<mailto:Tom.Berkhout@bchydro.com>;
alexandre.bigonesse@canada.ca<mailto:alexandre.bigonesse@canada.ca>; pcaraher@ahma-
bc.org<mailto:pcaraher@ahma-bc.org>;
mchorobik@communityenergy.bc.ca<mailto:mchorobik@communityenergy.bc.ca>;
NConnolly@richmond.ca<mailto:NConnolly@richmond.ca>;
bdeeks@rdcfinehomes.com<mailto:bdeeks@rdcfinehomes.com>; diana@havan.ca<mailto:diana@havan.ca>;
patrick.enright@vancouver.ca<mailto:patrick.enright@vancouver.ca>;
catherine.ernst@boabc.org<mailto:catherine.ernst@boabc.org>; jfisher@udi.org<mailto:jfisher@udi.org>;
ruta.fluxgold@canada.ca<mailto:ruta.fluxgold@canada.ca>; sfralin@ahma-bc.org<mailto:sfralin@ahma-bc.org>;
MGatensby@aibc.ca<mailto:MGatensby@aibc.ca>; hgoodland@scius.ca<mailto:hgoodland@scius.ca>; Gosman, Nat
EMLI:EX; joe.iconhomes@gmail.com<mailto:joe.iconhomes@gmail.com>;
nheap@richmond.ca<mailto:nheap@richmond.ca>; SHorsburgh@rdn.bc.ca<mailto:SHorsburgh@rdn.bc.ca>;
vanessa@chbabc.org<mailto:vanessa@chbabc.org>; jjung@asttbc.org<mailto:jjung@asttbc.org>;
toby.lau@bchydro.com<mailto:toby.lau@bchydro.com>; wileung@bchousing.org<mailto:wileung@bchousing.org>;
Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>;
J.Madden@ubc.ca<mailto:J.Madden@ubc.ca>; Lisa.Mak@bchydro.com<mailto:Lisa.Mak@bchydro.com>;
s.22 >; May, Zachary OHCS:EX;
christopher.mclellan@canada.ca<mailto:christopher.mclellan@canada.ca>;
mmcwilliam3@bcit.ca<mailto:mmcwilliam3@bcit.ca>; Mohareb, Adrian ENV:EX;
sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>; roberto@zebx.org<mailto:roberto@zebx.org>;
warrenp@bccassn.com<mailto:warrenp@bccassn.com>;
hradhakrishnan@egbc.ca<mailto:hradhakrishnan@egbc.ca>; ron@havan.ca<mailto:ron@havan.ca>;
kelly@hkrbuilders.com<mailto:kelly@hkrbuilders.com>; lsampliner@portmoody.ca<mailto:lsampliner@portmoody.ca>;
muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>;
Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>; rthe@wesgroup.ca<mailto:rthe@wesgroup.ca>;
Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>;
ralph.wells@ubc.ca<mailto:ralph.wells@ubc.ca>; tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>;
Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Subject: Hold: Energy Step Code Council meeting (GHG mtg. #4)
When: Tuesday, July 27, 2021 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Note: We will send calendar placeholders for both July 27 and July 28 in the event that the July 14 meeting needs to be pushed back. Thank you so much for your understanding.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

Page 085 of 309

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s.15

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Sent: Tuesday, July 6, 2021 10:58 AM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; bea.bains@fortisbc.com<mailto:bea.bains@fortisbc.com>;
Tom.Berkhout@bchydro.com<mailto:Tom.Berkhout@bchydro.com>;
alexandre.bigonesse@canada.ca<mailto:alexandre.bigonesse@canada.ca>; pcaraher@ahma-
bc.org<mailto:pcaraher@ahma-bc.org>;
mchorobik@communityenergy.bc.ca<mailto:mchorobik@communityenergy.bc.ca>;
NConnolly@richmond.ca<mailto:NConnolly@richmond.ca>;
bdeeks@rdcfinehomes.com<mailto:bdeeks@rdcfinehomes.com>; diana@havan.ca<mailto:diana@havan.ca>;
patrick.enright@vancouver.ca<mailto:patrick.enright@vancouver.ca>;
catherine.ernst@boabc.org<mailto:catherine.ernst@boabc.org>; jfisher@udi.org<mailto:jfisher@udi.org>;
ruta.fluxgold@canada.ca<mailto:ruta.fluxgold@canada.ca>; sfralin@ahma-bc.org<mailto:sfralin@ahma-bc.org>;
MGatensby@aibc.ca<mailto:MGatensby@aibc.ca>; hgoodland@scius.ca<mailto:hgoodland@scius.ca>; Gosman, Nat
EMLI:EX; joe.iconhomes@gmail.com<mailto:joe.iconhomes@gmail.com>;
nheap@richmond.ca<mailto:nheap@richmond.ca>; SHorsburgh@rdn.bc.ca<mailto:SHorsburgh@rdn.bc.ca>;
vanessa@chbabc.org<mailto:vanessa@chbabc.org>; jjung@asttbc.org<mailto:jjung@asttbc.org>;
toby.lau@bchydro.com<mailto:toby.lau@bchydro.com>; wileung@bchousing.org<mailto:wileung@bchousing.org>;
Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>;
J.Madden@ubc.ca<mailto:J.Madden@ubc.ca>; Lisa.Mak@bchydro.com<mailto:Lisa.Mak@bchydro.com>;
s.22 >; May, Zachary OHCS:EX;
christopher.mclellan@canada.ca<mailto:christopher.mclellan@canada.ca>;
mmcwilliam3@bcit.ca<mailto:mmcwilliam3@bcit.ca>; Mohareb, Adrian ENV:EX;
sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>; roberto@zebx.org<mailto:roberto@zebx.org>;
warrenp@bccassn.com<mailto:warrenp@bccassn.com>;
hradhakrishnan@egbc.ca<mailto:hradhakrishnan@egbc.ca>; ron@havan.ca<mailto:ron@havan.ca>;
kelly@hkrbuilders.com<mailto:kelly@hkrbuilders.com>; lsampliner@portmoody.ca<mailto:lsampliner@portmoody.ca>;
muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>;
Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>; rthe@wesgroup.ca<mailto:rthe@wesgroup.ca>;
Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>;
ralph.wells@ubc.ca<mailto:ralph.wells@ubc.ca>; tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>;
Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Subject: Hold: Energy Step Code Council meeting (GHG mtg. #4)
When: Wednesday, July 28, 2021 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Note: We will send calendar placeholders for both July 27 and July 28 in the event that the July 14 meeting needs to be pushed back. Thank you so much for your understanding.

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Page 087 of 309

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s.15

FW: UDI Webinar - Panelist Invitation

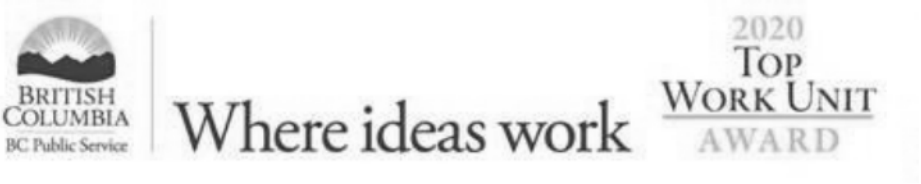
From: May, Zachary OHCS:EX
To: Andrew Harmsworth <ah@ghl.ca>
Sent: July 6, 2021 1:40:57 PM PDT
Attachments: image002.jpg, image003.jpg, image001.jpg, image004.jpg

Hi Andrew,

Which report is this referencing? Is this the IBC report, or something different?

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Yvonne Lo <ylo@udi.org>
Sent: Monday, July 5, 2021 1:58 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: UDI Webinar - Panelist Invitation
Importance: High

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Dear Zachary,

Hope you had a wonderful weekend! Can't believe it's been over a year since we last worked together on a webinar.

We are currently working on a potential webinar on the GHL report of the possible mass timber code changes with COV. Andrew Harmsworth will present the report findings and explained the possible code changes identified. Then Patrick Enright can briefly preface his presentation by summarizing how the City might use this report and the survey results.

After discussing with Andrew and Jeff, we would love to invite you to be our panelist . We are also thinking of inviting Rocky Sethi of Adera as a moderator to complete the panel.

The suggested webinar dates (9:15am – 10:30am):
July 20 (Tue)
July 21 (Wed)
July 28 (Wed)
July 29 (Thu)

Would you be interested and available? Thanks so much for your kind consideration.

Best wishes,
Yvonne

Yvonne Lo | Director, Professional Development
Urban Development Institute
ylo@udi.org *Cellular:* 604.789.0898
udi.bc.ca


FW: UDI Webinar - Panelist Invitation

From: May, Zachary OHCS:EX
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Sent: July 6, 2021 1:53:48 PM PDT
Attachments: image002.jpg, image003.jpg, image001.jpg, image004.jpg

Hi Andrew,

Any concerns with us accepting this invitation? Is this something you would like to represent BSSB at?

I have emailed Andrew Harmsworth to confirm the report he's going to present, but in all cases I assume our response is that we're happy to facilitate having this information added to the national code discussion for adoption in future code cycles.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Yvonne Lo <ylo@udi.org>
Sent: Monday, July 5, 2021 1:58 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: UDI Webinar - Panelist Invitation
Importance: High

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Dear Zachary,

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After discussing with Andrew and Jeff, we would love to invite you to be our panelist . We are also thinking of inviting Rocky Sethi of Adera as a moderator to complete the panel.

The suggested webinar dates (9:15am – 10:30am):
July 20 (Tue)
July 21 (Wed)
July 28 (Wed)
July 29 (Thu)

Would you be interested and available? Thanks so much for your kind consideration.

Best wishes,
Yvonne

Yvonne Lo | Director, Professional Development
Urban Development Institute
ylo@udi.org *Cellular:* 604.789.0898
udi.bc.ca


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Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
www.udi.bc.ca

To: The Hon. David Eby, Q.C., Attorney General and Minister of Housing
From: Anne McMullin, President & CEO, Urban Development Institute (UDI)
Date: July 8, 2021
Re: Ideas that do not need further discussion with UDI

Development Opportunities for Affordable Housing

Partnerships with First Nations: UDI's former Chair, David Negrin, told UDI members a few of years ago that First Nations will soon become the largest developers in the Province. This should be celebrated as a positive step towards reconciliation, but it is also an opportunity for the Government to achieve its 114,000 housing unit goal. First Nations have more flexibility in densifying projects, which means they can establish the benchmark for project sizes in key areas, so it is easier for other non-profit and for-profit builders to follow suit in the future. The Province should partner with First Nations and encourage them to "go big", and make sure that local governments do not slow down or reduce the size of the projects through servicing agreements. There should also be a focus on training for members of First Nations to address the growing skills gap we have in the construction industry. This also lines up with the desire of many First Nations communities to become developers.

Partnerships with Educational Institutions: Several key transit projects have been built or are proposed near universities and colleges – the gondola to SFU, the Millennium Line to UBC, the Canada Line near Langara and a potential rapid transit line that would connect the BCIT Burnaby Campus to both the Expo and Millennium lines. The Province should ensure that these sites are leveraged for additional housing – especially student and faculty housing.

TransLink: TransLink could be allowed to purchase additional lands for its transit stations (ideally before they announce where the stations are going to be). These sites can also establish benchmarks for density next to transit stations and become Transit Oriented Affordable Housing projects, by establishing metrics for affordability as is done in Seattle and Los Angeles. In addition, projects could be built around stations, as was done in New Westminster and with the Vancity building in Vancouver. This should particularly be considered when new SkyTrain lines and stations are being constructed. The UDI Board, over 10 years ago, expressed interest in Joint Venture opportunities along the right-of-ways of the SkyTrain guideways. However, some of these right-of-ways are controlled/owned by other provincial entities such as BC Hydro. If these entities do not proceed with housing projects, they could be given to TransLink, so they can proceed them. To ensure that projects can proceed affordably with appropriate densities, Transit Supportive Agreements may need to include provisions on how the sites will be developed.

Other Government and Non-profit lands: Not enough is being done with government lands at all levels. Some of these sites, like the BC Liquor store at the Cambie and 41st Canada Line Station, are at strategic locations. Again, these could be projects that set the benchmark for density. There are community facilities, libraries and even schools. There are opportunities for upgrading facilities while providing more housing. When new buildings are constructed, there should be an assessment regarding whether housing can be incorporated into the projects – especially rental and affordable housing. Below are before and after pictures of North Toronto Collegiate Institute. The Toronto District School Board could not fund the repairs needed for the school, which was almost a century old. They worked with a builder to construct a new high school with a strata project.





It does not have to be builders that take the lead, there should be a role for BC Housing or the Ministry. This would allow the Government to be more directive about its expectations to local governments. One example of utilizing public sector lands that could result in potentially of thousands of new affordable homes is False Creek South, as several leases are expiring there. This provides an opportunity to substantially increase the housing in the area – while allowing the existing residents to remain in False Creek South. The City owns a large amount of undeveloped land between the Olympic Village and the Cambie Street Bridge. Housing could be built on this site, and some of the units could be offered to tenants and other residents in the older False Creek South buildings at the same rates they pay now. When the sites with older buildings are redeveloped, these units could be offered to the next set of tenants and residents, so other older buildings can be redeveloped. This would allow those buildings to be redeveloped – with no displacement. BC Housing could also look at opportunities for sites that non-profits, religious organizations, and legions own.

Increasing Housing Options in Catchment Areas with Low Enrollment: One issue facing many urban communities is lowering student enrollments, which is leading to divisive debates regarding school closures. There is an opportunity to address housing affordability – while keeping the schools open. Local governments and school boards could work with neighbourhoods to identify how to increase the school age populations in the catchment areas by accepting growth – especially projects with homes for people with school age children. It would be critical that the schools remain open if population metrics are being achieved, so there would be a clear incentive for residents to accept growth. There could be a role for the Ministry of Housing as well as the Ministry of Education in starting these discussions.

Policy Issues

CMHC and BC Housing's HousingHub: We have heard from a number of UDI members that the HousingHub programs are not aligning with some CMHC incentive programs. One member told us that a project with affordable housing units that was approved by the HousingHub was rejected by CMHC's National Office for the Federal Affordable Mortgage Loan Insurance (MLI Flex) program because of a difference of opinion about how to obtain affordability in projects. BC Housing focuses on ensuring that the units are rented to households with incomes below certain thresholds and CMHC focuses on actual rent rates. For affordable rental projects to proceed non-profit and for-profit builders need incentives from multiple sources. We advise the Ministry and BC Housing to work with CMHC and local governments to align incentive programs for affordable housing units.

Metro's *Regional Growth Strategy* (*RGS*): Metro Vancouver is updating its *Metro 2040 Regional Growth Strategy*. It is called *Metro 2050*, and it will be the Regional Plan for the next 30 years. In the past and now, these plans have lead to even more land being frozen or restricted from housing (even affordable housing), but there have been no mandated targets for growth in areas where development should occur (e.g. near transit stations). On the positive front, Metro is considering allowing housing in mixed-employment areas if they are within 200 metres of a SkyTrain station. We are recommending this expand to 400 metres or 800 metres as these are the typical sizes of Transit Oriented Development (TOD) areas. At the same time, Metro is seeking more restrictions for industrial lands and increasing the hazard areas, greenspace and environmentally sensitive lands under *Metro 2050*. For the most part, UDI understands the need for restrictions, but it also means we need to ensure that growth will be directed to infill areas (especially TOD areas), and there is a reluctance to include targets in the new *RGS* at this time. Our understanding is that Provincial officials have been involved in the review, but we are not sure how the Ministry of Housing is involved or how the Ministry's goals of delivering 114,000 affordable and rental housing units is being considered. The *RGS* could be a vehicle for the Province to establish municipal targets in the Region – especially around transit. A draft Metro 2050 RGS is expected to be released in June with final approval occurring the following Summer.

Missing Middle and the Oregon Approach: UDI agrees that the Province should pursue the elimination of single-family home zoning as was done in Oregon. However, our members are generally Part 3 builders, and the types of builders who construct du/tri/quad-plexes are Part 9 builders who are Canadian Home Builders' Association B.C. (CHBA-BC) and the Homebuilders Association of Vancouver (HAVAN) members. We recommend the Ministry work with these organizations on this important initiative.

On-street Parking Regulations/Fees: One of the key strategies for lowering housing costs is reducing off-street parking requirements in projects. The costs per underground stall can be $70,000. Suburban municipalities with SkyTrain stations have been reluctant to substantially lower parking requirements because they fear a community backlash if it is difficult for residents to park on streets. They believe people who own cars will not pay for off-street parking in new projects and choose to park their vehicles in every diminishing on-street parking spaces. This is why it was found in Metro Vancouver's *2018 Regional Parking Study* that parking supply exceeds utilization by 42% in strata projects; in rental buildings, supply exceeds utilization by 35%; and in mixed tenure and mixed rental buildings, the number is 41%. The issue of on-street parking could be resolved if parking regulations and

fees were introduced to streets near transit areas as in the City of Vancouver. However, suburban local Councils are reluctant to introduce these measures because residents are used to free on-street parking, which is typical in the suburbs, but not appropriate in urban areas near SkyTrain. The government could work with TransLink to utilize *Transit Supportive Agreements* with municipalities and other measures to mandate on-street parking regulations and charges within 800 metres of SkyTrain stations. If not adopted by local governments, TransLink could then introduce metered parking in those areas and collect the revenues (which ideally would be spent on transit upgrades in the community). Either way, on-street parking regulations and fees would allow local Councils to be more comfortable in reducing off-street parking requirements near transit.

Education: It would assist non-profit/for-profit builders if the Ministry could educate the public on the critical challenges we face in providing affordable housing. Vancouver is one of the fastest growing regions in North America, and it will be growing even faster as Federal immigration targets expand to over 400,000 people per year. At the same time, we are a land constrained Region with the Ocean, border and mountains as well as the Agricultural Land Reserve, Urban Containment Boundary and protected industrial lands. The work for *Metro 2040* demonstrated that only 9% of the Region's land is greenfield, and 75% of the growth will be in infill areas where people live and work. We have talked to Metro, and by the 2030s there may be little to no greenfield land in the Region, so all new housing (and projects) will be infill. The public for the most part is unaware that we cannot just grow outward as most fast growing North American regions do. If we are going to address affordability, we have to grow through intensification in our existing communities. The added environmental and economic benefits of building complete infill communities should also be communicated to the public.

RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

From: May, Zachary OHCS:EX
To: Bains, Bea <Bea.Bains@fortisbc.com>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 7, 2021 3:01:16 PM PDT
Attachments: image001.jpg

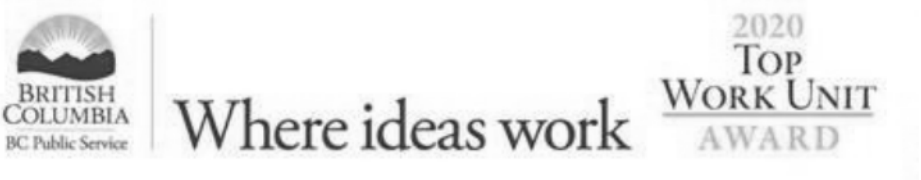
Hi Bea,

Based on the call we just had with the modelling team we will likely be cancelling the meeting next week and using both days we have placeholders for at the end of July. The team needs more time to polish the analysis and provide impact analysis along with options to the council.

Happy to set up a call prior to the next council meeting. I'll send out some dates on Friday.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Bains, Bea <Bea.Bains@fortisbc.com>
Sent: Wednesday, July 7, 2021 1:57 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac,
Hoping we can connect in advance of this meeting to get an indication of where we are headed in terms of options and recommendations.
Potential regulation on GHG and energy has the greatest impact to our organization and so would appreciate a dialogue in advance of our next Step code council meeting.

Regards Bea

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Tuesday, July 6, 2021 10:43 AM
To: Andersson, Dale OHCS:EX; Bains, Bea; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca;

Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Subject: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)
When: Wednesday, July 14, 2021 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

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Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

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To do

From: Zachary May <s.22 >
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 8, 2021 5:39:26 AM PDT

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Udi response

Get Outlook for Android

RE: Dale, I received this comment from a member of the our Building Code Committee on the Metrics report

From: Alex Blue <ablue@EvokeBuildings.com>
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: July 9, 2021 10:46:51 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Dale.

- I'll leave electric baseboards in; we do have an option for FC that would address the fluid based heating options. (Also this depends on where you are in the province and what you are building; I'm definitely seeing some electric baseboard especially on rental, smaller buildings, or outside of Vancouver)
- Part 9 info will be there in the final! It's in the spreadsheets right now only.
- Conclusions definitely will be built out in the final. Wanted to get initial feedback since some of the conclusions need a fair bit of manual work to pull data.

Alex

-----Original Message-----
From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: July 9, 2021 10:38 AM
To: Alex Blue <ablue@EvokeBuildings.com>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: Fwd: Dale, I received this comment from a member of the our Building Code Committee on the Metrics report

FYI Alex. Thank you I'll be back in the office Monday. Dale

Sent from my iPhone

Begin forwarded message:

From: Jeff Fisher <jfisher@udi.org>
Date: July 8, 2021 at 10:59:41 AM PDT
To: "Andersson, Dale OHCS:EX" <Dale.Andersson@gov.bc.ca>
Subject: Dale, I received this comment from a member of the our Building Code Committee on the Metrics report

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jeff

I have had a fairly quick read through the report (heading on vacation next week so not a lot of time). I have a few comments:

* Page 15 of the report indicates high-rise MURB archetype with electric baseboards – I think the industry has shifted away from that as a whole. In part due to market demand for cooling, combined with a large amount of DE connection mandating fluid based heating options. The second description is probably more accurate (pages 15 to 16).
* I can't really comment on Hotel, Retail and Office as we don't build them.
* I don't see any archetype information or analysis of other common built forms – specifically townhomes and low-rise wood frame condos.
* There seems to be gaps – such as conclusion so it is difficult to provide a full consideration of the report. High level – this seems to be an evolution and falls behind the standards set in the Step Code.

Thanks

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor Urban Development Institute Suite 1100, 1050 West Pender Street Vancouver, BC V6E 3S7 Canada Tel 604 661-3031|Fax 604 689-8691 Cell 604 340-8019 |E-mail jfisher@udi.org<mailto:jfisher@udi.org>
Web
https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.udi.bc.ca%2F&data=04%7C01%7CScott.B.Williams%40gov.bc.ca%7Cbfcaaf6334d6449b3c2308d94301890d%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637614496708470926%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C2000&sdata=2onStGlz%2FwHNkWzSNYinojbU6TjpKBGHNry%2BnWg%2BgGs%3D&reserved=0<https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.udi.bc.ca%2F&data=04%7C01%7CScott.B.Williams%40gov.bc.ca%7Cbfcaaf6334d6449b3c2308d94301890d%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637614496708480918%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C2000&sdata=vG5EHtjTo%2FcBmzs5qk4D57oSmN%2FTuRMqTqCR80T1XLU%3D&reserved=0>

Update: Meeting moved to July 27th. Please see separate email for more information.

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft Teams meeting

Join on your computer or mobile app

s.15

RE: Energy Step Code Council meeting (GHG mtg. #3)

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Megan Lohmann <mlohmann@communityenergy.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: July 9, 2021 3:44:42 PM PDT

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Hi Hugo,

Thanks for the update. s.22 I will connect with Megan (cc'd) to make sure UBCM still has a rep, and see whether a colleague can sit in for me.

This will make the outline and confer stage really important and expedited for me. Given the nature of the change this may need to include briefing some folks at UBCM.

So I can prepare people, can you confirm now all items scoped to be in the proposal? I imagine it will include the following, but likely I'm missing things.

- buildings types
- GHGI or other performance limit
- link to steps or not
- targeted adoption date(s)
- DE considerations/approach
- RNG path approach
- electricity connection cost exemption approach
- accounting for cooling and/or current or future weather files
- any regionality

Also, could you please confirm what metrics were used to evaluate/develop the proposed requirements? These? Anything else?

- upfront cost
- operating/energy costs
- equipment and system types needed (to hit targets) vs. local supply

Thanks in advance. This will help ensure we can properly evaluate the proposals to be able to arrive at consensus quickly.

Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

Upcoming Out of Office Alert: Away from July 24 – August 8

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 9, 2021 3:05 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com;

nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; rthe@wesgroup.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; pauline@chbabc.org; Remi Charron <rcharron@bchousing.org>
Subject: Energy Step Code Council meeting (GHG mtg. #3)

Hello, members of the Energy Step Code Council:

I hope everyone is staying well this summer. I am writing to discuss a change in scheduling for the upcoming meetings to discuss how to reduce carbon in new construction.

Instead of meeting on July 14th, we will meet on both days held in your calendars (Tues. July 27th from 1-4 p.m. and July 28th from 9 a.m.-noon). This will provide BSSB additional time to create specific proposals for your consideration, and to send an outline to you a week in advance so you have time to confer with your colleagues.

Our goal will be to reach a consensus on a preferred approach after those two meetings.

Thanks very much for your understanding. If you have questions, please feel free to send me an email.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Energy Step Code Council meeting (GHG mtg. #3)

From: May, Zachary OHCS:EX
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: July 9, 2021 3:52:53 PM PDT
Attachments: image001.jpg

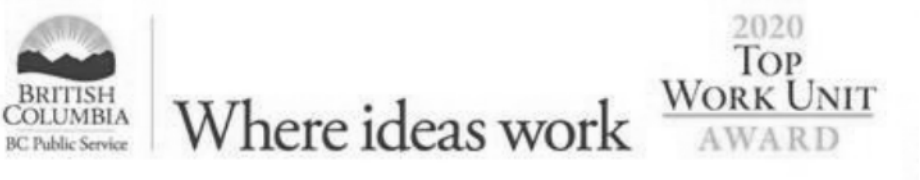
Hi Max,

Will confirm next week, but all the below issues should be addressed in the proposals and analysis that Alex Blue's team is doing for us.

One item I'm not clear on is *electricity connection cost exemption approach*. Can you help me understand what you're referring to?

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Sent: Friday, July 9, 2021 3:45 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Megan Lohmann <mlohmann@communityenergy.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)
Importance: High

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,

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Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; pauline@chbabc.org; Remi Charron <rcharron@bchousing.org>
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Hugo

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Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
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Email: hugo.wong@gov.bc.ca

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To:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc:	Megan Lohmann <mlohmann@communityenergy.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent:	July 9, 2021 4:00:43 PM PDT
Attachments:	image001.jpg

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Hi Zac,

Excellent, thanks very much.

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MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

Upcoming Out of Office Alert: Away from July 24 – August 8

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 9, 2021 3:53 PM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
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(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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RE: UDI Webinar - Panelist Invitation

From: May, Zachary OHCS:EX
To: Yvonne Lo <ylo@udi.org>
Sent: July 9, 2021 4:02:27 PM PDT
Attachments: image005.jpg, image006.jpg, image007.jpg, image004.jpg

Hi Yvonne,

I'm happy to participate. The only dates that work for me are the 20th and 21st.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

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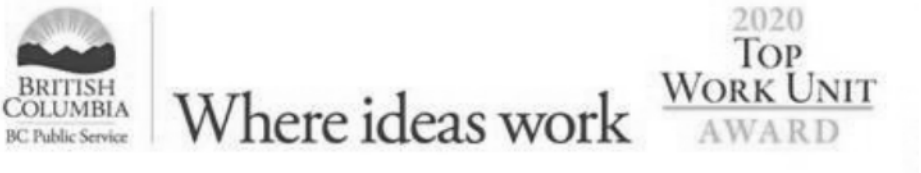

From: Yvonne Lo <ylo@udi.org>
Sent: Monday, July 5, 2021 1:58 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: UDI Webinar - Panelist Invitation
Importance: High

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Dear Zachary,

Hope you had a wonderful weekend! Can't believe it's been over a year since we last worked together on a webinar.

We are currently working on a potential webinar on the GHL report of the possible mass timber code changes with COV. Andrew Harmsworth will present the report findings and explained the possible code changes identified. Then Patrick Enright can briefly preface his presentation by summarizing how the City might use this report and the survey results.

After discussing with Andrew and Jeff, we would love to invite you to be our panelist . We are also thinking of inviting Rocky Sethi of Adera as a moderator to complete the panel.

The suggested webinar dates (9:15am – 10:30am):
July 20 (Tue)
July 21 (Wed)
July 28 (Wed)
July 29 (Thu)

Would you be interested and available? Thanks so much for your kind consideration.

Best wishes,
Yvonne

Yvonne Lo | Director, Professional Development

Urban Development Institute
ylo@udi.org *Cellular:* 604.789.0898
udi.bc.ca



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Sent: July 9, 2021 4:03:44 PM PDT
Attachments: image001.jpg

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Gotcha, thanks Zac.

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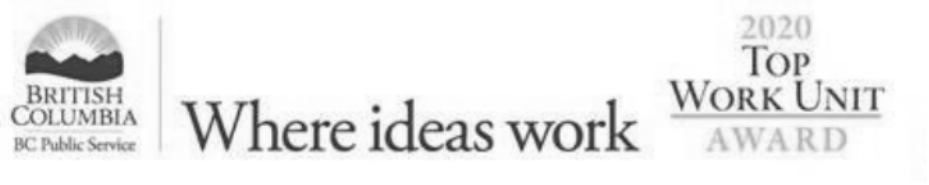

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Totally appreciate the challenge with vacations. The goal would be to get a draft proposal out of the meetings in July that everyone could shop around their organizations and likely seek final input on the reg by end of august or early sept. Hoping that works. Happy to set up a call to discuss further next week.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

On Jul 10, 2021, at 7:23 AM, Megan Lohmann <mlohmann@communityenergy.bc.ca> wrote:

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Thanks all and for Max emphasizing the ideal scenario to have the proposals early enough that we can engage lightly with our colleagues.

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Thanks,
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Sent: July 9, 2021 5:06 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

Gotcha, thanks Zac.

s.22

Cheers

Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY

Sustainability Office
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Upcoming Out of Office Alert: Away from July 24 – August 8

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Director, Strategic Policy
(he/him/his)

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Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca
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- upfront cost

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Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; pauline@chbabc.org; Remi Charron <rcharron@bchousing.org>
Subject: Energy Step Code Council meeting (GHG mtg. #3)

Hello, members of the Energy Step Code Council:

I hope everyone is staying well this summer. I am writing to discuss a change in scheduling for the upcoming meetings to discuss how to reduce carbon in new construction.

Instead of meeting on July 14th, we will meet on both days held in your calendars (Tues. July 27th from 1-4 p.m. and July 28th from 9 a.m.-noon). This will provide BSSB additional time to create specific proposals for your consideration, and to send an outline to you a week in advance so you have time to confer with your colleagues.

Our goal will be to reach a consensus on a preferred approach after those two meetings.

Thanks very much for your understanding. If you have questions, please feel free to send me an email.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Energy Step Code Council meeting (GHG mtg. #3)

From: Megan Lohmann <mlohmann@communityenergy.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: July 12, 2021 7:10:43 AM PDT

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Ok thanks. That sounds a little more doable than getting consensus at these meetings.

Looking forward to the proposals!

Thanks,
Megan

-----Original Message-----
From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: July 10, 2021 1:12 PM
To: Megan Lohmann <mlohmann@communityenergy.bc.ca>
Cc: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: Re: Energy Step Code Council meeting (GHG mtg. #3)

Totally appreciate the challenge with vacations. The goal would be to get a draft proposal out of the meetings in July that everyone could shop around their organizations and likely seek final input on the reg by end of august or early sept. Hoping that works. Happy to set up a call to discuss further next week.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

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muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>; Sykes, Maxwell
<Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>; rthe@wesgroup.ca<mailto:rthe@wesgroup.ca>;

Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca<mailto:Holly.Wacker@gov.bc.ca>>; Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>; ralph.wells@ubc.ca<mailto:ralph.wells@ubc.ca>; tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca<mailto:Scott.B.Williams@gov.bc.ca>>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca<mailto:guido.wimmers@unbc.ca>>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca<mailto:Andrew.PapeSalmon@gov.bc.ca>>; pauline@chbabc.org<mailto:pauline@chbabc.org>; Remi Charron <rcharron@bchousing.org<mailto:rcharron@bchousing.org>>
Subject: Energy Step Code Council meeting (GHG mtg. #3)

Hello, members of the Energy Step Code Council:

I hope everyone is staying well this summer. I am writing to discuss a change in scheduling for the upcoming meetings to discuss how to reduce carbon in new construction.

Instead of meeting on July 14th, we will meet on both days held in your calendars (Tues. July 27th from 1-4 p.m. and July 28th from 9 a.m.-noon). This will provide BSSB additional time to create specific proposals for your consideration, and to send an outline to you a week in advance so you have time to confer with your colleagues.

Our goal will be to reach a consensus on a preferred approach after those two meetings.

Thanks very much for your understanding. If you have questions, please feel free to send me an email.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch Office of Housing and Construction Standards Ministry of Attorney General and Minister Responsible for Housing Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca<mailto:hugo.wong@gov.bc.ca>

RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

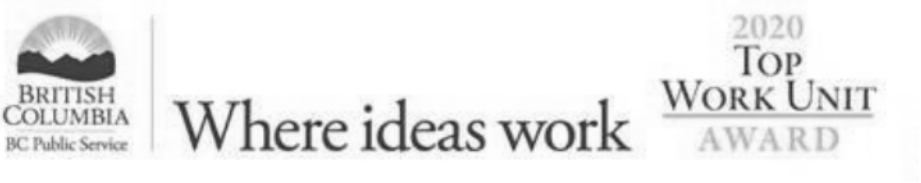
From: May, Zachary OHCS:EX
To: Bains, Bea <Bea.Bains@fortisbc.com>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 12, 2021 2:42:18 PM PDT
Attachments: image001.jpg

Hi Bea,

Does this Friday at 11:30am work for you?

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Bains, Bea <Bea.Bains@fortisbc.com>
Sent: Wednesday, July 7, 2021 3:28 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Great. Thanks Zac.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, July 7, 2021 3:01 PM
To: Bains, Bea <Bea.Bains@fortisbc.com>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

Hi Bea,

Based on the call we just had with the modelling team we will likely be cancelling the meeting next week and using both days we have placeholders for at the end of July. The team needs more time to polish the analysis and provide impact analysis along with options to the council.

Happy to set up a call prior to the next council meeting. I'll send out some dates on Friday.

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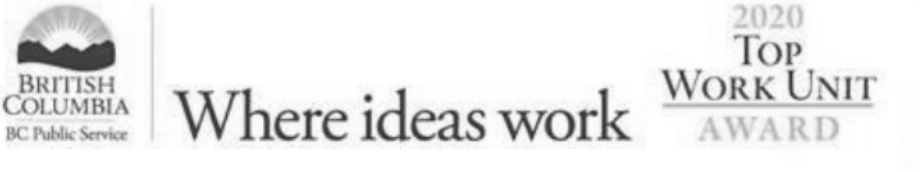
Zachary D. May, MBA
Director, Strategic Policy

(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Bains, Bea <Bea.Bains@fortisbc.com>
Sent: Wednesday, July 7, 2021 1:57 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac,
Hoping we can connect in advance of this meeting to get an indication of where we are headed in terms of options and recommendations.
Potential regulation on GHG and energy has the greatest impact to our organization and so would appreciate a dialogue in advance of our next Step code council meeting.

Regards Bea

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Tuesday, July 6, 2021 10:43 AM
To: Andersson, Dale OHCS:EX; Bains, Bea; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Subject: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)
When: Wednesday, July 14, 2021 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

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Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft Teams meeting

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Click here to join the meeting

Learn More | Meeting options

_____

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*"FortisBC" refers to the FortisBC group of companies which includes FortisBC Holdings. Inc., FortisBC Energy Inc., FortisBC Inc., FortisBC Alternative Energy Services Inc. and Fortis Generation Inc.

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RE: Energy Step Code Council meeting (GHG mtg. #3)

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 12, 2021 3:03:41 PM PDT
Attachments: image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Zac – sounds good.

Cheers
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

Upcoming Out of Office Alert: Away from July 24 – August 8

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 12, 2021 2:59 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; rthe@wesgroup.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; pauline@chbabc.org; Remi Charron <rcharron@bchousing.org>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

Hello everyone,

I received a few emails on Friday asking for additional clarity about the agenda for the meetings on July 27th and 28th, and opportunities to provide feedback after those meetings.

At the meetings on the 27th and 28th our consultant team working the Metrics Report will explore how different options for regulating carbon pollution (e.g. GHGi, total GHG, other options) will impact different building types in terms of design and cost implications. We will also review these findings to address key issues raised during our survey in April. We will be seeking consensus on which options seem best, and where we need more analysis or input.

The goal from these two meetings is to prepare a set of draft recommendation(s) for the technical requirements for carbon pollution standards and a summary of the design and cost implications of the approach(es). We will summarize this in a document that can be shared within your organizations for further input over a few additional weeks. The goal

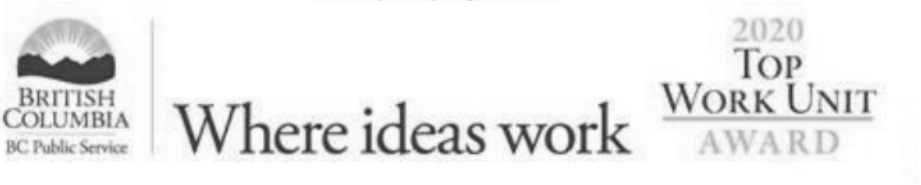
will be to have recommended options and feedback from your organizations and members by the end of August. This should put us in a good position to summarize the technical requirements that belong in regulation and the supporting guidelines that would appear in an updated Best Practices Guideline for Local Governments by September.

The bottom line is that we will work towards identifying preferred options (or just one if possible) on the 27th and 28th, but we will be proving materials and time to seek additional input in the weeks following the meeting.

Please feel free to reach out if you have any questions. I appreciate everyone's patience as we adapt and adjust to changing timelines and the other rapidly evolving CleanBC discussions. I remain optimistic that we are on track to have final recommendations from the Energy Step Code Council ready in September.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, July 9, 2021 3:05 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; pauline@chbabc.org; Remi Charron <rcharron@bchousing.org>
Subject: Energy Step Code Council meeting (GHG mtg. #3)

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Thanks very much for your understanding. If you have questions, please feel free to send me an email.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

From: Bains, Bea <Bea.Bains@fortisbc.com>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 12, 2021 3:06:32 PM PDT
Attachments: image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac,
Hope you had a good weekend.
Unfortunately I am not able to make it this Friday but can do Wednesday 11 to 12pm or 1 to 3:30pm or Thursday 9am to 10am or 1 to 3pm.
Would any of those times work?

Thx Bea

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, July 12, 2021 2:42 PM
To: Bains, Bea <Bea.Bains@fortisbc.com>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

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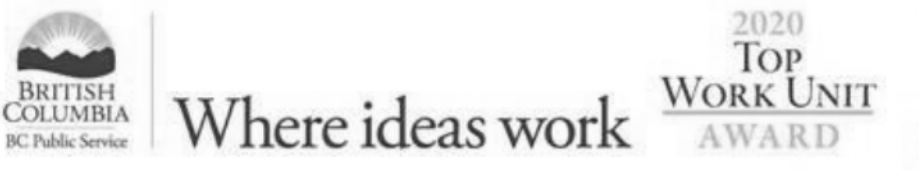
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Bains, Bea <Bea.Bains@fortisbc.com>
Sent: Wednesday, July 7, 2021 3:28 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

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Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

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Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
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2020 TOP WORK UNIT AWARD

From: Bains, Bea <Bea.Bains@fortisbc.com>
Sent: Wednesday, July 7, 2021 1:57 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

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Potential regulation on GHG and energy has the greatest impact to our organization and so would appreciate a dialogue in advance of our next Step code council meeting.

Regards Bea

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Tuesday, July 6, 2021 10:43 AM
To: Andersson, Dale OHCS:EX; Bains, Bea; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 May, Zachary OHCS:EX; christopher.mclellan@canada.ca;

mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Subject: [External Email] - Energy Step Code Council meeting (GHG mtg. #3)
When: Wednesday, July 14, 2021 1:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

CAUTION: This is an external email.
Do not respond, click on links or open attachments unless you recognize the sender.

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft Teams meeting

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Click here to join the meeting

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FW: UPDATED BC Worksafe and CO2 rates

From: Eoghan Hayes <ehayes@edgec.ca>
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Connolly,Norm <NConnolly@richmond.ca>, Jeff Fisher <jfisher@udi.org>
Sent: July 13, 2021 9:28:44 AM PDT
Attachments: image002.png, image004.png, image007.png, image006.png, image005.png, image003.png, image001.png

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Morning all

I wanted to share this email exchange back and forth between Iain and I

Please read from the bottom up share your thoughts when you have a moment.

Note the potential code of ethics violation with reducing **minimum** outside air rates.

Best regards,
Eoghan Hayes, P.Eng, BEMP, RESET AP , LEED AP BD&C
Managing Director
+1 (604) 338 1063 | www.edgesustainability.com
The Brickworks Building
304–1228 Hamilton St., Vancouver BC, V6B 6L2

edge consultants airsset by edge

From: Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>
Sent: July 8, 2021 11:00 AM
To: Eoghan Hayes <ehayes@edgec.ca>
Subject: RE: UPDATED BC Worksafe and CO2 rates

HI Eoghan,

Wow – thanks for the comprehensive response. I'm trying to find the time to read through this!

Iain

****

Iain A Macdonald
Cell: +1 (343) 550 0541

From: Eoghan Hayes [mailto:ehayes@edgec.ca]
Sent: July 5, 2021 8:29 PM
To: Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>
Subject: FW: UPDATED BC Worksafe and CO2 rates

****ATTENTION*** This email originated from outside of the NRC. ***ATTENTION*** Ce courriel provient de l'extérieur du CNRC*

Hi Iain,

Hope you had a great weekend. Your assumptions below are correct.

The 350 ppm for ambient is on the low side. Ambient now is at about 415 to 420 ppm and is predicted to rise. Appendix D of ASHRAE 62.1-2016 references 700 ppm above ambient levels which from the extract below can range from 300 to 500 ppm above outside air levels.

Thus, maintaining a steady-state CO_2 concentration in a space no greater than about 700 ppm above outdoor air levels will indicate that a substantial majority of visitors entering a space will be satisfied with respect to human bioeffluents (body odor). A more detailed discussion of this relationship between CO_2 concentrations and the perception of bioeffluents, as well as the use of indoor CO_2 to estimate building ventilation rates, is contained in ASTM Standard D6245 [D-8].

CO_2 concentrations in acceptable outdoor air typically range from 300 to 500 ppm. High CO_2 concentrations in the outdoor air can be an indicator of combustion and/or other contaminant sources.

Most existing buildings and building standards are programmed to 1,000 PPM. I realize there is differences on opinion on using CO_2 as a metric for good indoor air quality, however regulations are regulations regardless of our opinion. I do agree with the 1,000 ppm limit inside and I would actually prefer to see this limit reduced down further especially when energy conditions are favorable to do so (airside free cooling using economizers is a great example) .

Based on our experience to date, we see a number of key things in the industry that happen on a continuous regular basis.

a. A good number of mechanical designs that come across our desks do not meet code minimum ventilation rates. The reasons for this vary from using more recent versions of ASHRAE 62.1 2007 for LEED for example to not understanding the ASHRAE 62.1 standard at all.
b. Take an office for example: most of the offices we work on are core and shell offices, meaning that at the time of design we have zero idea of who the tenant will be and their occupancy density. You could have a government office in the building with 1 person / 200 ft^2 or a WeWork that has 1 person / 100 ft^{2-} or less. Each of the ASHRAE 62.1 standards assume a general default occupancy density for all types of office spaces, regardless of the real end-use office type, and engineers just use this as the default.
c. ASHRAE 62.1-2001 without add N (current BC Building Code) for an office building is based on 7 people every 1,000 ft^2/100 m^2 at 20 CFM. To keep this simple, this works out to 0.14 CFM/ft^2.

TABLE 2

OUTDOOR AIR REQUIREMENTS FOR VENTILATION*

2.1 COMMERCIAL FACILITIES (offices, stores, shops, hotels, sports facilities)

Application	Estimated Maximum** Occupancy P/1000 ft^2 or 100 m^2	Outdoor Air Requirements				Comments
		cfm/ person	L/s· person	cfm/ft^2	$L/s \cdot m^2$	
Dry Cleaners, Laundries						Dry-cleaning processes may require more ai
Commercial laundry	10	25	13			
Commercial dry cleaner	30	30	15			
Storage, pick up	30	35	18			
Coin-operated laundries	20	15	8			
Coin-operated dry cleaner	20	15	8			
Food and Beverage Service						
Dining rooms	70	20	10			
Cafeteria, fast food	100	20	10			
Bars, cocktail lounges	100	30	15			Supplementary smoke-removal equipment may be required.
Kitchens (cooking)	20	15	8			Makeup air for hood exhaust may require more ventilating air. The sum of the outdoo air and transfer air of acceptable quality fro adjacent spaces shall be sufficient to provid an exhaust rate of not less than 1.5 cfm/ft^2 (7.5 $L/s \cdot m^2$).
Garages, Repair, Service Stations						
Enclosed parking garage				1.50	7.5	Distribution among people must consider worker location and concentration of runnir engines; stands where engines are run must incorporate systems for positive engines exhaust withdrawal. Contaminant sensors may be used to control ventilation.
Auto repair rooms				1.50	7.5	
Hotels, Motels, Resorts, Dormitories				cfm/room	L/s·room	Independent of room size.
Bedrooms				30	15	
Living rooms				30	15	
Baths				35	18	Installed capacity for intermittent use.
Lobbies	30	15	8			
Conference rooms	50	20	10			
Assembly rooms	120	15	8			
Dormitory sleeping areas	20	15	8			See also food and beverage services, mer- chandising, barber and beauty shops, garag
Gambling casinos	120	30	15			Supplementary smoke-removal equipment may be required.
Offices						
Office space	7	20	10			Some office equipment may require local exhaust.
Reception areas	60	15	8			
Telecommunication centers and data entry areas	60	20	10			
Conference rooms	50	20	10			

d. The ASHRAE 62.-1 2016 Standard Table 6.2.2.1 table below states an office space now only has 5 people / 1,000 ft^2 (or 100 m^2) and each person should be given 17 CFM . This works out to 0.085 CFM/ft^2. The mistakes we see with the later versions of the standard are engineers use either the people outdoor air rates or the area outdoor air rate, instead of the sum of both. This means that for an office we see designs with 0.06 CFM/ft^2 or 0.025 CFM/ft^2, rather than the sum which is 0.085CFM/ft^2

TABLE 6.2.2.1 Minimum Ventilation Rates in Breathing Zone *(Continued)*
(Table 6.2.2.1 shall be used in conjunction with the accompanying notes.)

Occupancy Category	People Outdoor Air Rate R_p		Area Outdoor Air Rate R_a		Notes	Default Values			
						Occupant Density (see Note 4)	Combined Outdoor Air Rate (see Note 5)		
	cfm/ person	L/s-person	cfm/ft^2	L/s·m^2		#/1000 ft^2 or #/100 m^2	cfm/ person	L/s-person	Air Class
General									
Break rooms	5	2.5	0.06	0.3	H	25	7	3.5	1
Coffee stations	5	2.5	0.06	0.3	H	20	8	4	1
Conference/meeting	5	2.5	0.06	0.3	H	50	6	3.1	1
Corridors	—	—	0.06	0.3	H	—			1
Occupiable storage rooms for liquids or gels	5	2.5	0.12	0.6	B	2	65	32.5	2
Hotels, Motels, Resorts, Dormitories									
Bedroom/living room	5	2.5	0.06	0.3	H	10	11	5.5	1
Barracks sleeping areas	5	2.5	0.06	0.3	H	20	8	4.0	1
Laundry rooms, central	5	2.5	0.12	0.6		10	17	8.5	2
Laundry rooms within dwelling units	5	2.5	0.12	0.6		10	17	8.5	1
Lobbies/prefunction	7.5	3.8	0.06	0.3	H	30	10	4.8	1
Multipurpose assembly	5	2.5	0.06	0.3	H	120	6	2.8	1
Office Buildings									
Breakrooms	5	2.5	0.12	0.6		50	7	3.5	1
Main entry lobbies	5	2.5	0.06	0.3	H	10	11	5.5	1
Occupiable storage rooms for dry materials	5	2.5	0.06	0.3		2	35	17.5	1
Office space	5	2.5	0.06	0.3	H	5	17	8.5	1
Reception areas	5	2.5	0.06	0.3	H	30	7	3.5	1
Telephone/data entry	5	2.5	0.06	0.3	H	60	6	3.0	1

GENERAL NOTES FOR TABLE 6.2.2.1
1 **Related requirements:** The rates in this table are based on all other applicable requirements of this standard being met.
2 **Environmental Tobacco Smoke:** This table applies to ETS-free areas. Refer to Section 5.17 for requirements for buildings containing ETS areas and ETS-free areas.

So a few observations here between 62.1-2001 w/o Add N (current code) and the 62.1-2016 proposed to be used, and other observations as it relates to air quality in general.

1. The numbers in the standards indicated that **occupancy rates in offices have dropped by 29%** between 2001 and 2016 for our buildings moving forward into the future- have they actually? (**5 people / 1,000 ft^2** in 62.1-2016 vs **7 people /1,000 ft^2** in 62.1-2001 w/o Add N).
2. **Ventilation rates per person have dropped by 15%** (20 CFM per person vs 17CFM per person).
3. Overall ventilation rates for an office space have dropped by **39 %** when comparing both standards (**0.14 CFM/ft^2 vs 0.085 CFM/ft^2**).

As well as this:

4. We know CO_2 levels in outside air are increasing.
5. We are talking about design here, not operation. These are code **minimum** ventilation rates. We should not be under sizing ventilation HVAC systems especially given the pandemic. We should be mandating smart controls like demand control ventilation systems and HRVs and ERV which is what we already do a vast majority of these projects.
6. Reducing the design air flow rates of outside air ventilation systems will:
    a. Reduce air side free cooling

b. Reduce climate resiliency of the building because outdoor CO_2 levels are increasing.
c. Increase the risk of virus/bacteria spread in indoor environments when working in an enclosed space for long periods of time with no access to operable windows.

Our experience is primarily with office space ventilation and using this as an example here. We have other examples and these can be provided as well if necessary. We have carried out a lot of analysis on CO_2 levels in indoor spaces based on:

- ASHRAE 62.1 minimum ventilation rates
- Occupant gains in the space as per 2013 ASHRAE Handbook - Fundamentals Table 1 (p18.4)

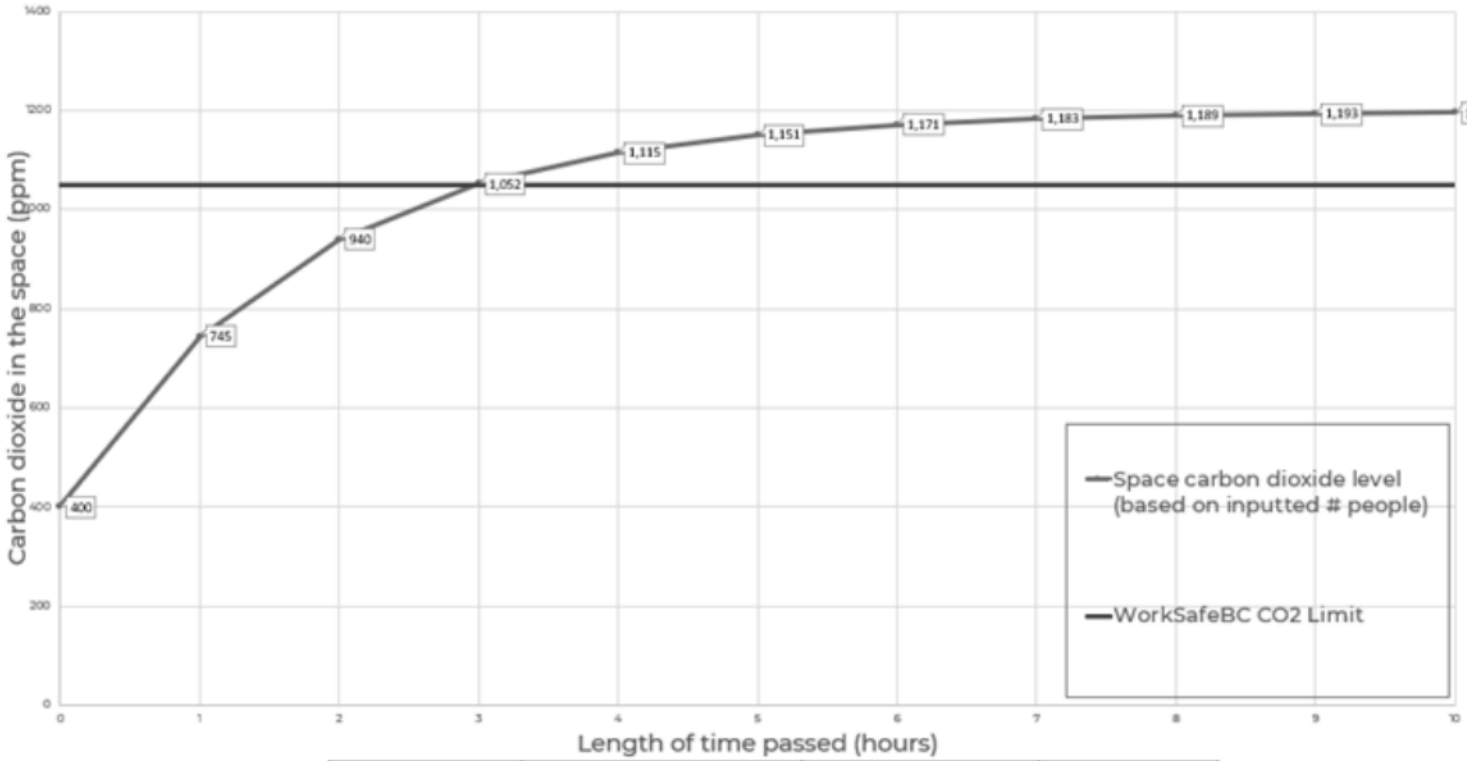
The graphs below show the CO_2 rates a 1,000 ft^2 (92.90m^2) office space (1,000ft^2 as per ASHRAE 62,1 metrics) and have plotted these over time. The analysis has been carried out using the 62.1-2016 ventilation rates (first graph) and the 62.1-2001 (w/o Add N) ventilation rates (second graph). Both graphs use the office occupant density in the current code (62.1-2001 (w/o Add N)). The red line on the graph shows the WorkSafe BC CO_2 limit for indoor spaces. As you can see, using 62.1-2016 minimum ventilation rate and the occupant density from 62.1-2001 (w/o Add N), the CO_2 produced by the people in the space exceeds the WorkSafe BC limits.

In conclusion, based on our experience:

- HVAC engineers tend to design to absolute code minimum as it relates to ventilation- designing to minimums is not considered good engineering practice.
- Operation is not design- we should be mandating smart controls like demand control ventilation systems and designing larger than code minimum ventilation for our buildings.
- If we have exact same office occupancy as the current code (62.1-2001 w/o Add N: 7 people per 1,000 ft^2) and use the 62.1-2016 ventilation rates we would exceed WorkSafe BC CO_2 limits.
- Reducing outside air rates by 39 % in offices for code minimum ventilation would not be deemed a wise course of action given the current SARS-CoV-2 pandemic and could also be interpreted as a direct violation of the EGBC code of ethics, https://www.egbc.ca/Complaints-Discipline/Code-of-Ethics/Code-of-Ethics specifically, *"hold paramount the safety, health, and welfare of the public, including the protection of the environment and the* ***promotion of health and safety in the workplace****"*

Space Carbon Dioxide Concentration Over Time (based on ASHRAE 62.1-2016 minimum ventilation rates)

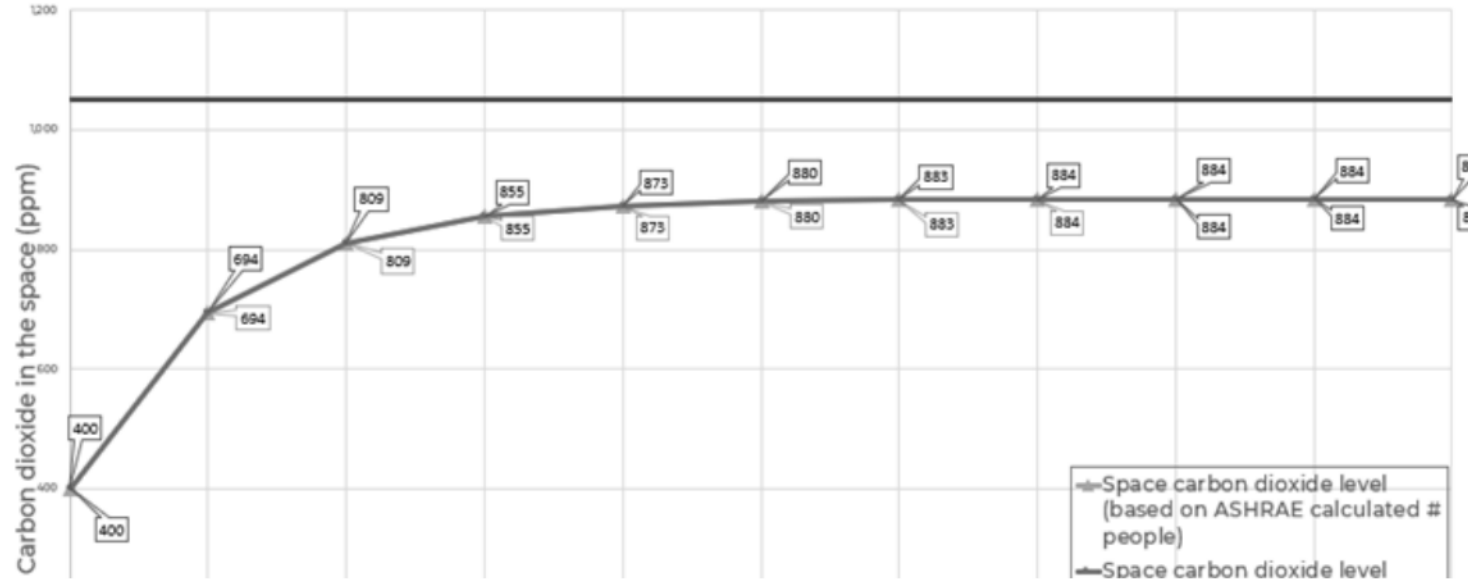
Activity in space	Occupancy Cateogory	Room Type	Area of space (m^2)	Height of space (m)	Actual number of people in space
Seated, very light work	Office Buildings	Office space	92.90	2.75	7.00

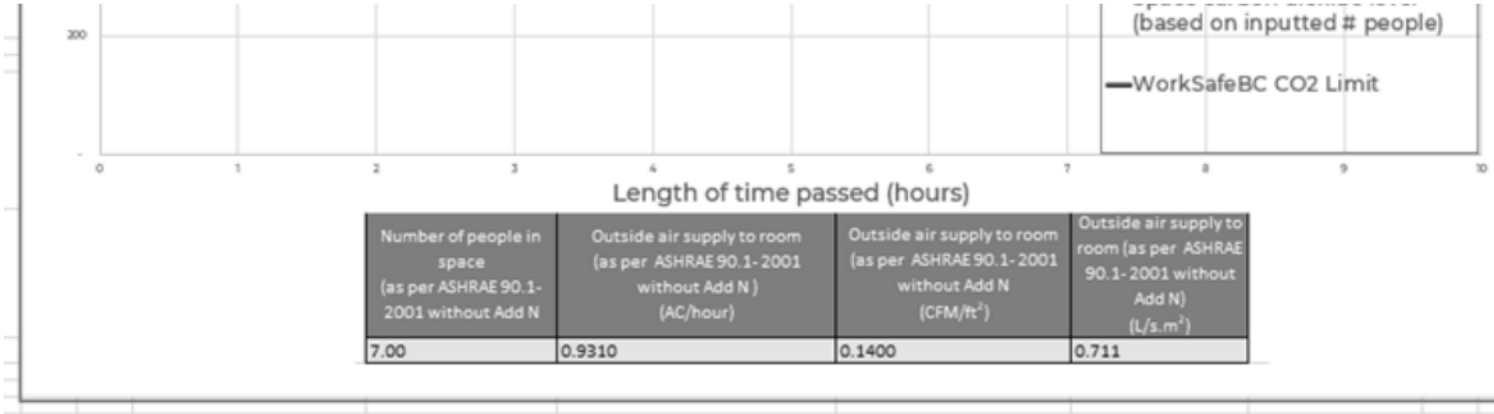


Number of people in space (as per ASHRAE 62.1-2016)	Outside air supply to room (as per ASHRAE 62.1-2016) (AC/hour)	Outside air supply to room (as per ASHRAE 62.1-2016) (CFM/ft^2)	Outside air supply to room (as per ASHRAE 62.1- 2016) (L/s.m^2)
5.00	0.5653	0.0850	0.432

Space Carbon Dioxide Concentration Over Time (based on ASHRAE 62.1-2001 (without Addendum N) minimum ventilation rates)

Activity in space	Occupancy Cateogory	Room Type	Area of space (m^2)	Height of space (m)	Actual number of people in space
Seated, very light work	Offices	Office space	92.90	2.75	7.00





Number of people in space (as per ASHRAE 90.1-2001 without Add N	Outside air supply to room (as per ASHRAE 90.1-2001 without Add N) (AC/hour)	Outside air supply to room (as per ASHRAE 90.1-2001 without Add N (CFM/ft²)	Outside air supply to room (as per ASHRAE 90.1-2001 without Add N) (L/s.m²)
7.00	0.9310	0.1400	0.711

Best regards,
Eoghan Hayes, P.Eng, BEMP, RESET AP , LEED AP BD&C
Managing Director
+1 (604) 338 1063 | www.edgesustainability.com
The Brickworks Building
304–1228 Hamilton St., Vancouver BC, V6B 6L2

edge consultants airsset byedge

From: Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>
Sent: July 2, 2021 6:50 AM
To: Eoghan Hayes <ehayes@edgec.ca>
Subject: BC Worksafe and CO2 rates

Hi Eoghan,

Thanks for the link to the BC worksafe document. From what I see they are assuming an ambient of 350 ppm and then setting their limit as 650 ppm above ambient. (this aligns with the 1000ppm that ASHRAE used in the past, before they changed to 700 ppm above ambient). Is that correct? Is the 650 above ambient the target that people are having difficulty with? If are BC worksafe measuring levels?

Iain

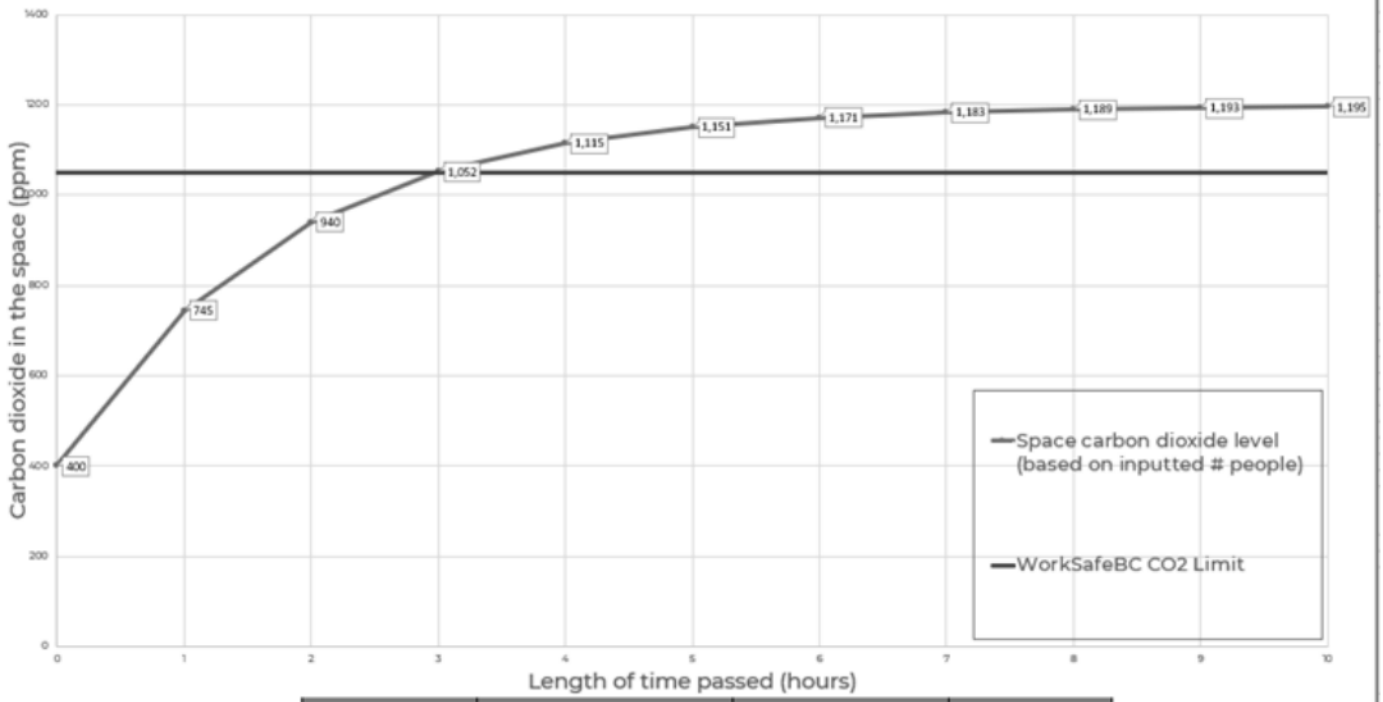
****
Iain A Macdonald
Cell: +1 (343) 550 0541

TABLE 2
OUTDOOR AIR REQUIREMENTS FOR VENTILATION*
2.1 COMMERCIAL FACILITIES (offices, stores, shops, hotels, sports facilities)

Application	Estimated Maximum** Occupancy P/1000 ft^2 or 100 m^2	Outdoor Air Requirements				Comments
		cfm/ person	L/s· person	cfm/ft^2	L/s·m^2	
Dry Cleaners, Laundries						Dry-cleaning processes may require more air.
Commercial laundry	10	25	13			
Commercial dry cleaner	30	30	15			
Storage, pick up	30	35	18			
Coin-operated laundries	20	15	8			
Coin-operated dry cleaner	20	15	8			
Food and Beverage Service						
Dining rooms	70	20	10			
Cafeteria, fast food	100	20	10			
Bars, cocktail lounges	100	30	15			Supplementary smoke-removal equipment may be required.
Kitchens (cooking)	20	15	8			Makeup air for hood exhaust may require more ventilating air. The sum of the outdoor air and transfer air of acceptable quality from adjacent spaces shall be sufficient to provide an exhaust rate of not less than 1.5 cfm/ft^2 (7.5 L/s·m^2).
Garages, Repair, Service Stations						
Enclosed parking garage				1.50	7.5	Distribution among people must consider worker location and concentration of running engines; stands where engines are run must incorporate systems for positive engines exhaust withdrawal. Contaminant sensors may be used to control ventilation.
Auto repair rooms				1.50	7.5	
Hotels, Motels, Resorts, Dormitories				cfm/room	L/s·room	Independent of room size.
Bedrooms				30	15	
Living rooms				30	15	
Baths				35	18	Installed capacity for intermittent use.
Lobbies	30	15	8			
Conference rooms	50	20	10			
Assembly rooms	120	15	8			
Dormitory sleeping areas	20	15	8			See also food and beverage services, merchandising, barber and beauty shops, garages.
Gambling casinos	120	30	15			Supplementary smoke-removal equipment may be required.
Offices						
Office space	7	20	10			Some office equipment may require local exhaust.
Reception areas	60	15	8			
Telecommunication centers and data entry areas	60	20	10			
Conference rooms	50	20	10			

Space Carbon Dioxide Concentration Over Time (based on ASHRAE 62.1-2016 minimum ventilation rates)

Activity in space	Occupancy Cateogory	Room Type	Area of space (m^2)	Height of space (m)	Actual number of people in space
Seated, very light work	Office Buildings	Office space	92.90	2.75	7.00



Number of people in space (as per ASHRAE 62.1-2016)	Outside air supply to room (as per ASHRAE 62.1-2016) (AC/hour)	Outside air supply to room (as per ASHRAE 62.1-2016) (CFM/ft^2)	Outside air supply to room (as per ASHRAE 62.1- 2016) ($L/s.m^2$)
5.00	0.5653	0.0850	0.432

Space Carbon Dioxide Concentration Over Time (based on ASHRAE 62.1-2001 (without Addendum N) minimum ventilation rates)

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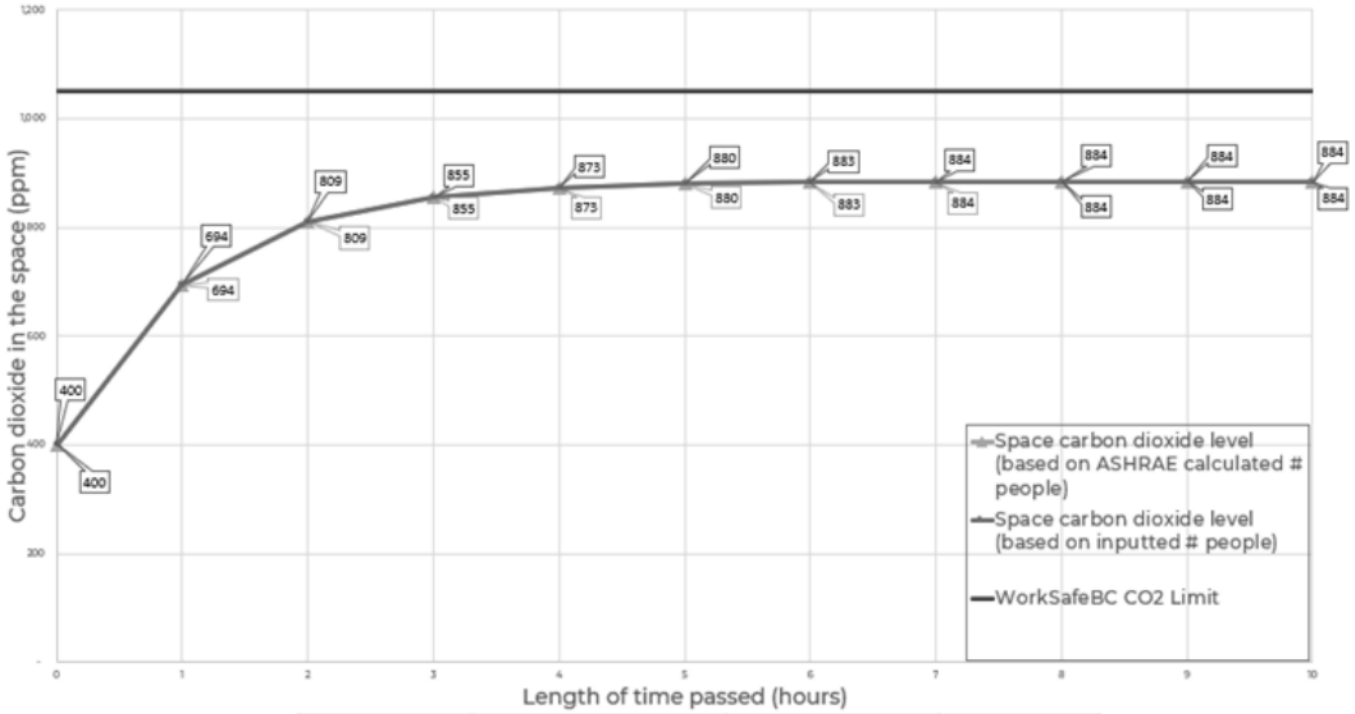
edge consultants

Activity in space	Occupancy Cateogory	Room Type	Area of space (m^2)	Height of space (m)	Actual number of people in space
Seated, very light work	Offices	Office space	92.90	2.75	7.00



Number of people in space (as per ASHRAE 90.1-2001 without Add N	Outside air supply to room (as per ASHRAE 90.1-2001 without Add N) (AC/hour)	Outside air supply to room (as per ASHRAE 90.1-2001 without Add N (CFM/ft^2)	Outside air supply to room (as per ASHRAE 90.1-2001 without Add N) (L/s.m^2)
7.00	0.9310	0.1400	0.711

TABLE 6.2.2.1 Minimum Ventilation Rates in Breathing Zone *(Continued)*
(Table 6.2.2.1 shall be used in conjunction with the accompanying notes.)

	People Outdoor Air Rate R_p		Area Outdoor Air Rate R_a			Default Values			
						Occupant Density (see Note 4)	Combined Outdoor Air Rate (see Note 5)		
Occupancy Category	cfm/ person	L/s-person	cfm/ft^2	L/s·m^2	Notes	#/1000 ft^2 or #/100 m^2	cfm/ person	L/s-person	Air Class
General									
Break rooms	5	2.5	0.06	0.3	H	25	7	3.5	1
Coffee stations	5	2.5	0.06	0.3	H	20	8	4	1
Conference/meeting	5	2.5	0.06	0.3	H	50	6	3.1	1
Corridors	—	—	0.06	0.3	H	—			1
Occupiable storage rooms for liquids or gels	5	2.5	0.12	0.6	B	2	65	32.5	2
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Barracks sleeping areas	5	2.5	0.06	0.3	H	20	8	4.0	1
Laundry rooms, central	5	2.5	0.12	0.6		10	17	8.5	2
Laundry rooms within dwelling units	5	2.5	0.12	0.6		10	17	8.5	1
Lobbies/prefunction	7.5	3.8	0.06	0.3	H	30	10	4.8	1
Multipurpose assembly	5	2.5	0.06	0.3	H	120	6	2.8	1
Office Buildings									
Breakrooms	5	2.5	0.12	0.6		50	7	3.5	1
Main entry lobbies	5	2.5	0.06	0.3	H	10	11	5.5	1
Occupiable storage rooms for dry materials	5	2.5	0.06	0.3		2	35	17.5	1
Office space	5	2.5	0.06	0.3	H	5	17	8.5	1
Reception areas	5	2.5	0.06	0.3	H	30	7	3.5	1
Telephone/data entry	5	2.5	0.06	0.3	H	60	6	3.0	1

GENERAL NOTES FOR TABLE 6.2.2.1

1 **Related requirements:** The rates in this table are based on all other applicable requirements of this standard being met.

2 **Environmental Tobacco Smoke:** This table applies to ETS-free areas. Refer to Section 5.17 for requirements for buildings containing ETS areas and ETS-free areas.

Thus, maintaining a steady-state CO_2 concentration in a space no greater than about 700 ppm above outdoor air levels will indicate that a substantial majority of visitors entering a space will be satisfied with respect to human bioeffluents (body odor). A more detailed discussion of this relationship between CO_2 concentrations and the perception of bioeffluents, as well as the use of indoor CO_2 to estimate building ventilation rates, is contained in ASTM Standard D6245 [D-8].

CO_2 concentrations in acceptable outdoor air typically range from 300 to 500 ppm. High CO_2 concentrations in the outdoor air can be an indicator of combustion and/or other contaminant sources.

RE: UDI Webinar - Panelist Invitation

From: Yvonne Lo <ylo@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 13, 2021 10:43:24 AM PDT
Attachments: image002.jpg, image003.jpg, image004.jpg, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks so much Zachary,

Since Andrew is away this whole week, I was thinking it would be nice to meet on the 20th to go over the webinar with the entire panel.

Maybe then we can set on a new date hopefully in August or September?

I have sent you a calendar invite for the pre-meeting.

Most appreciated,
Yvonne

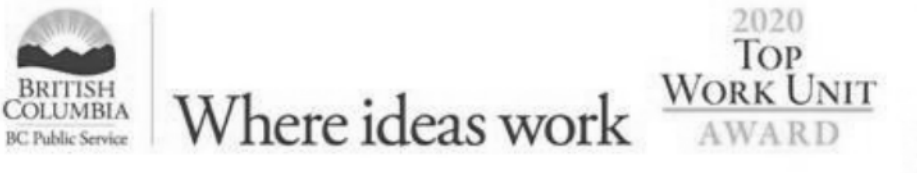
From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 9, 2021 4:02 PM
To: Yvonne Lo <ylo@udi.org>
Subject: RE: UDI Webinar - Panelist Invitation

Hi Yvonne,

I'm happy to participate. The only dates that work for me are the 20th and 21st.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Yvonne Lo <ylo@udi.org>
Sent: Monday, July 5, 2021 1:58 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: UDI Webinar - Panelist Invitation
Importance: High

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Dear Zachary,

Hope you had a wonderful weekend! Can't believe it's been over a year since we last worked together on a webinar.

We are currently working on a potential webinar on the GHL report of the possible mass timber code changes with COV. Andrew Harmsworth will present the report findings and explained the possible code changes identified. Then Patrick Enright can briefly preface his presentation by summarizing how the City might use this report and the survey results.

After discussing with Andrew and Jeff, we would love to invite you to be our panelist . We are also thinking of inviting Rocky Sethi of Adera as a moderator to complete the panel.

The suggested webinar dates (9:15am – 10:30am):
July 20 (Tue)
July 21 (Wed)
July 28 (Wed)
July 29 (Thu)

Would you be interested and available? Thanks so much for your kind consideration.

Best wishes,
Yvonne

Yvonne Lo | Director, Professional Development
Urban Development Institute
ylo@udi.org *Cellular:* 604.789.0898
udi.bc.ca


RE: Energy Step Code Council meeting (GHG mtg. #3)

From: Diana Dilworth <diana@havan.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 13, 2021 11:22:38 AM PDT
Attachments: image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Zachary,

I'm going to be off on holidays for the 27th and 28th and respectfully ask if my colleague Jay Chadha can attend the meetings in my absence. HAVAN wants to keep on top of the issues and I've been keeping both Jay and my CEO Ron Rapp (co-chair of the Step 9 sub-Committee) briefed progress that our Council is making.

Unfortunately I won't have have access to Zoom on my vacation (likely a good thing :)

Thanks for consideration of this Zachary,

Cheers,

~ Diana

From: May, Zachary OHCS:EX [Zachary.May@gov.bc.ca]
Sent: Monday, July 12, 2021 2:59 PM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; Diana Dilworth; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; crtmathews@gmail.com; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; Ron Rapp; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Cc: Pape-Salmon, Andrew OHCS:EX; pauline@chbabc.org; Remi Charron
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)
Hello everyone,

I received a few emails on Friday asking for additional clarity about the agenda for the meetings on July 27th and 28th, and opportunities to provide feedback after those meetings.

At the meetings on the 27th and 28th our consultant team working the Metrics Report will explore how different options for regulating carbon pollution (e.g. GHGi, total GHG, other options) will impact different building types in terms of design and cost implications. We will also review these findings to address key issues raised during our survey in April. We will be seeking consensus on which options seem best, and where we need more analysis or input.

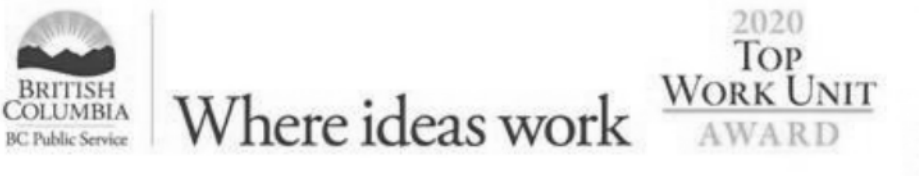
The goal from these two meetings is to prepare a set of draft recommendation(s) for the technical requirements for carbon pollution standards and a summary of the design and cost implications of the approach(es). We will summarize this in a document that can be shared within your organizations for further input over a few additional weeks. The goal will be to have recommended options and feedback from your organizations and members by the end of August. This should put us in a good position to summarize the technical requirements that belong in regulation and the supporting guidelines that would appear in an updated Best Practices Guideline for Local Governments by September.

The bottom line is that we will work towards identifying preferred options (or just one if possible) on the 27th and 28th, but we will be proving materials and time to seek additional input in the weeks following the meeting.

Please feel free to reach out if you have any questions. I appreciate everyone's patience as we adapt and adjust to changing timelines and the other rapidly evolving CleanBC discussions. I remain optimistic that we are on track to have final recommendations from the Energy Step Code Council ready in September.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, July 9, 2021 3:05 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; [redacted] May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; pauline@chbabc.org; Remi Charron <rcharron@bchousing.org>
Subject: Energy Step Code Council meeting (GHG mtg. #3)

Hello, members of the Energy Step Code Council:

I hope everyone is staying well this summer. I am writing to discuss a change in scheduling for the upcoming meetings to discuss how to reduce carbon in new construction.

Instead of meeting on July 14th, we will meet on both days held in your calendars (Tues. July 27th from 1-4 p.m. and July 28th from 9 a.m.-noon). This will provide BSSB additional time to create specific proposals for your consideration, and to send an outline to you a week in advance so you have time to confer with your colleagues.

Our goal will be to reach a consensus on a preferred approach after those two meetings.

Thanks very much for your understanding. If you have questions, please feel free to send me an email.

Best,
Hugo

Hugo Wong (he/him)

Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Refrigerant Leakage Invite - Did Not Open, Opened, Registered

From:	Lisa Westerhoff <lwesterhoff@integralgroup.com>
To:	Faught, Brady <brady.faught@vancouver.ca>, Higgins, Chris <Chris.Higgins@vancouver.ca>, gary.hamer@bchydro.com, gbenson@vancouvereconomic.com, Jeff Fisher <jfisher@udi.org>, Jovan Cheema <Jovan@homeperformance.ca>, Lang, Micah <micah.lang@vancouver.ca>, Mak, Lisa <lisa.mak@bchydro.com>, Matt Greeno <mgreeno@crd.bc.ca>, Maya Chorobik <mchorobik@communityenergy.bc.ca>, Nikki Elliott <nelliott@crd.bc.ca>, Remi Charron <rcharron@bchousing.org>, Wark, Robyn <robyn.wark@bchydro.com>, erik.blair <erik.blair@metrovancouver.org>, Pander, Sean <sean.pander@vancouver.ca>, Berkhout, Tom <Tom.Berkhout@bchydro.com>, Wilma Leung <wileung@bchousing.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc:	Marshall Duer-Balkind <mduerbalkind@integralgroup.com>, Madi Kennedy <madi.kennedy@integralgroup.com>
Sent:	July 15, 2021 9:31:02 AM PDT
Attachments:	image002.png, image006.jpg, image004.png, image007.jpg, image005.jpg, image003.png

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi everyone,

I'm reaching out to make sure you got the invitation to this event next week- we'll be presenting on some research that Integral did to identify ways to reduce refrigerant leakage. I've asked the presenters to tailor their presentation as much as possible to policy makers and industry folks who will be interested to know what options exist out there for reducing the embodied emissions of heat pump and VRF based systems.

Hope you can join us, and please feel free to circulate to your networks/interested colleagues.

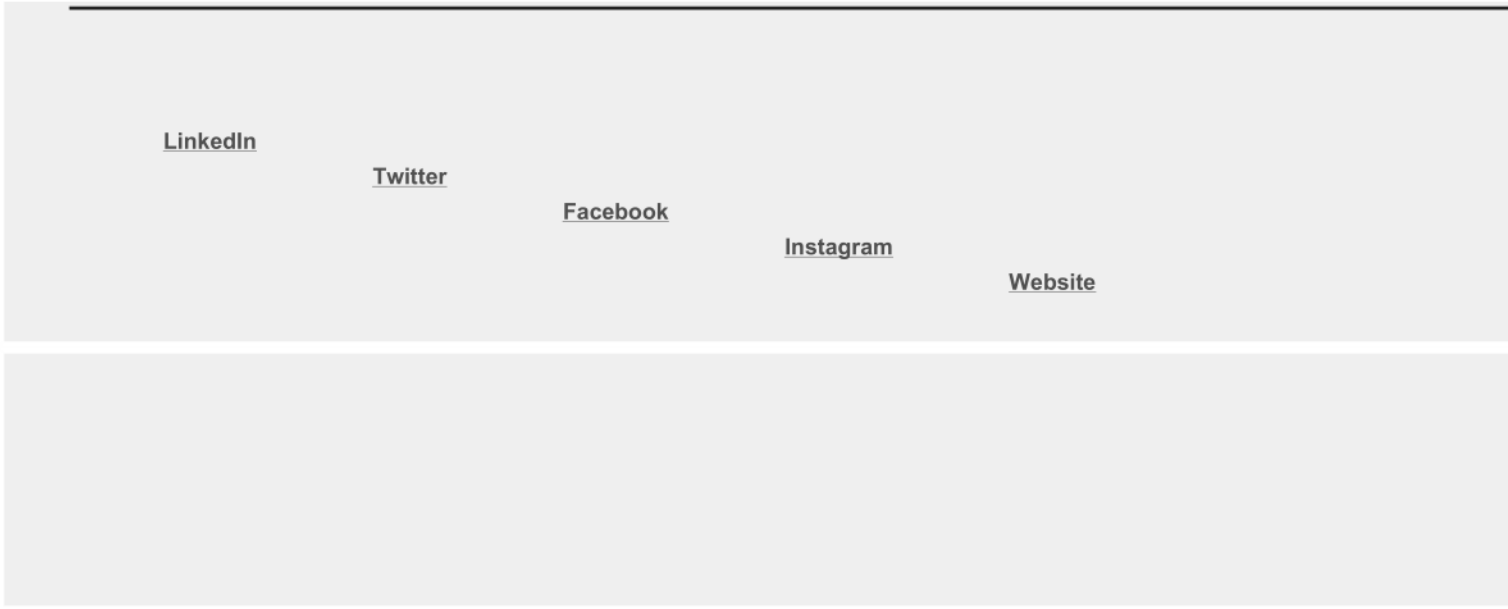
Lisa

Page 157 of 309 to/à Page 159 of 309

Withheld pursuant to/removed as

Copyright

Copyright



Thanks!

(Pronouns: she/her/hers)
Working Hours: Monday-Thurday; out of office Fridays

Cathy Chan | Marketing Manager and Visual Artist | Integral Group
P: 604.687.1800 x 2151 | cchan@integralgroup.com

Lisa Westerhoff | Principal | Integral Group
P: 604.687.1800 x 2084 | M: +1 778.938.6186 | lwesterhoff@integralgroup.com

From: Lisa Westerhoff <lwesterhoff@integralgroup.com>
Sent: July 14, 2021 10:38 AM
To: Cathy Chan <cchan@integralgroup.com>
Subject: RE: Refrigerant Leakage Invite - Did Not Open, Opened, Registered

Hey Cathy, is there a way I can forward/reply to the original email that was sent out?
There are a lot of names on the did not open list, so I'm trying to think of a quick and easy way to reach people.

LW

Lisa Westerhoff | Principal | Integral Group
P: 604.687.1800 x 2084 | M: +1 778.938.6186 | lwesterhoff@integralgroup.com

From: Cathy Chan <cchan@integralgroup.com>
Sent: July 13, 2021 4:22 PM
To: Lisa Westerhoff <lwesterhoff@integralgroup.com>
Subject: Refrigerant Leakage Invite - Did Not Open, Opened, Registered

Hi Lisa,

Attached is a spreadsheet of who the invite was sent to via Mailchimp, who opened the invite (second last column), and who is registered (last column). There's a second worksheet in the file for those who are registered but weren't on our mailing list. I think a lot of people forwarded the invite to others—half of our registrants are not on our mailing list!

It'd be great if you could reach out to the individuals on the spreadsheet who didn't open the invite because sometimes Mailchimp invites go to junk folders, even though the invite says it's from 'Lisa Westerhoff'.

When you email people, please keep in mind that we can't send mass emails that would constitute spam, but more individual emails with the invite is ok, especially if there are particular people you want to make sure they got the invite
s.22 for example didn't open their invites, so could've gone to spam folder).

Some additional notes:

Bounced: ljones@coquitlam.ca

Automatic Reply Notices:

- Please note that effective March 1, 2021, Troy is no longer the Principal of E3 Eco Group. This email account is being monitored, and your request will be forwarded to the appropriate person. For future reference, your contacts at E3 are as follows: Einar Halbig, Managing Partner – einar@e3ecogroup.com | Lauryn Zosiak, Project Manager for LEED projects – lauryn@e3ecogroup.com | Michelle Ripoli, HR & Office Manager, quote requests – michelle@e3ecogroup.com

- Alex Hutton is on maternity leave until July 2022

- Sepehr Foroushani is no longer with the City of Richmond. Please direct all inquiries to James Cooper at JCooper2@richmond.ca.

Thanks!
Cathy

(Pronouns: she/her/hers)
Working Hours: Monday-Thurday; out of office Fridays

Cathy Chan, MSc, BSc (Hons), BFA | Marketing Manager and Visual Artist
Integral Group | Trust | **Nurture** | Inspire
P: 604.687.1800 x 2151
integralgroup.com | cchan@integralgroup.com
Suite 180 - 200 Granville Street, Vancouver, BC V6C 1S4 | Just released! Read our latest Corporate Social & Env

This email may contain confidential and/or privileged information. If you are not the intended recipient or have received this email in error, please notify the sender immediat disclosure or distribution of the information contained on this email is prohibited.


REFRIGERANT LEAKAGE +
ENVIRONMENTAL IMPACTS
Best Practices for Building Electrification
with
Bhavin Degadwala
Hugh Dugdale
Moderated by Lisa Westerhoff
INTEGRAL
LEARNING LAB
JULY 22 | 12PM PDT

RE: UDI feedback on metrics report re: ref building and ATT

From: Jeff Fisher <jfisher@udi.org>
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: July 19, 2021 3:07:29 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Dale!

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: July 12, 2021 6:49 AM
To: Jeff Fisher <jfisher@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: UDI feedback on metrics report re: ref building and ATT

Hi Jeff,

Just to let you know I got your voice message from Friday July 9 re:

1. **Reference building** – what will that be and the need to compare current code requirements (based on 2015 code) to what will be required in the next/2022 edition of the code
2. **Airtightness testing** – the national doesn't look to be including this so we need to consider the cost of doing ATT in the metrics study

I've cc'd Scott here for his info and will discuss your message with him. I believe these concerns will all be addressed in the report.

Thank you as always for UDI's involvement and feedback in this and so many other projects.

Kind regards,
Dale

Dale Andersson, PhD | Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9653 | Email: dale.andersson@gov.bc.ca

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

You have been invited to the following event.
URBCx 2021 Steering Committee Touchpoint 2
When Wed Aug 11, 2021 2pm – 3pm Pacific Time - Vancouver
Joining info Join with Google Meet
s.15

Calendar zachary.may@gov.bc.ca
Who • jessica@thriveconsulting.me - organizer
• Moy, Greg
• O'Grady, Ryan N ENV:EX
• Steve Litke
• Harshan Radhakrishnan
• Frances Woo
• Peter Mitchell
• Yvonne Lo
• Norma Miller
• Kris Holm
• Tudhope, Dave R MAH:EX
• Craig, Ken EMBC:EX
• Ulmi, Malaika (NRCan/RNCan)
• Hastings, Nicky (NRCan/RNCan)
• Jeff Fisher
• John Sherstobitoff
• Anna Warwick Sears
• Fiona Dercole
• Pape-Salmon, Andrew OHCS:EX
• msakai@bcrea.bc.ca
• gbenson@vancouvereconomic.com
• zachary.may@gov.bc.ca

more details
s.15

s.15

I am placing a few calendar holders for organizing the URBCx 2021 session: challenges and opportunities associated with development in hazardous areas, scheduled for sept/october.

This is picking up from the session that was postponed from URBC 2020 due to the provincial election. I have spoken with many of you in advance of sending this out and the current, draft prospectus has also been shaped by many of you already.

These touch-point meetings are not meant to be stressful obligations, but rather opportunities to participate as a steering committee member to shape the agenda and other items as it is further defined going into the fall - as you can and desire to.

Thank you again for your contributions to date, I look forward to your further input and to creating a meaningful opportunity for deliberative dialogue and risk reduction/resilience building action in the fall!

More details and a few calendar invites to follow.

Warmly,
Jessica
(URBC Program Lead, 2016-present)
Going (zachary.may@gov.bc.ca)?
s.15

s.15

Invitation from Google
s.15

You are receiving this courtesy email at the account zachary.may@gov.bc.ca because you are an attendee of this event.

To stop receiving future updates for this event, decline this event. Alternatively you can sign up for a Google account at https://calendar.google.com/calendar/ and control your notification settings for your entire calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn
s.15
More
s.15

I am placing a few calendar holders for organizing the URBCx 2021 session: challenges and opportunities associated with development in hazardous areas, scheduled for sept/october.

This is picking up from the session that was postponed from URBC 2020 due to the provincial election. I have spoken with many of you in advance of sending this out and the current, draft prospectus has also been shaped by many of you already.

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Thank you again for your contributions to date, I look forward to your further input and to creating a meaningful opportunity for deliberative dialogue and risk reduction/resilience building action in the fall!

More details and a few calendar invites to follow.

Warmly,
Jessica
(URBC Program Lead, 2016-present)

-::~:~::~::~:~::-
Do not edit this section of the description.

This event has a video call.
s.15

RE: Leaders at OMTI

From: Yvonne Lo <ylo@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 22, 2021 5:14:35 PM PDT
Attachments: image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks so much Zach, this is really helpful.

Most appreciated,
Yvonne

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 20, 2021 10:06 AM
To: Yvonne Lo <ylo@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: Leaders at OMTI

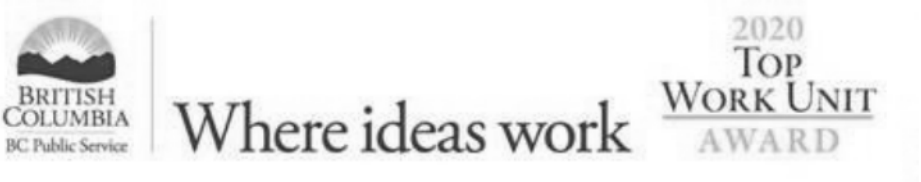
Hi Jeff and Yvonne,

As discussed, OMTI has two excellent directors who would be a great addition to future gender-diverse panels – Trilby Hoffman-McGaw and Lee Nicol. Trilby and Lee both worked at BSSB in the past, so it's possible you have worked with them already.

Trilby.Hoffman-McGaw@gov.bc.ca
Lee.Nicol@gov.bc.ca

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



RE: Energy Step Code Council meeting (GHG mtg. #3)

From:	May, Zachary OHCS:EX
To:	Megan Lohmann <mlohmann@communityenergy.bc.ca>
Cc:	Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Maya Chorobik <mchorobik@communityenergy.bc.ca>
Sent:	July 26, 2021 10:50:16 AM PDT

Hi Megan,

We're hoping to have materials available to us today at noon, but I realize that doesn't provide adequate time to review, especially for those who are balancing this work with family vacations and other priorities.

I will touch base with our team internally to see if postponing make sense or if we proceed with just one of the meetings and reduce our expectations on decision-making.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Megan Lohmann <mlohmann@communityenergy.bc.ca>
Sent: Monday, July 26, 2021 10:41 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Maya Chorobik <mchorobik@communityenergy.bc.ca>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Morning all,

I understand the intent was to have a proposal to the Council prior to the meeting for consideration. Would BSSB consider postponing these meetings so that there is more time for proposal review? I haven't seen any materials yet - hopefully haven't missed anything.

I appreciate the time constraint on the other end in terms of your preferred schedule to get the reg drafted, but it's also an important process that I'm sure all LGs would like to have an opportunity to fully participate in.

My two cents :)

Megan

-----Original Message-----
From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]

Sent: July 10, 2021 1:12 PM
To: Megan Lohmann <mlohmann@communityenergy.bc.ca>
Cc: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: Re: Energy Step Code Council meeting (GHG mtg. #3)

Totally appreciate the challenge with vacations. The goal would be to get a draft proposal out of the meetings in July that everyone could shop around their organizations and likely seek final input on the reg by end of august or early sept. Hoping that works. Happy to set up a call to discuss further next week.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

On Jul 10, 2021, at 7:23 AM, Megan Lohmann <mlohmann@communityenergy.bc.ca> wrote:

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks all and for Max emphasizing the ideal scenario to have the proposals early enough that we can engage lightly with our colleagues.

I am a tentative for the 27th and a hard no for the 28th also due to travel and vacation schedules. I will see if I can get someone else to sit-in as well – tough timing in the summer, but I assume we'd have access to recordings or similar and follow up engagement? What is the timeline post-meetings?

Thanks,
Megan

From: Sykes, Maxwell [mailto:Maxwell.Sykes@surrey.ca]
Sent: July 9, 2021 5:06 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

Gotcha, thanks Zac.

s.22

Cheers
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8 C 604.317.0422 | T 604.592.7022 | F 604.591.4357
https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.surrey.ca%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C7dbc6dad215b4c2cefa308d9505c8ce4%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637629180692367200%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=kQvPRGsH3f2d%2FOZtGsjeohkbM2xlZu%2BngqlqVL7E0vQ%3D&reserved=0<https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.surrey.ca%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C7dbc6dad215b4c2cefa308d9505c8ce4%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637629180692367200%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=kQvPRGsH3f2d%2FOZtGsjeohkbM2xlZu%2BngqlqVL7E0vQ%3D&reserved=0>

Upcoming Out of Office Alert: Away from July 24 – August 8

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>
Sent: July 9, 2021 4:04 PM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

Got it. That’s something that won’t show up in the regulation, but we can capture that in the best practices guide for sure.

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>
Sent: Friday, July 9, 2021 4:01 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac,

Excellent, thanks very much.

By the electricity piece I meant the discussion around how higher levels of electrification may mean BC Hydro needs to extend/increase distribution lines connected to the site if there isn’t enough power available nearby. This can be a high cost depending on how much distribution infra needs to be built. I don’t have other details in my notes, but it was raised at our first 2021 meeting on this item.

Thanks
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8 C 604.317.0422 | T 604.592.7022 | F 604.591.4357
https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.surrey.ca%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C7dbc6dad215b4c2cefa308d9505c8ce4%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637629180692377192%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=t6lRl8PdR0JY19ilC2QzYcbYuG5CvLZfGRYpgp5ukQw%3D&reserved=0<https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.surrey.ca%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C7dbc6dad215b4c2cefa308d9505c8ce4%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637629180692377192%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=t6lRl8PdR0JY19ilC2QzYcbYuG5CvLZfGRYpgp5ukQw%3D&reserved=0>

Upcoming Out of Office Alert: Away from July 24 – August 8

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>
Sent: July 9, 2021 3:53 PM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

Hi Max,

Will confirm next week, but all the below issues should be addressed in the proposals and analysis that Alex Blue's team is doing for us.

One item I'm not clear on is electricity connection cost exemption approach. Can you help me understand what you're referring to?

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca<mailto:zachary.may@gov.bc.ca>
<image001.jpg>

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>
Sent: Friday, July 9, 2021 3:45 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>; Megan Lohmann <mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)
Importance: High

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,

Thanks for the update.[s.22] I will connect with Megan (cc'd) to make sure UBCM still has a rep, and see whether a colleague can sit in for me.

This will make the outline and confer stage really important and expedited for me. Given the nature of the change this may need to include briefing some folks at UBCM.

So I can prepare people, can you confirm now all items scoped to be in the proposal? I imagine it will include the following, but likely I'm missing things.
- buildings types
- GHGI or other performance limit
- link to steps or not
- targeted adoption date(s)
- DE considerations/approach
- RNG path approach
- electricity connection cost exemption approach
- accounting for cooling and/or current or future weather files
- any regionality

Also, could you please confirm what metrics were used to evaluate/develop the proposed requirements? These? Anything else?
- upfront cost
- operating/energy costs
- equipment and system types needed (to hit targets) vs. local supply

Thanks in advance. This will help ensure we can properly evaluate the proposals to be able to arrive at consensus quickly.

Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
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https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.surrey.ca%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C7dbc6dad215b4c2cefa308d9505c8ce4%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637629180692377192%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=t6lRl8PdR0JY19ilC2QzYcbYuG5CvLZfGRYpgp5ukQw%3D&reserved=0<https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.surrey.ca%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C7dbc6dad215b4c2cefa308d9505c8ce4%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637629180692377192%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=t6lRl8PdR0JY19ilC2QzYcbYuG5CvLZfGRYpgp5ukQw%3D&reserved=0>

Upcoming Out of Office Alert: Away from July 24 – August 8

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Sent: July 9, 2021 3:05 PM

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>;
bea.bains@fortisbc.com<mailto:bea.bains@fortisbc.com>;
Tom.Berkhout@bchydro.com<mailto:Tom.Berkhout@bchydro.com>;
alexandre.bigonesse@canada.ca<mailto:alexandre.bigonesse@canada.ca>; pcaraher@ahma-
bc.org<mailto:pcaraher@ahma-bc.org>;
mchorobik@communityenergy.bc.ca<mailto:mchorobik@communityenergy.bc.ca>;
NConnolly@richmond.ca<mailto:NConnolly@richmond.ca>;
bdeeks@rdcfinehomes.com<mailto:bdeeks@rdcfinehomes.com>; diana@havan.ca<mailto:diana@havan.ca>;
patrick.enright@vancouver.ca<mailto:patrick.enright@vancouver.ca>;
catherine.ernst@boabc.org<mailto:catherine.ernst@boabc.org>; jfisher@udi.org<mailto:jfisher@udi.org>;
ruta.fluxgold@canada.ca<mailto:ruta.fluxgold@canada.ca>; sfralin@ahma-bc.org<mailto:sfralin@ahma-bc.org>;
MGatensby@aibc.ca<mailto:MGatensby@aibc.ca>; hgoodland@scius.ca<mailto:hgoodland@scius.ca>; Gosman, Nat
EMLI:EX <Nathaniel.Gosman@gov.bc.ca<mailto:Nathaniel.Gosman@gov.bc.ca>>;
joe.iconhomes@gmail.com<mailto:joe.iconhomes@gmail.com>; nheap@richmond.ca<mailto:nheap@richmond.ca>;
SHorsburgh@rdn.bc.ca<mailto:SHorsburgh@rdn.bc.ca>; vanessa@chbabc.org<mailto:vanessa@chbabc.org>;
jjung@asttbc.org<mailto:jjung@asttbc.org>; toby.lau@bchydro.com<mailto:toby.lau@bchydro.com>;
wileung@bchousing.org<mailto:wileung@bchousing.org>; Lilley, Daisy ENV:EX
<Daisy.Lilley@gov.bc.ca<mailto:Daisy.Lilley@gov.bc.ca>>;
mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>;
J.Madden@ubc.ca<mailto:J.Madden@ubc.ca>; Lisa.Mak@bchydro.com<mailto:Lisa.Mak@bchydro.com>;
s.22 <mailto:crtmathews@gmail.com>; May, Zachary OHCS:EX
<Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>;
christopher.mclellan@canada.ca<mailto:christopher.mclellan@canada.ca>;
mmcwilliam3@bcit.ca<mailto:mmcwilliam3@bcit.ca>; Mohareb, Adrian ENV:EX
<Adrian.Mohareb@gov.bc.ca<mailto:Adrian.Mohareb@gov.bc.ca>>;
sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>; roberto@zebx.org<mailto:roberto@zebx.org>;
warrenp@bccassn.com<mailto:warrenp@bccassn.com>;
hradhakrishnan@egbc.ca<mailto:hradhakrishnan@egbc.ca>; ron@havan.ca<mailto:ron@havan.ca>;
kelly@hkrbuilders.com<mailto:kelly@hkrbuilders.com>; lsampliner@portmoody.ca<mailto:lsampliner@portmoody.ca>;
muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>; Sykes, Maxwell
<Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>; rthe@wesgroup.ca<mailto:rthe@wesgroup.ca>;
Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca<mailto:Holly.Wacker@gov.bc.ca>>;
Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>; ralph.wells@ubc.ca<mailto:ralph.wells@ubc.ca>;
tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>; Williams, Scott B OHCS:EX
<Scott.B.Williams@gov.bc.ca<mailto:Scott.B.Williams@gov.bc.ca>>; XT:Wimmers, Guido CITZ:IN
<guido.wimmers@unbc.ca<mailto:guido.wimmers@unbc.ca>>; Wong, Hugo OHCS:EX
<Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca<mailto:Andrew.PapeSalmon@gov.bc.ca>>;
pauline@chbabc.org<mailto:pauline@chbabc.org>; Remi Charron
<rcharron@bchousing.org<mailto:rcharron@bchousing.org>>
Subject: Energy Step Code Council meeting (GHG mtg. #3)

Hello, members of the Energy Step Code Council:

I hope everyone is staying well this summer. I am writing to discuss a change in scheduling for the upcoming meetings to discuss how to reduce carbon in new construction.

Instead of meeting on July 14th, we will meet on both days held in your calendars (Tues. July 27th from 1-4 p.m. and July 28th from 9 a.m.-noon). This will provide BSSB additional time to create specific proposals for your consideration, and to send an outline to you a week in advance so you have time to confer with your colleagues.

Our goal will be to reach a consensus on a preferred approach after those two meetings.

Thanks very much for your understanding. If you have questions, please feel free to send me an email.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch Office of Housing and Construction Standards Ministry of Attorney General and Minister Responsible for Housing Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca<mailto:hugo.wong@gov.bc.ca>

RE: Description of policy levers

From: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
To: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 26, 2021 1:08:29 PM PDT
Attachments: image001.jpg, Comprehensive Partner List.xlsx

Thanks Katherine – I will compile and get it back to Nat/Andrew for their review tomorrow.

Are you able to review the stakeholder list by 3:00pm today so we can get the invite into everyone's calendars?

Nicole

From: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Sent: Monday, July 26, 2021 1:00 PM
To: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Description of policy levers

Attached is a description of policy levers.

Katherine Muncaster | Director, Energy Efficiency Branch | Electricity and Alternative Energy Division | BC Ministry of Energy, Mines and Low Carbon Innovation | Tel 778-698-7180| katherine.muncaster@gov.bc.ca

---

From: Muncaster, Katherine EMLI:EX
Sent: July 26, 2021 9:43 AM
To: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Description of policy levers

Hi Nicole,
I'm unfortunately running behind on this but hope to get it to you by noon. Nat has asked that you compile the levers from BSSB and EMLI and then send for review to Nat and Andrew.

Katherine Muncaster | Director, Energy Efficiency Branch | Electricity and Alternative Energy Division | BC Ministry of Energy, Mines and Low Carbon Innovation | Tel 778-698-7180| katherine.muncaster@gov.bc.ca

---

From: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: July 21, 2021 10:39 AM
To: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Description of policy levers

Up to 5 bullets per lever is great. Focus on the basic mechanism and scope of application.

From: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Sent: Wednesday, July 21, 2021 10:32 AM
To: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Description of policy levers

How extensive should the bullets be (e.g. 2-3 bullets per lever, or 2 pages). Are you looking for just the basic mechanism of how they work, or past examples?

Katherine Muncaster | Director, Energy Efficiency Branch | Electricity and Alternative Energy Division | BC Ministry of Energy, Mines and Low Carbon Innovation | Tel 778-698-7180| katherine.muncaster@gov.bc.ca

---

From: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: July 21, 2021 10:27 AM
To: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Description of policy levers

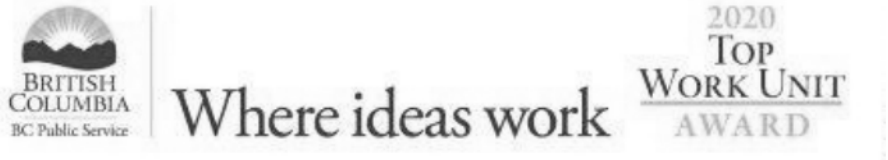
Hi Nat and Katherine,

To support the August 4th engagement content and discussion we are pulling together a broad overview of the current policy levers. Can I ask that your team pulls together a handful of overview bullets on all your ministry's policy levers (i.e., equipment standards, funding programs etc.). If there are other key themes, questions etc. specific to your work you want raised during the engagement please share those so we can make sure they are reflected in the materials.

We are aiming to get materials ready for sign-off early next week so need input by the end of this week.

Thanks,
NV

Nicole Vukosavljevic
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
UC: 778-974-5044 (preferred) | Cell: 250-883-7419 | Email: nicole.vukosavljevic@gov.bc.ca



I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

RE: Energy Step Code Council meeting (GHG mtg. #3)

From: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 26, 2021 1:52:21 PM PDT

Makes sense. I think we could have the session, but maybe just say it is a working session and won't be finalizing based on it. You could book another meeting in September to finalize the policy recommendations.

On another topic, is Evoke's approach aligned with the we previously discussed? For example:
- Step 1 is reporting only
- Step 2 is cost-effective (with future carbon pricing) with planned energy efficiency levels for 2022
- Step 3 is mid-point emissions and planned energy efficiency levels for 2027
- Step 4 is net-zero emissions (to align with federal commitments) and at least 80% GHG reduction, with cost-justified energy efficiency

Or are they doing totally independent analysis based on industry practices, cost-benefit, etc?

Not critical either way, I am just curious.

Andrew Pape-Salmon | P.Eng., MRM, FCAE, FCSSE
Executive Director, Building and Safety Standards Branch
Email: Andrew.PapeSalmon@gov.bc.ca
Cell: 250-812-1933

-----Original Message-----
From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, July 26, 2021 11:04 AM
To: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

The delays in getting data from Evoke is putting us in a tight spot with stakeholders.

I'm reluctant to delay, but 6hrs of meetings without advance materials seems unproductive.

Recommendation - we cancel the Tuesday meeting and keep the Wednesday morning meeting. This will give us some sense of how to pull options together for stakeholders to review over August and into September.

Please let me know if either of you have an issue with this proposed approach.

-----Original Message-----
From: Megan Lohmann <mlohmann@communityenergy.bc.ca>
Sent: Monday, July 26, 2021 10:41 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Maya Chorobik <mchorobik@communityenergy.bc.ca>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

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known sender.

Morning all,

I understand the intent was to have a proposal to the Council prior to the meeting for consideration. Would BSSB consider postponing these meetings so that there is more time for proposal review? I haven't seen any materials yet - hopefully haven't missed anything.

I appreciate the time constraint on the other end in terms of your preferred schedule to get the reg drafted, but it's also an important process that I'm sure all LGs would like to have an opportunity to fully participate in.

My two cents :)

Megan

-----Original Message-----
From: May, Zachary OHCS:EX [mailto:Zachary.May@gov.bc.ca]
Sent: July 10, 2021 1:12 PM
To: Megan Lohmann <mlohmann@communityenergy.bc.ca>
Cc: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: Re: Energy Step Code Council meeting (GHG mtg. #3)

Totally appreciate the challenge with vacations. The goal would be to get a draft proposal out of the meetings in July that everyone could shop around their organizations and likely seek final input on the reg by end of august or early sept. Hoping that works. Happy to set up a call to discuss further next week.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

On Jul 10, 2021, at 7:23 AM, Megan Lohmann <mlohmann@communityenergy.bc.ca> wrote:

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks all and for Max emphasizing the ideal scenario to have the proposals early enough that we can engage lightly with our colleagues.

I am a tentative for the 27th and a hard no for the 28th also due to travel and vacation schedules. I will see if I can get someone else to sit-in as well – tough timing in the summer, but I assume we'd have access to recordings or similar and follow up engagement? What is the timeline post-meetings?

Thanks,
Megan

From: Sykes, Maxwell [mailto:Maxwell.Sykes@surrey.ca]
Sent: July 9, 2021 5:06 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

Gotcha, thanks Zac.

s.22

Cheers
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
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Upcoming Out of Office Alert: Away from July 24 – August 8

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>
Sent: July 9, 2021 4:04 PM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

Got it. That’s something that won’t show up in the regulation, but we can capture that in the best practices guide for sure.

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>
Sent: Friday, July 9, 2021 4:01 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac,

Excellent, thanks very much.

By the electricity piece I meant the discussion around how higher levels of electrification may mean BC Hydro needs to extend/increase distribution lines connected to the site if there isn't enough power available nearby. This can be a high cost depending on how much distribution infra needs to be built. I don't have other details in my notes, but it was raised at our first 2021 meeting on this item.

Thanks
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8 C 604.317.0422 | T 604.592.7022 | F 604.591.4357
https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.surrey.ca%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C7dbc6dad215b4c2cefa308d9505c8ce4%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637629180692377192%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=t6lRl8PdR0JY19ilC2QzYcbYuG5CvLZfGRYpgp5ukQw%3D&reserved=0<https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.surrey.ca%2F&data=04%7C01%7CZachary.May%40gov.bc.ca%7C7dbc6dad215b4c2cefa308d9505c8ce4%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C637629180692377192%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=t6lRl8PdR0JY19ilC2QzYcbYuG5CvLZfGRYpgp5ukQw%3D&reserved=0>

Upcoming Out of Office Alert: Away from July 24 – August 8

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>
Sent: July 9, 2021 3:53 PM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Megan Lohmann <mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)

Hi Max,

Will confirm next week, but all the below issues should be addressed in the proposals and analysis that Alex Blue's team is doing for us.

One item I'm not clear on is electricity connection cost exemption approach. Can you help me understand what you're referring to?

Best,
Zachary D. May, MBA
Director, Strategic Policy

(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca<mailto:zachary.may@gov.bc.ca>
<image001.jpg>

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>
Sent: Friday, July 9, 2021 3:45 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>; Megan Lohmann <mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>
Subject: RE: Energy Step Code Council meeting (GHG mtg. #3)
Importance: High

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,

Thanks for the update.[s.22] . I will connect with Megan (cc'd) to make sure UBCM still has a rep, and see whether a colleague can sit in for me.

This will make the outline and confer stage really important and expedited for me. Given the nature of the change this may need to include briefing some folks at UBCM.

So I can prepare people, can you confirm now all items scoped to be in the proposal? I imagine it will include the following, but likely I'm missing things.
- buildings types
- GHGI or other performance limit
- link to steps or not
- targeted adoption date(s)
- DE considerations/approach
- RNG path approach
- electricity connection cost exemption approach
- accounting for cooling and/or current or future weather files
- any regionality

Also, could you please confirm what metrics were used to evaluate/develop the proposed requirements? These? Anything else?
- upfront cost
- operating/energy costs
- equipment and system types needed (to hit targets) vs. local supply

Thanks in advance. This will help ensure we can properly evaluate the proposals to be able to arrive at consensus quickly.

Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8 C 604.317.0422 | T 604.592.7022 | F 604.591.4357
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Upcoming Out of Office Alert: Away from July 24 – August 8

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Sent: July 9, 2021 3:05 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca<mailto:Dale.Andersson@gov.bc.ca>>; bea.bains@fortisbc.com<mailto:bea.bains@fortisbc.com>; Tom.Berkhout@bchydro.com<mailto:Tom.Berkhout@bchydro.com>; alexandre.bigonesse@canada.ca<mailto:alexandre.bigonesse@canada.ca>; pcaraher@ahma-bc.org<mailto:pcaraher@ahma-bc.org>; mchorobik@communityenergy.bc.ca<mailto:mchorobik@communityenergy.bc.ca>; NConnolly@richmond.ca<mailto:NConnolly@richmond.ca>; bdeeks@rdcfinehomes.com<mailto:bdeeks@rdcfinehomes.com>; diana@havan.ca<mailto:diana@havan.ca>; patrick.enright@vancouver.ca<mailto:patrick.enright@vancouver.ca>; catherine.ernst@boabc.org<mailto:catherine.ernst@boabc.org>; jfisher@udi.org<mailto:jfisher@udi.org>; ruta.fluxgold@canada.ca<mailto:ruta.fluxgold@canada.ca>; sfralin@ahma-bc.org<mailto:sfralin@ahma-bc.org>; MGatensby@aibc.ca<mailto:MGatensby@aibc.ca>; hgoodland@scius.ca<mailto:hgoodland@scius.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca<mailto:Nathaniel.Gosman@gov.bc.ca>>; joe.iconhomes@gmail.com<mailto:joe.iconhomes@gmail.com>; nheap@richmond.ca<mailto:nheap@richmond.ca>; SHorsburgh@rdn.bc.ca<mailto:SHorsburgh@rdn.bc.ca>; vanessa@chbabc.org<mailto:vanessa@chbabc.org>; jjung@asttbc.org<mailto:jjung@asttbc.org>; toby.lau@bchydro.com<mailto:toby.lau@bchydro.com>; wileung@bchousing.org<mailto:wileung@bchousing.org>; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca<mailto:Daisy.Lilley@gov.bc.ca>>; mlohmann@communityenergy.bc.ca<mailto:mlohmann@communityenergy.bc.ca>; J.Madden@ubc.ca<mailto:J.Madden@ubc.ca>; Lisa.Mak@bchydro.com<mailto:Lisa.Mak@bchydro.com>; s.22 >; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca<mailto:Zachary.May@gov.bc.ca>>; christopher.mclellan@canada.ca<mailto:christopher.mclellan@canada.ca>; mmcwilliam3@bcit.ca<mailto:mmcwilliam3@bcit.ca>; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca<mailto:Adrian.Mohareb@gov.bc.ca>>; sean.pander@vancouver.ca<mailto:sean.pander@vancouver.ca>; roberto@zebx.org<mailto:roberto@zebx.org>; warrenp@bccassn.com<mailto:warrenp@bccassn.com>; hradhakrishnan@egbc.ca<mailto:hradhakrishnan@egbc.ca>; ron@havan.ca<mailto:ron@havan.ca>; kelly@hkrbuilders.com<mailto:kelly@hkrbuilders.com>; lsampliner@portmoody.ca<mailto:lsampliner@portmoody.ca>; muneesh@boma.bc.ca<mailto:muneesh@boma.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca<mailto:Maxwell.Sykes@surrey.ca>>; rthe@wesgroup.ca<mailto:rthe@wesgroup.ca>; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca<mailto:Holly.Wacker@gov.bc.ca>>; Robyn.Wark@BCHydro.com<mailto:Robyn.Wark@BCHydro.com>; ralph.wells@ubc.ca<mailto:ralph.wells@ubc.ca>; tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>; Williams, Scott B OHCS:EX

<Scott.B.Williams@gov.bc.ca<mailto:Scott.B.Williams@gov.bc.ca>>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca<mailto:guido.wimmers@unbc.ca>>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca<mailto:Hugo.Wong@gov.bc.ca>>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca<mailto:Andrew.PapeSalmon@gov.bc.ca>>; pauline@chbabc.org<mailto:pauline@chbabc.org>; Remi Charron <rcharron@bchousing.org<mailto:rcharron@bchousing.org>>
Subject: Energy Step Code Council meeting (GHG mtg. #3)

Hello, members of the Energy Step Code Council:

I hope everyone is staying well this summer. I am writing to discuss a change in scheduling for the upcoming meetings to discuss how to reduce carbon in new construction.

Instead of meeting on July 14th, we will meet on both days held in your calendars (Tues. July 27th from 1-4 p.m. and July 28th from 9 a.m.-noon). This will provide BSSB additional time to create specific proposals for your consideration, and to send an outline to you a week in advance so you have time to confer with your colleagues.

Our goal will be to reach a consensus on a preferred approach after those two meetings.

Thanks very much for your understanding. If you have questions, please feel free to send me an email.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch Office of Housing and Construction Standards Ministry of Attorney General and Minister Responsible for Housing Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca<mailto:hugo.wong@gov.bc.ca>

Update (July 26, 2021):

Hello, everyone:

As you may have noticed, we have not been able to send material ahead in advance. As such, we will be cancelling the Tuesday afternoon meeting. I apologize for the late notice.

We will retain the Wednesday morning session as an opportunity to hear the initial technical analysis and ask general questions, but we will not need to come to consensus on an approach at that meeting. Instead, we will book follow-up meetings in August and September so we leave enough time for you to take the analysis back to your colleagues for review and comment.

For Wednesday, I will send a new calendar invitation for the same block of time to include a newly available telephone dial-in option, which I hope will increase the amount of flexibility for everyone.

Thank you very much, and if you have any questions, please send me an email.

Best,
Hugo

Update (July 9, 2021): This meeting now replaces the meeting originally scheduled for July 14.

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

Update: 7-26-2021: Please see below for an updated videoconferencing link with dial-in option. If you have technical difficulties, please email hugo.wong@gov.bc.ca<mailto:hugo.wong@gov.bc.ca>, or call 236 478 1406.

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft teams join link:

Microsoft Teams meeting
Join on your computer or mobile app
s.15

Update: 7-26-2021: Please refer to a new calendar invitation with a new videoconferencing link and dial-in option. If you have technical difficulties, please email hugo.wong@gov.bc.ca<mailto:hugo.wong@gov.bc.ca>, or call 236 478 1406.

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Energy Step Code Council meeting agenda and slides

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, ruta.fluxgold@canada.ca, sfralin@ahma-bc.org, MGatensby@aibc.ca, hgoodland@scius.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, s.22 May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, sean.pander@vancouver.ca, roberto@zebx.org, warrenp@bccassn.com, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, lsampliner@portmoody.ca, muneesh@boma.bc.ca, Maxwell.Sykes@surrey.ca, rthe@wesgroup.ca, Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, chepting@enersys.ca
Cc:	Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>, pauline@chbabc.org, Jay Chadha <jay@havan.ca>, Owen, Jason <JOwen@surrey.ca>, Alex Blue <ablue@EvokeBuildings.com>, Remi Charron <rcharron@bchousing.org>, Jackie Kanyuk <jackie@bcnpha.ca>, Richards, Victoria <Victoria.Richards@bchydro.com>, ian@bcnpha.ca
Sent:	July 27, 2021 2:15:21 PM PDT
Attachments:	ESCC Agenda 2021 07 28.pdf, SCC GHG Meeting.pptx

Hello, everyone:

Here are agenda and slides in advance of Alex's presentation tomorrow.

Looking forward to it.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Package

Date and Time of Meeting: Wednesday July 28, 2021 | Time: 9:00 a.m. to 12:00 p.m. Pacific Time
s.15

Chair: Zachary May, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro
Meeting Materials

- Agenda (below)
- Analysis document from Alex Blue, Evoke Buildings

Contacts if You Require Assistance

- Hugo Wong, BSSB – 236 478 1406 (call only); hugo.wong@gov.bc.ca

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
09:00 a.m.	Welcome, Introductions and Opening Remarks	Zachary May, ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Approve of agenda
09:05	Executive Message	Andrew Pape-Salmon, Executive Director, BSSB	▪ Update on Provincial priorities and context
09:20	Overall Approach	Zachary May, ESCC Chair	▪ Review process to date and proposed direction on key aspects of the regulation
09:40	Metrics Analysis: Options for Part 3 Buildings and Part 9 Buildings	Alex Blue, Evoke Buildings Inc.	▪ Present summary of findings from the Metrics Research Update analysis (still draft) ▪ Answer initial questions about the analysis
10:15	Break		
10:30	Discussion	Zachary May, ESCC Chair + All	To discuss issues raised in the analysis, such as: ▪ How much flexibility do we need between energy-efficiency steps and GHG steps? Should there be any limitations on how the two are applied? ▪ How does compliance with any of the three proposed GHG steps affect compliance with the three energy efficiency steps? Any anomalies or very expensive outcomes? ▪ What equipment and/or assemblies become necessary or no longer possible at different steps?
11:55	Final Remarks and Next Steps	Zachary May, ESCC Chair	
12 noon	Adjournment		

BC Energy Step Code Metrics Report Update GHG Targets Discussion

EVOKE



E3 ECO GROUP

GHG Steps – Metrics Report Info

July 26, 2021

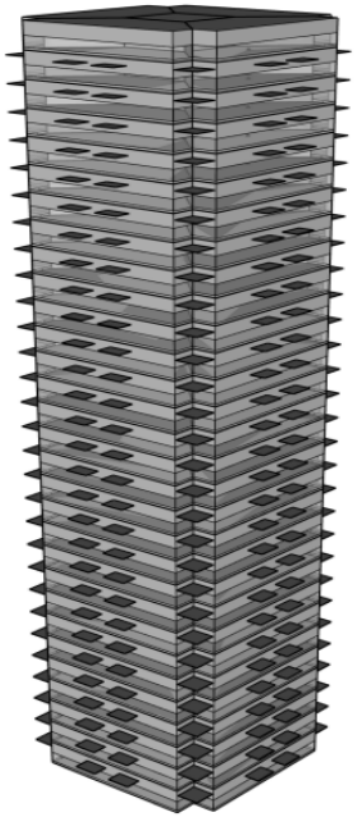
1. Part 3
    1. Analysis/approach
    2. Common observations across building types
    3. Sample archetypes/"steps" highlighting technical implications for buildings
    4. Any building types that seem particularly sensitive?
    5. Range of ICC for different steps, and relation to operational costs?
    6. Conditions that should be placed on modelling to ensure outcomes?
2. Part 9
    1. Analysis/approach
    2. Common observations across building types
    3. Sample archetypes/"steps" highlighting technical implications for buildings
    4. Any housing archetypes that seem particularly sensitive?
    5. Range of ICC for different steps, and relation to operational costs?
    6. Issues with the more limited scope of MEUI? Does GHGi for housing address all loads or just those in MEUI?

Part 3

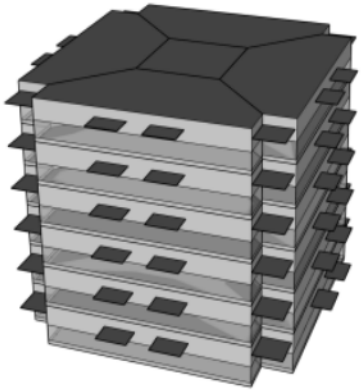
LOW-RISE MURB, HIGH-RISE MURB, OFFICE, RETAIL, HOTEL

Part 3 Analysis Overview

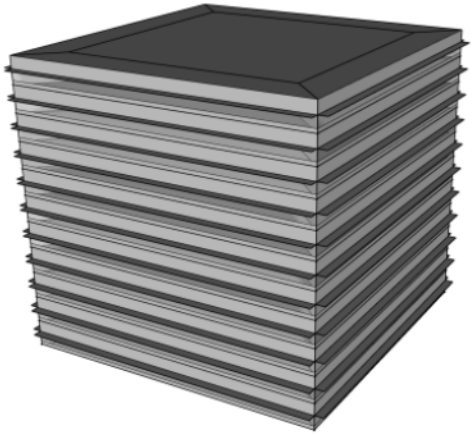
High Rise MURB



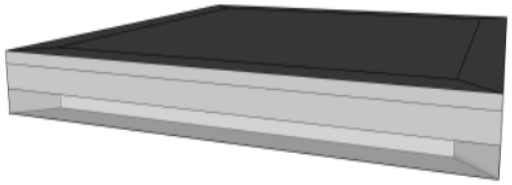
Low Rise MURB



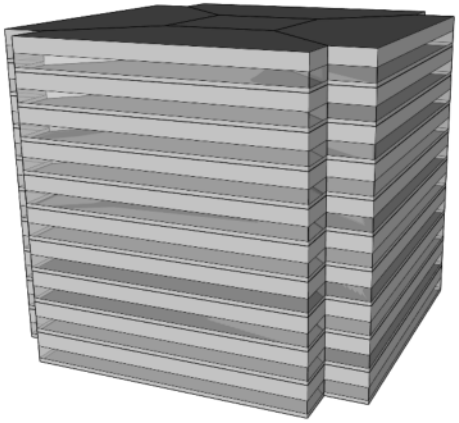
Office



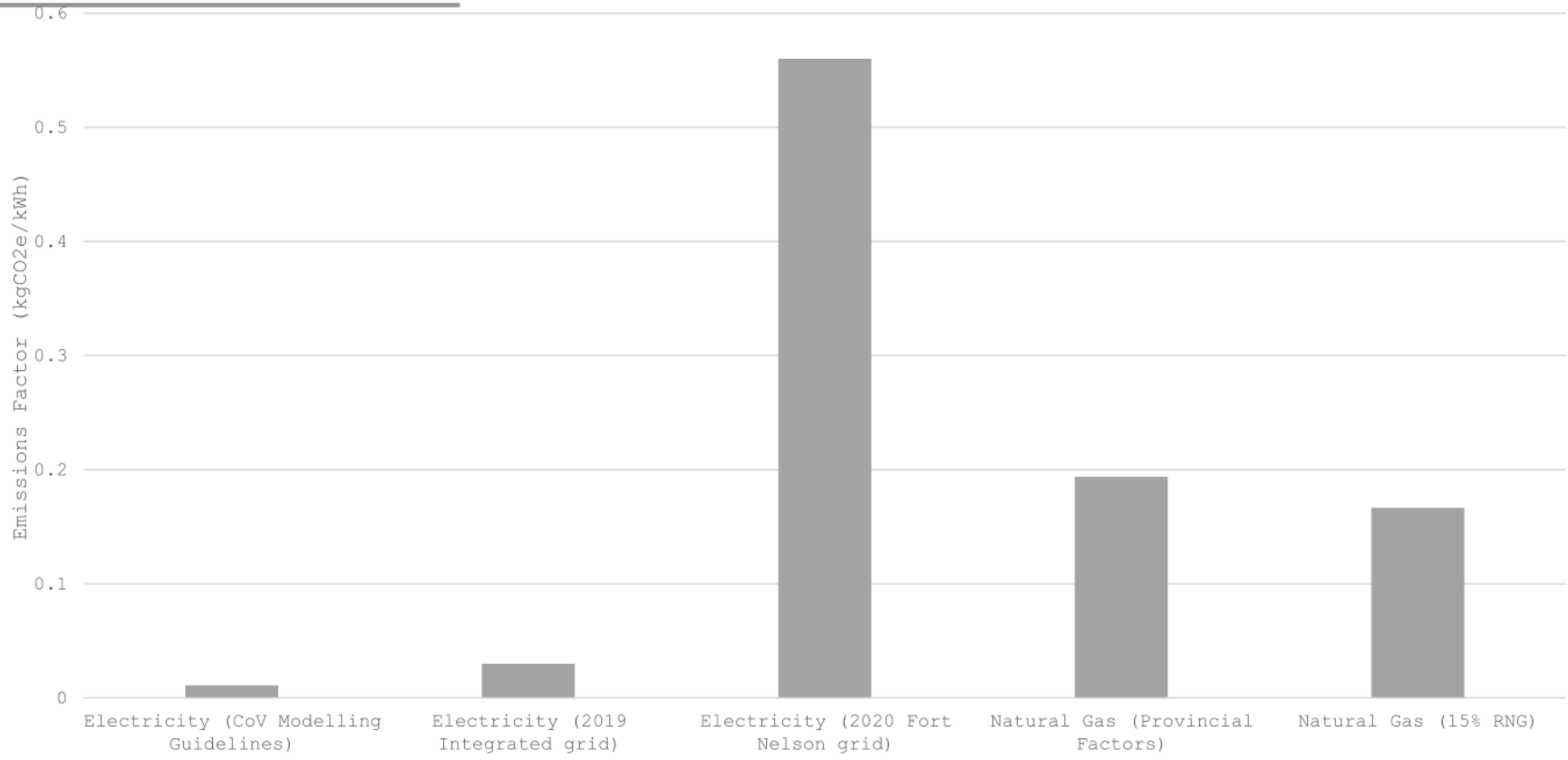
Retail



Hotel



GHG Emissions Factors



Click to edit Master text styles

EUI Implications of GHG Targets

Max TEUI to hit:	6 kg/m²/year	3 kg/m²/year	1 kg/m²/year
100% Elec	201	100	33
25% NG	158	79	26
50% NG	116	58	19

*using Integrated grid 2019 electricity factors

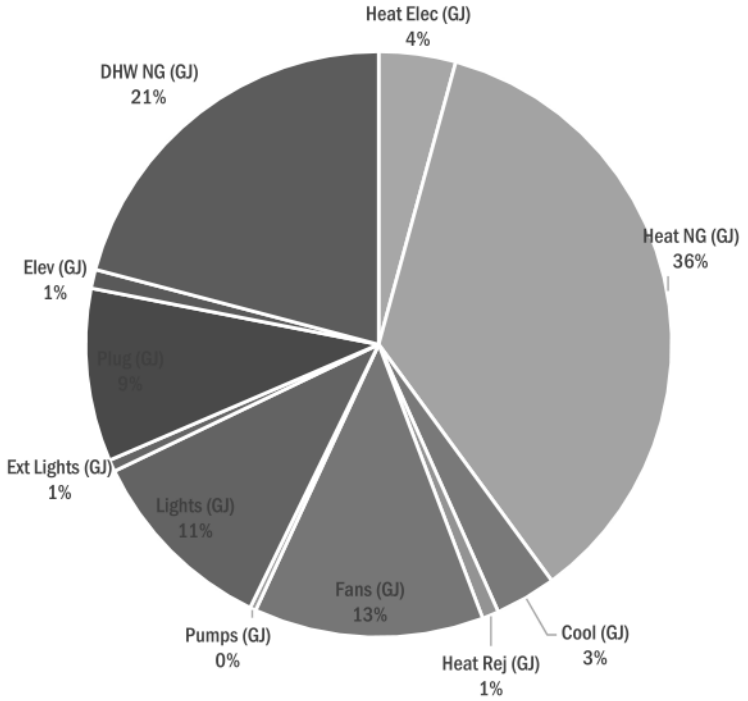
Current TEUI Targets:

Hotel: 120 – 170

MURB: 100 – 180

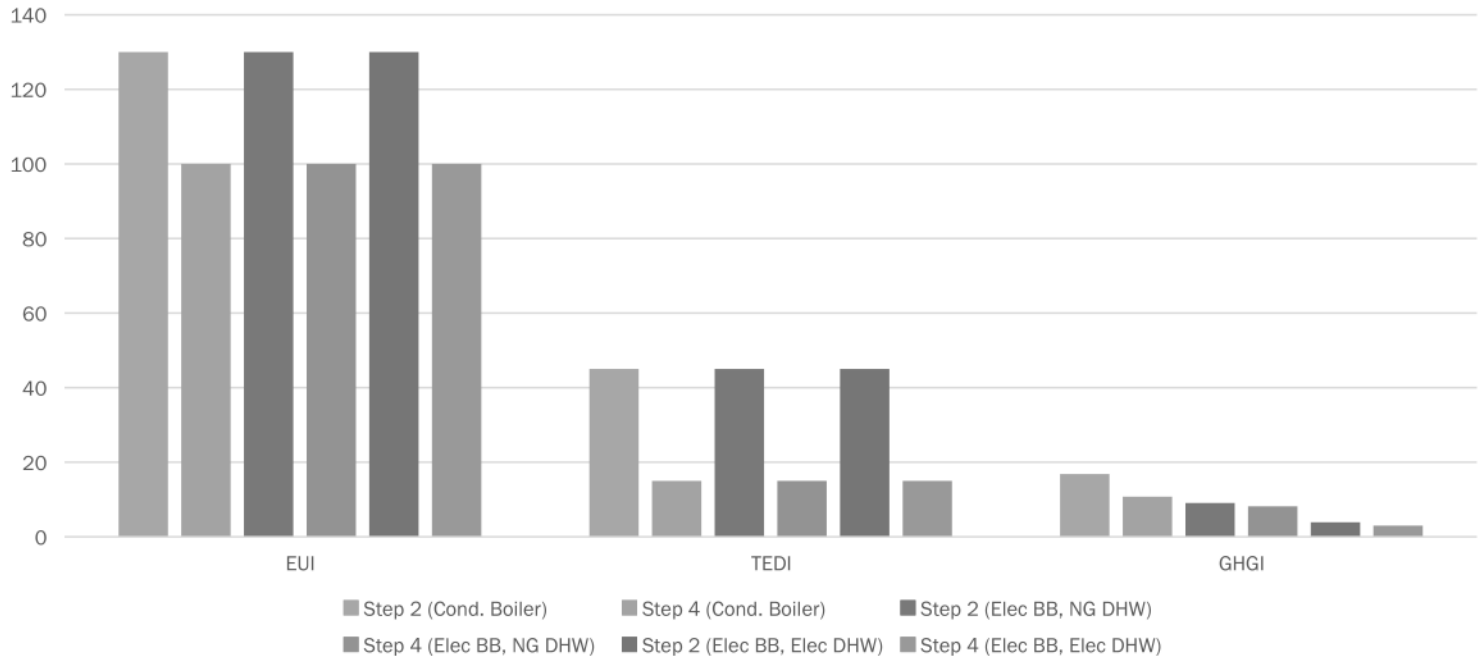
Offices: 100 – 130

Retail: 120 - 190



MURB – NECB 2015 Baseline, FCs w/ Boiler

ECMs and Emissions Factors



Back of envelope using EUI/TEDI targets only

MURB, CZ4

GHGI impact of:

- Step 2 to Step 4
- Condensing boiler to electric baseboard
- NG DHW to electric DHW

Emissions factors >> ECMs

Sample Steps - Principals

1. ECMs

- Typical to slightly improved envelope
  - Walls R-7 to 10
  - Windows USI-1.6 to 2.0
  - Roof R-40
- Typical efficiency HRV 60%
- No infiltration savings
- Mid-range WWR
  - MURBs 40%, retail 20%, office 50%, hotel 50%
- 20% DHW flow savings
- Condensing boiler

2. Partial Heating Fuel Switch

- Same ECMs as 1
- Switch to ASHP for primary heating
  - 70% of annual heating load for most archetypes
  - 90% for retail
- Natural gas condensing boiler backup

3. Fuel Switch Heating + DHW

- Same ECMs as 1
- ASHP w/ electric resistance backup (or fully HP)
- Electric resistance for NG

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Sample Steps – MURB CZ4

1. ECMs

- GHGIs
  - Range 10.2 – 15.4
  - Average 13.2
- ICC
  - Range 1.1% - 2.3%
  - Average 1.7%
- 24 scenarios
- Some dependence on suite size (density)
  - Low density (large units) ranges from 10.3 – 13.5 GHGI
  - High density (small units) ranges from 12.9 – 15.4 GHGI
- Approx. 40% - 50% NG, remainder electric

2. Partial Heating Fuel Switch

- GHGIs
  - Range 7.8 – 10.8
  - Average 9.4
- ICC
  - Range 2.4% - 3.6%
  - Average 3.0%
- 24 scenarios
- Similar dependence on suite size (density)
  - Low density (large units) ranges from 7.8 – 8.5 GHGI
  - High density (small units) ranges from 10.1 – 10.8 GHGI
- Approx. 25 - 35% NG, remainder electric

3. Fuel Switch Heating + DHW

- GHGIs
  - Range 3.1 – 3.8
  - Average 3.5
- ICC
  - Range 2.4% - 3.6%
  - Average 3.0%
- 24 scenarios
- Similar dependence on suite size (density)
  - Low density (large units) ranges from 3.1 – 3.4 GHGI
  - High density (small units) ranges from 3.6 – 3.8 GHGI
- 100% electric

Click to edit Master text styles

Sample Steps – MURB CZ7a

1. ECMs

- GHGIs
  - Range 20.0 – 27.0
  - Average 23.6
- ICC
  - Range 0.8% – 1.7%
  - Average 1.3%
- 24 scenarios
- Some dependence on suite size (density)
  - Low density (large units) ranges from 20.0 – 25.1 GHGI
  - High density (small units) ranges from 22.0 – 27.0 GHGI
- Approx. 50 - 60% NG, remainder electric

2. Partial Heating Fuel Switch

- GHGIs
  - Range 11.3 – 15.2
  - Average 13.4
- ICC
  - Range 2.3% - 3.3%
  - Average 2.8%
- 24 scenarios
- Similar dependence on suite size (density)
- Approx. 25 - 35% NG, remainder electric

3. Fuel Switch Heating + DHW

- GHGIs
  - Range 4.5 – 5.3
  - Average 4.9
- ICC
  - Range 2.3% - 3.3%
  - Average 2.8%
- 24 scenarios
- Similar dependence on suite size (density)
- 100% electric

Sample Steps – Office CZ4

1. ECMs

- GHGIs
  - Range 6.3 – 8.6
  - Average 7.5
- ICC
  - Range -0.6% – -1.0%
  - Average -0.8%
- 16 scenarios
- Approx. 25% - 35% NG, remainder electric
- Some dependence on occupant density (adds approx. 1.3 to GHGI if double density)

2. Partial Heating Fuel Switch

- GHGIs
  - Range 5.0 – 7.0
  - Average 6.0
- ICC
  - Range 0.4 – 0.7%
  - Average 0.5%
- 16 scenarios
- Approx. 20 - 25% NG, remainder electric
- Similar dependence on occupant density

3. Fuel Switch Heating + DHW

- GHGIs
  - Range 2.5 – 3.2
  - Average 2.8
- ICC
  - Range 0.4 – 0.7%
  - Average 0.5%
- 16 scenarios
- 100% electric

Sample Steps – Office CZ7a

1. ECMs

- GHGIs
  - Range 10.8 – 14.1
  - Average 12.4
- ICC
  - Range -0.2% – 0.3%
  - Average 0.1%
- 16 scenarios
- Approx. 40% - 50% NG, remainder electric
- Some dependence on occupant density (adds approx. 1 to GHGI if double density)

2. Partial Heating Fuel Switch

- GHGIs
  - Range 6.7 – 9.1
  - Average 7.9
- ICC
  - Range 1.4 – 1.8%
  - Average 1.6%
- 16 scenarios
- Approx. 23 - 27% NG, remainder electric
- Similar dependence on occupant density

3. Fuel Switch Heating + DHW

- GHGIs
  - Range 2.9 – 3.8
  - Average 3.3
- ICC
  - Range 1.4 – 1.8%
  - Average 1.6%
- 16 scenarios
- 100% electric

Sample Steps – Retail CZ4

1. ECMs

- GHGIs
  - Range 5.9 – 8.0
  - Average 6.9
- ICC
  - Range -1.4% – -3.1%
  - Average -2.2%
- 8 scenarios
- Approx. 20% - 30% NG, remainder electric
- Some sensitivity to space mix/archetype: mall vs big box
  - Mall 7.3 – 8.0
  - Big box 5.9 – 6.5

2. Partial Heating Fuel Switch

- GHGIs
  - Range 3.4 – 3.8
  - Average 3.6
- ICC
  - Range -0.2 - -1.2%
  - Average -0.6%
- 8 scenarios
- Approx. 5 - 8% NG, remainder electric

3. Fuel Switch Heating + DHW

- GHGIs
  - Range 2.6 – 2.8
  - Average 2.7
- ICC
  - Range -0.2 - -1.2%
  - Average -0.6%
- 8 scenarios
- 100% electric

Sample Steps – Hotel CZ4

1. ECMs

- GHGIs
  - Range 17.5 – 23.0
  - Average 20.2
- ICC
  - Range 1.1% – 1.7%
  - Average 1.4%
- 8 scenarios
- Approx. 40% - 60% NG, remainder electric
- Sensitivity to fuel source for laundry (10%+ of energy use)
  - Electric 17.5 - 18.5 GHGI
  - NG 22.0 – 23.0 GHGI

2. Partial Heating Fuel Switch

- GHGIs
  - Range 14.2 – 18.9
  - Average 16.5
- ICC
  - Range 2.4% - 3.0%
  - Average 2.7%
- 8 scenarios
- Approx. 35% - 50% NG, remainder electric

3. Fuel Switch Heating + DHW

- GHGIs
  - Range 4.8 – 4.9
  - Average 4.9
- ICC
  - Range 2.4% - 3.0%
  - Average 2.7%
- 8 scenarios
- 100% electric

Modelling Conditions

- Emissions Factors
  - Consistency over time
  - District heat
  - Renewables
- Backup heat sources, DHW top-up or backup
- DHW savings calculations
  - Method in CoV Modelling Guidelines
- Home cooking loads, fireplaces
  - Method in CoV Modelling Guidelines
- Other Process Loads
  - E.g. swimming pool heating, commercial laundry for hotel,

Part 9

TBA

Thank you!

EVOKE



Sample Steps – Retail CZ7a

1. ECMs

- GHGIs
  - Range 13.1 – 17.3
  - Average 15.2
- ICC
  - Range -0.6% – -1.7%
  - Average -1.0%
- 8 scenarios
- Approx. 35% - 45% NG, remainder electric
- Some sensitivity to space mix/archetype: mall vs big box
  - Mall 15.7 – 17.3
  - Big box 13.1 – 14.7

2. Partial Heating Fuel Switch

- GHGIs
  - Range 4.9 – 5.7
  - Average 5.3
- ICC
  - Range 0.4 - 1.5%
  - Average 0.8%
- 8 scenarios
- Approx. 5 - 10% NG, remainder electric

3. Fuel Switch Heating + DHW

- GHGIs
  - Range 3.7 – 3.9
  - Average 3.8
- ICC
  - Range 0.4 - 1.5%
  - Average 0.8%
- 8 scenarios
- 100% electric

Click to edit Master text styles

Sample Steps – Hotel CZ7a

1. ECMs

- GHGIs
  - Range 25.4 – 32.1
  - Average 28.8
- ICC
  - Range 0.7% - 1.4%
  - Average 1.1%
- 8 scenarios
- Approx. 55% - 70% NG, remainder electric
- Sensitivity to fuel source for laundry (10%+ of energy use)
  - Electric 25.4 – 27.6 GHGI
  - NG 29.9 – 32.1 GHGI

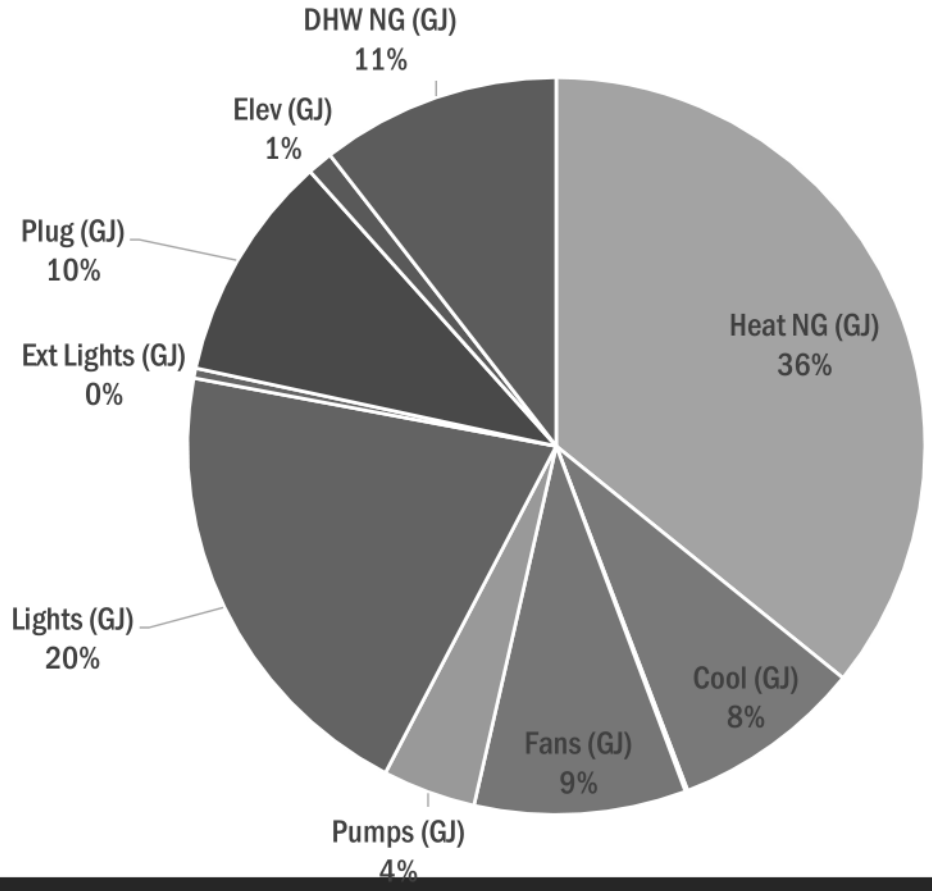
2. Partial Heating Fuel Switch

- GHGIs
  - Range 16.9 – 22.0
  - Average 19.5
- ICC
  - Range 2.2% - 2.9%
  - Average 2.5%
- 8 scenarios
- Approx. 35% - 50% NG, remainder electric

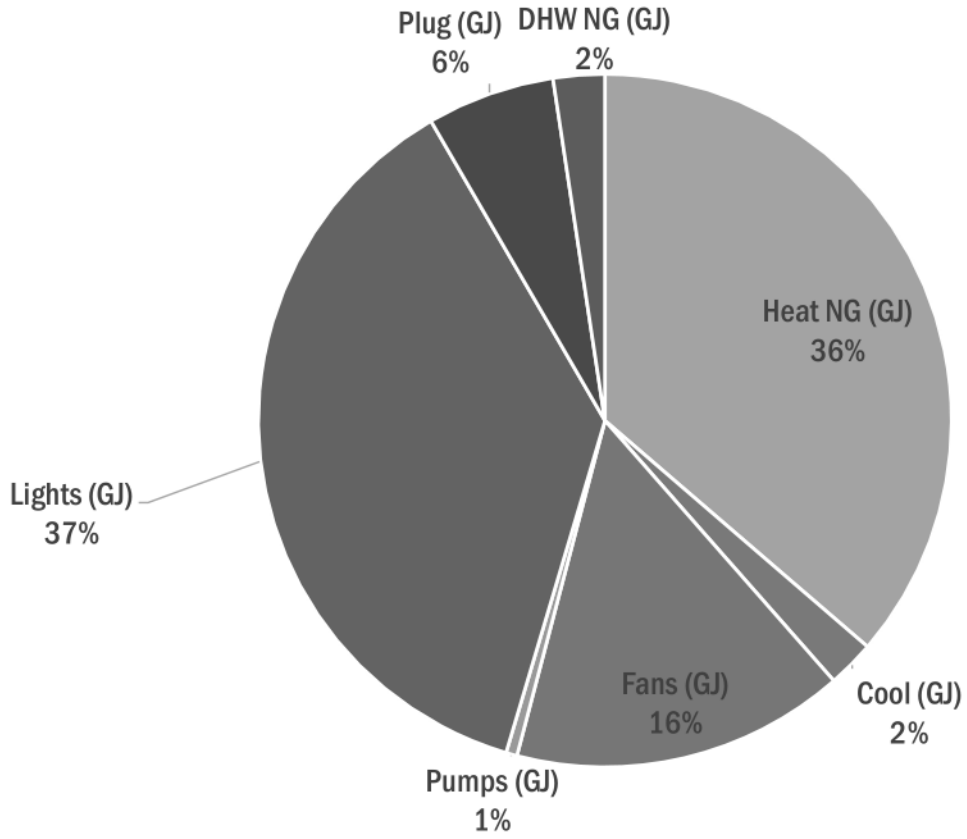
3. Fuel Switch Heating + DHW

- GHGIs
  - Range 5.5 – 5.7
  - Average 5.6
- ICC
  - Range 2.2% - 2.9%
  - Average 2.5%
- 8 scenarios
- 100% electric

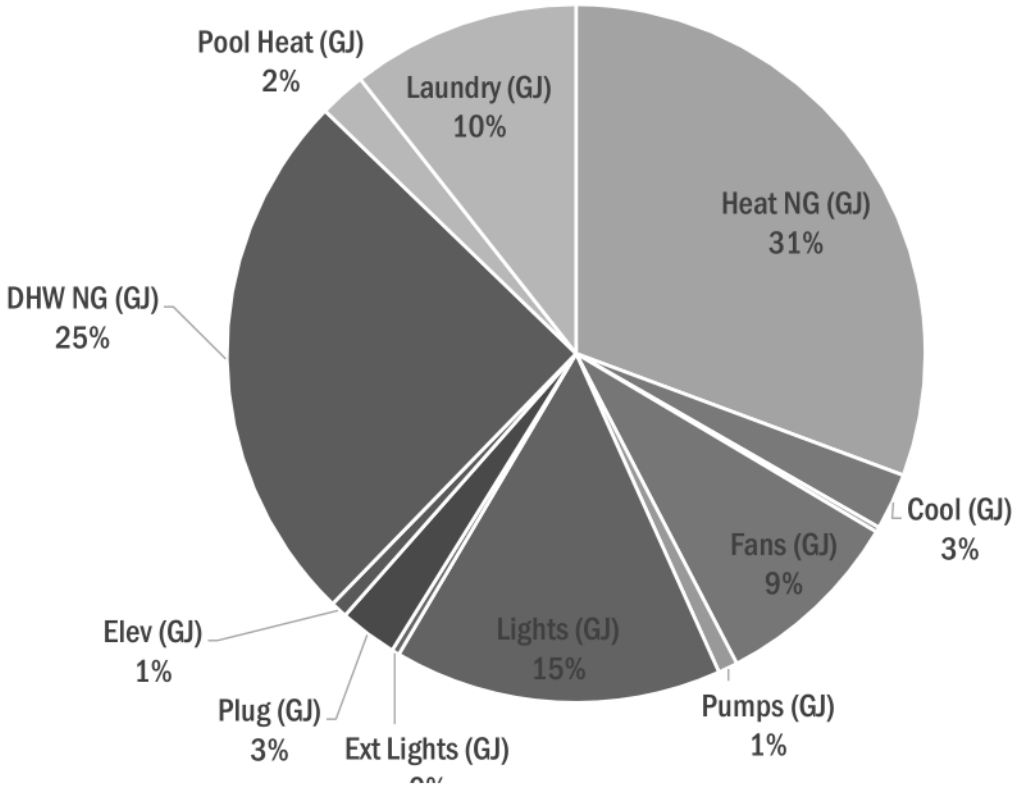
Office CZ4 NECB 2015



Retail CZ4 big box NECB 2015



Hotel CZ4 NECB 2015



RE: [External Email] - Energy Step Code Council meeting agenda and slides

From: Bains, Bea <Bea.Bains@fortisbc.com>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: July 27, 2021 2:31:50 PM PDT

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Thanks Hugo.

Zac
Wondering what levels (or % RNG) we were able to include in the modelling?
I see 15% in slide 5. Was Alex able to include higher blends up to 100%?

Thanks Bea

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Tuesday, July 27, 2021 2:15 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; Bains, Bea <Bea.Bains@fortisbc.com>; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 : May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; chepting@enersys.ca
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>; McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>; pauline@chbabc.org; Jay Chadha <jay@havan.ca>; Owen, Jason <JOwen@surrey.ca>; Alex Blue <ablue@EvokeBuildings.com>; Remi Charron <rcharron@bchousing.org>; Jackie Kanyuk <jackie@bcnpha.ca>; Richards, Victoria <Victoria.Richards@bchydro.com>; ian@bcnpha.ca
Subject: [External Email] - Energy Step Code Council meeting agenda and slides

CAUTION: This is an external email.
Do not respond, click on links or open attachments unless you recognize the sender.

Hello, everyone:

Here are agenda and slides in advance of Alex's presentation tomorrow.

Looking forward to it.

Best,

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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RE: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

From: Jeff Fisher <jfisher@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 28, 2021 9:39:09 AM PDT
Attachments: image001.jpg

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Thanks

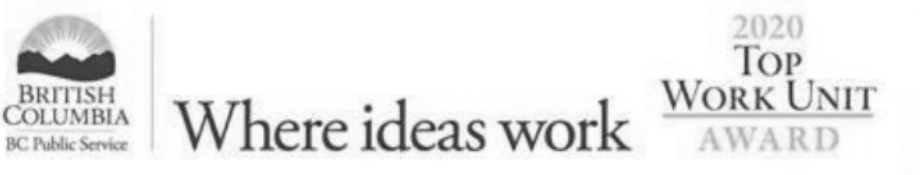
Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 28, 2021 9:38 AM
To: Jeff Fisher <jfisher@udi.org>
Subject: RE: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

The regulation to adopt the 2022 requirements, which are expected to be effective December 2022. Previously I had hoped to have that in regulation about 12-months in advance, but this will compress that timeline between adoption and effective date.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Jeff Fisher <jfisher@udi.org>
Sent: Wednesday, July 28, 2021 9:37 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

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Thanks

Also, what is being delayed until mid-2022 – the whole new version of the *BCBC* – or just the inclusion of the ESC in the *BCBC*?

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 28, 2021 9:33 AM
To: Jeff Fisher <jfisher@udi.org>
Subject: RE: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

Yes. Let me see what happened.

From: Jeff Fisher <jfisher@udi.org>
Sent: Wednesday, July 28, 2021 9:30 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Heather Park <hpark@udi.org>
Subject: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

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Jeff Fisher, M.PL., CAE, MCIP, RPP
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Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

RE: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

From: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 28, 2021 9:41:59 AM PDT

No it didn't go to anyone else. I accidentally missed UDI when I was removing the climate resilience stakeholders and transferring the energy/carbon stakeholders to the other tab.

I am assuming you have already forwarded him the invite.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, July 28, 2021 9:33 AM
To: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: FW: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

Can you see where the invite for UDI went? Maybe it went to someone other than Jeff?

From: Jeff Fisher <jfisher@udi.org>
Sent: Wednesday, July 28, 2021 9:30 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Heather Park <hpark@udi.org>
Subject: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

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Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

RE: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

From: Jeff Fisher <jfisher@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 28, 2021 9:49:25 AM PDT

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Thanks I received the invite!

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
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Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 28, 2021 9:33 AM
To: Jeff Fisher <jfisher@udi.org>
Subject: RE: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

Yes. Let me see what happened.

From: Jeff Fisher <jfisher@udi.org>
Sent: Wednesday, July 28, 2021 9:30 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Heather Park <hpark@udi.org>
Subject: Zachary, we're we supposed to get an invite to that 2030 Road-map discussion?

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Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

Energy Step Code Council meeting (new invite)

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, ruta.fluxgold@canada.ca, sfralin@ahma-bc.org, MGatensby@aibc.ca, hgoodland@scius.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, s.22 May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, sean.pander@vancouver.ca, roberto@zebx.org, warrenp@bccassn.com, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, lsampliner@portmoody.ca, muneesh@boma.bc.ca, Maxwell.Sykes@surrey.ca, rthe@wesgroup.ca, Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, chepting@enersys.ca
Cc:	Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>, pauline@chbabc.org, Jay Chadha <jay@havan.ca>, Owen, Jason <JOwen@surrey.ca>, Alex Blue <ablue@EvokeBuildings.com>, Remi Charron <rcharron@bchousing.org>, Jackie Kanyuk <jackie@bcnpha.ca>, Richards, Victoria <Victoria.Richards@bchydro.com>, ian@bcnpha.ca, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Sent:	July 28, 2021 10:27:40 AM PDT
Attachments:	ESCC Carbon Pollution Meeting 3 - 2021-07-28.pdf

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY

STEPCODE

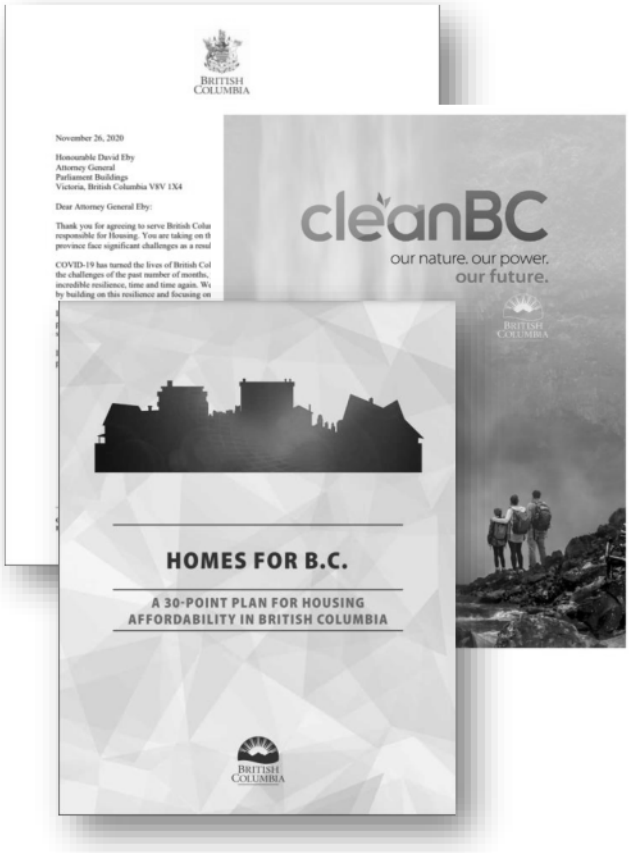
BUILDING BEYOND THE STANDARD



Carbon Pollution Standards

July 28, 2021

Agenda



Time	Topic	Speaker(s)
09:00	Welcome, Introductions and Opening Remarks	Zachary May, ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs
09:05	Executive Message	Andrew Pape-Salmon, Executive Director, BSSB
09:20	Overall Approach	Zachary May, ESCC Chair
09:40	Metrics Analysis: Options for Part 3 Buildings and Part 9 Buildings	Alex Blue, Evoke Buildings Inc.
10:15	Break	
10:30	Discussion	Zachary May, ESCC Chair + All
11:55	Final Remarks and Next Steps	Zachary May, ESCC Chair
12 noon	Adjournment	

Executive Remarks

Carbon Pollution Standards

Possible technical standard

metric of measurement + steps + any technical conditions

Step	GHGi
1	(measure only)
2	6.0
3	3.0

Table for example purposes only – not a proposed requirement

1) GHGi shall be determined according to the emissions intensities in Division C.

2) GHGi shall be determined using the same operational assumptions used to determine compliance with the energy efficiency requirements of Table 9.36.6.3.

*All non-regulatory requirements can be outlined in a separate guide on a more flexible timeline and with more opportunity to update over time.

Carbon Step Outcomes

Proposed outcomes for GHGi Steps

Step 1 – Measure-only

Step 2 – Reduced Carbon
Decarbonization of either heating or hot water system
Not a prescriptive requirement
GHGi targets are intended to align with this desired outcome, but not explicitly require it to maintain flexibility of a performance-based approach

Step 3 – Near Zero Carbon
Decarbonization of both heating and hot water systems
Not a prescriptive requirement
GHGi targets are intended to align with this desired outcome, but not explicitly require it to maintain flexibility of a performance-based approach
Lack of zero-carbon electricity/fuels makes zero carbon impractical at this time

Emissions Factors

Electricity Emissions Factor Issues

GGIRCA 2019 – 29.9 kg CO_2e/MWh (gross import)

GGIRCA 2020 – 40.1 kg CO_2e/MWh (gross import)

GGIRCA 2021 – net import being examined – not yet calculated

- But will be lower than GGIRCA 2020
- GGIRCA methodology is seeking to account for imports AND exports going forward

City of Vancouver Energy Modelling Guidelines (2018) – 11 kg CO_2e/MWh

2020 BC PSO Methodology – 10.67 kg CO_2e/MWh (BC Hydro)

- 2021 methodology document will reference 2021 GGIRCA number

Emissions Factors

Electricity

2020 GGIRCA EEF is an outlier due to high imports of high carbon electricity.

Proposed approach:

Use 2019 GGIRCA emissions factor of **0.0299 kg CO2e/kWh** for the integrated grid, and **0.560 kg CO2e/kWh** for the Fort Nelson grid.

This is a much higher value than the 0.011 kg CO2e/kWh in the CoV modelling guidelines, but reflects BSSB's commitment to transparent and evidence-based regulation.

Natural Gas

Proposed approach:

Use the emissions factor from the BC 2020 Methodology for reporting emissions of **0.17953 kg CO_2e/kWh**

This is slightly lower than the CoV modelling guidelines value of 0.185 kg CO_2e/kWh

Emissions Factors

Renewable Natural Gas / Hydrogen in the Natural Gas network

No mechanism available that could be referenced in regulation that would demonstrate, pre-occupancy, that a building will use RNG/hydrogen long term.

Proposed approach:

Use **0.17953 kg CO_2e/kWh** for all connections to the natural gas network.

This could be reconsidered in the future if a way to demonstrate use of RNG/hydrogen becomes available and is something able to be demonstrated pre-occupancy.

Other Combustion Fuels

Proposed approach:

BC 2020 Methodology for reporting emissions

Emissions Factors

District Energy

Need to rely on discretion of the AHJ to accept an appropriate emissions factor
Will identify best practices for determining the emissions factor from district energy systems in the updated Best Practices Guide for Local Governments

Affordability

Minimum Energy Efficiency

Part 9 Buildings
"Measure only" requirement available for any energy efficiency step
Minimum **Step 3** energy efficiency as a prerequisite for **any** GHG performance requirement

Part 3 Buildings
"Measure only" requirement available for any energy efficiency step
Minimum **Step 2** energy efficiency as a prerequisite for **any** GHG performance requirement

Need to consider incremental capital impact of requiring highest energy efficiency and GHG steps

Reinforce the value of land use and zoning policies to support the development of new low-energy, low-carbon housing

Public Sector Leadership

What is the Public Sector Doing?

Proposing ambitious GHG emissions performance requirements

Options include electrification and meeting Step Code targets

Proposing they will also need to comply with a Green Building Certification Path

Timelines

Meeting 3 – July 28, 2021
Initial review of emissions, cost, and technical analysis

August 2021
Finalize technical analysis
BSSB to summarize proposed option(s) for review and feedback

September 2021
Finalize proposal and seek consensus endorsement by ESCC

Fall 2021
Proposal to be considered by Ministry of Attorney General and Minister Responsible for Housing

Complete updates to the Local Government Best Practices Guide to support implementation of proposed changes

RE: Energy Step Code Council meeting (new invite)

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, ruta.fluxgold@canada.ca, sfralin@ahma-bc.org, MGatensby@aibc.ca, hgoodland@scius.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com,[s.22] , May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, sean.pander@vancouver.ca, roberto@zebx.org, warrenp@bccassn.com, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, lsampliner@portmoody.ca, muneesh@boma.bc.ca, Maxwell.Sykes@surrey.ca, rthe@wesgroup.ca, Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, chepting@enersys.ca
Cc:	Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>, pauline@chbabc.org, Jay Chadha <jay@havan.ca>, Owen, Jason <JOwen@surrey.ca>, Alex Blue <ablue@EvokeBuildings.com>, Remi Charron <rcharron@bchousing.org>, Jackie Kanyuk <jackie@bcnpha.ca>, Richards, Victoria <Victoria.Richards@bchydro.com>, ian@bcnpha.ca, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Sent:	July 28, 2021 1:40:40 PM PDT
Attachments:	Part 3 EUI TEDI - high level analysis.xlsx, SCC GHG Meeting.pptx, Part 9 MEUI - High level analysis.xlsx

Hi all,

Attached is the slides and Excel sheets from Alex's presentation this morning.

Hugo

-----Original Appointment-----
From: Wong, Hugo OHCS:EX
Sent: Monday, July 26, 2021 2:22 PM
To: Andersson, Dale OHCS:EX; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com;[s.22] May, Zachary OHCS:EX; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN; Wong, Hugo OHCS:EX; chepting@enersys.ca
Cc: Pape-Salmon, Andrew OHCS:EX; McCrae, Aura OHCS:EX; pauline@chbabc.org; Jay Chadha; Owen, Jason; Alex Blue; Remi Charron; Jackie Kanyuk; Richards, Victoria; ian@bcnpha.ca; Muncaster, Katherine EMLI:EX
Subject: Energy Step Code Council meeting (new invite)
When: Wednesday, July 28, 2021 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Update: 7-26-2021: Please see below for an updated videoconferencing link with dial-in option. If you have technical difficulties, please email hugo.wong@gov.bc.ca, or call 236 478 1406.

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft teams join link:

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or call in (audio only)
s.15 Canada, Victoria

Phone Conference ID: s.15
Find a local number | Reset PIN

Learn More | Meeting options

Hotels and Motels			% NG		55%	45%	0%
			% Elec		45%	55%	100%
HDD	Step	EUI	TEDI		GHGI - Step 1	GHGI - Step 2	GHGI - Step 3
<3000		1	NECB				
		2	170	30	20.4	17.6	5.1
		3	140	20	16.8	14.5	4.2
		4	120	15	14.4	12.4	3.6
3000 - 3999		1	NECB				
		2	170	30	20.4	17.6	5.1
		3	145	21	17.4	15.0	4.3
		4	130	16	15.6	13.5	3.9
4000 - 4999		1	NECB				
		2	170	30	20.4	17.6	5.1
		3	145	25	17.4	15.0	4.3
		4	130	18	15.6	13.5	3.9
>4999		1	NECB				
		2	170	32	20.4	17.6	5.1
		3	150	28	18.0	15.5	4.5
		4	145	20	17.4	15.0	4.3

Check:		GHGI - Step 1	GHGI - Step 2	GHGI - Step 3
Estimate % of heating from TEDI	Ballpark DHW	GHGI if TEDI + DHW NG	GHGI if TEDI is 70% Elec/DHW is NG	GHGI if EUI is fully elec
18%	25%	17.0	13.5	5.1
14%	30%	14.4	12.1	4.2
13%	35%	13.0	11.3	3.6
18%	25%	17.0	13.5	5.1
14%	29%	14.7	12.3	4.3
12%	33%	13.5	11.6	3.9
18%	25%	17.0	13.5	5.1
17%	29%	15.4	12.5	4.3
14%	33%	13.8	11.7	3.9
19%	25%	17.3	13.6	5.1
19%	28%	16.0	12.8	4.5
14%	29%	14.6	12.3	4.3

	Emissions Factor (kgCO2e/kWh)
Electricity (2019 Integrated grid)	0.0299
Natural Gas (Provincial Factors)	0.1937

Other Residential			% NG		55%	35%	0%
			% Elec		45%	65%	100%
HDD	Step	EUI	TEDI		GHGI - Step 1	GHGI - Step 2	GHGI - Step 3
<3000		1	NECB				
		2	130	45	15.6	11.3	3.9
		3	120	30	14.4	10.5	3.6
		4	100	15	12.0	8.7	3.0
3000 - 3999		1	NECB				
		2	130	45	15.6	11.3	3.9
		3	120	35	14.4	10.5	3.6
		4	110	22	13.2	9.6	3.3
4000 - 4999		1	NECB				
		2	135	50	16.2	11.8	4.0
		3	120	35	14.4	10.5	3.6
		4	110	22	13.2	9.6	3.3
5000 - 5999		1	NECB				
		2	135	55	16.2	11.8	4.0
		3	120	40	14.4	10.5	3.6
		4	110	22	13.2	9.6	3.3
6000 - 6999		1	NECB				
		2	150	60	18.0	13.1	4.5
		3	140	50	16.8	12.2	4.2
		4	125	35	15.0	10.9	3.7
>6999		1	NECB				
		2	180	90	21.6	15.7	5.4
		3	160	75	19.2	14.0	4.8
		4	140	60	16.8	12.2	4.2

35%	20%	15.5	10.4	3.9
25%	22%	12.8	9.3	3.6
15%	26%	9.7	8.0	3.0
35%	20%	15.5	10.4	3.9
29%	22%	13.6	9.6	3.6
20%	24%	11.2	8.6	3.3
37%	19%	16.5	10.8	4.0
29%	22%	13.6	9.6	3.6
20%	24%	11.2	8.6	3.3
41%	19%	17.3	11.0	4.0
33%	22%	14.4	9.8	3.6
20%	24%	11.2	8.6	3.3
40%	17%	18.6	11.7	4.5
36%	19%	16.6	10.9	4.2
28%	21%	13.7	9.7	3.7
50%	14%	24.4	14.1	5.4
47%	16%	21.3	12.7	4.8
43%	19%	18.3	11.4	4.2

Offices			% NG		45%	25%	0%
			% Elec		55%	75%	100%
HDD	Step	EUI	TEDI		GHGI - Step 1	GHGI - Step 2	GHGI - Step 3
<3000		1	NECB				
		2	130	30	15.6	13.5	3.9
		3	100	20	12.0	10.4	3.0
3000 - 3999		1	NECB				
		2	130	30	15.6	13.5	3.9
		3	100	20	12.0	10.4	3.0
4000 - 4999		1	NECB				
		2	130	30	15.6	13.5	3.9
		3	100	20	12.0	10.4	3.0
>4999		1	NECB				
		2	130	30	15.6	13.5	3.9
		3	110	20	13.2	11.4	3.3

23%	11%	11.1	7.7	3.9
20%	14%	8.6	6.3	3.0
23%	11%	11.1	7.7	3.9
20%	14%	8.6	6.3	3.0
23%	11%	11.1	7.7	3.9
20%	14%	8.6	6.3	3.0
23%	11%	11.1	7.7	3.9
18%	13%	8.9	6.6	3.3

Retail			% NG		0.45	0.25	0
			% Elec		0.55	0.75	1
HDD	Step	EUI	TEDI		GHGI - Step 1	GHGI - Step 2	GHGI - Step 3
<3000		1	NECB				
		2	170	30	20.4	17.6	5.1
		3	120	20	14.4	12.4	3.6
3000 - 3999		1	NECB				
		2	170	30	20.4	17.6	5.1
		3	125	25	15.0	13.0	3.7
4000 - 4999		1	NECB				
		2	170	45	20.4	17.6	5.1
		3	130	30	15.6	13.5	3.9
>4999		1	NECB				
		2	190	55	22.8	19.7	5.7
		3	150	40	18.0	15.5	4.5

18%	2%	10.6	7.1	5.1
17%	3%	7.4	5.1	3.6
18%	2%	10.6	7.1	5.1
20%	3%	8.4	5.5	3.7
26%	2%	13.0	7.9	5.1
23%	3%	9.4	5.9	3.9
29%	2%	15.2	8.9	5.7
27%	2%	11.6	7.0	4.5

BC Energy Step Code Metrics Report Update GHG Targets Discussion

1

GHG Steps – Metrics Report Info

July 28, 2021

Part 3

Analysis/approach

Common observations across building types

Sample archetypes/”steps” highlighting technical implications for buildings

Any building types that seem particularly sensitive?

Range of ICC for different steps, and relation to operational costs?

Conditions that should be placed on modelling to ensure outcomes?

Part 9

Analysis/approach

Common observations across building types

Sample archetypes/”steps” highlighting technical implications for buildings

Any housing archetypes that seem particularly sensitive?

Issues with the more limited scope of MEUI? Does GHGi for housing address all loads or just those in MEUI?

Part 3

Low-rise MURB, High-Rise MURB, Office, Retail, Hotel

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Part 3 Analysis Overview

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Hotel

Retail

Office

Low Rise MURB

High Rise MURB

5 archetypes

Updated to NECB 2020 inputs/defaults

Still using NECB 2015 as baseline for costing/performance

Steps stay the same for current analysis

Parametric analysis using EnergyPlus

4

GHG Emissions Factors

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Results today are using the Integrated grid 2019 factors (0.03 kg/kWh). Note this is a little under 3x bigger than the CoV factors so for those that may have been working with the CoV factors for a few years, the numbers/targets might look a little different and take different measures to hit these numbers.

5

Electricity (CoV Modelling Guidelines) Electricity (2019 Integrated grid) Electricity (2020 Fort Nelson grid) Natural Gas (Provincial Factors) Natural Gas (15% RNG) 1.0999999999999999E-2 2.9899999999999999E-2 0.56000000000000005 0.19370000000000001 0.16658200000000001

Emissions Factor (kgCO2e/kWh)

Max TEUI to hit:

6 kg/m2/year

3 kg/m2/year

1 kg/m2/year

100% Elec

201

100

33

25% NG

158

79

26

50% NG

116

58

19

Current TEUI Targets:

Hotel: 120 – 170

MURB: 100 – 180

Offices: 100 – 130

Retail: 120 - 190

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EUI Implications of GHG Targets

*using Integrated grid 2019 electricity factors

MURB – NECB 2015 Baseline, FCs w/ Boiler

Just to throw some numbers and start to see what range could make sense – 1 is not achievable; 3 is right at the low end of TEUI targets so could be reasonable for some archetypes, but would likely require mostly or totally electric. 6 would give some flexibility on fuel mix; achievable for all buildings in all climate zones using fully electric, or can allow for reduced EUI and a mix of nat gas and electric. That might be more appropriate as closer to the upper targets.

Dial in on the next slides.

6

Heat Elec (GJ) Heat NG (GJ) Cool (GJ) Heat Rej (GJ) Fans (GJ) Pumps (GJ) Lights (GJ) Ext Lights (GJ) Plug (GJ) Elev (GJ) DHW Elec (GJ) DHW NG (GJ) 510.45987054782205 4294.7226341136602 405.42551440624499 110.12179280569299 1524.89228109347 39.546526137668096 1281.70256109605 78.394499999999994 1148.2322124382999 125.3556 0 2512.0247423400001

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ECMs and Emissions Factors

Back of envelope using EUI/TEDI targets only

MURB, CZ4

GHGI impact of:

Step 2 to Step 4

Condensing boiler to electric baseboard

NG DHW to electric DHW

Emissions factors >> ECMs

Just using the EUI and TEDI targets for Steps 2 and 4 for CZ4 MURB

Back of the envelope calculation.

What is the GHGI impact of going from Step 2 to 4?

What is the GHGI impact of fuel switching heating (similar efficiency)?

What is the GHGI impact of fuel switching DHW and heating?

Some GHGI reduction from Step 2 to 4, as we would expect!

Particularly significant with higher GHGI fuel source for heating – big heating/TEDI reduction = big GHGI savings.

Bigger impact as we fuel switch with the current emissions factors

So a fully low-GHG fuel building at Step 2 is likely to have lower GHG than a high GHG fuel buidling at Step 4.

Efficiency measures not likely to override emissions factors.

7

Step 2 (Cond. Boiler) EUI TEDI GHGI 130 45 16.818578947368422 Step 4 (Cond. Boiler) EUI TEDI GHGI 100 15 10.748947368421053 Step 2 (Elec BB, NG DHW) EUI TEDI GHGI 130 45 9.0596315789473678 Step 4 (Elec BB, NG DHW) EUI TEDI GHGI 100 15 8.1626315789473693 Step 2 (Elec BB, Elec DHW) EUI TEDI GHGI 130 45 3.887 Step 4 (Elec BB, Elec DHW) EUI TEDI GHGI 100 15 2.9899999999999998

1. ECMs

Typical to slightly improved envelope

Walls R-7 to 10

Windows USI-1.6 to 2.0

Roof R-40

Typical efficiency HRV 60%

No infiltration savings

Mid-range WWR

MURBs 40%, retail 20%, office 50%, hotel 50%

20% DHW flow savings

Condensing boiler

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Sample Steps - Principals

2. Partial Heating Fuel Switch

Same ECMs as 1

Switch to ASHP for primary heating

70% of annual heating load for most archetypes

90% for retail

Natural gas condensing boiler backup

3. Fuel Switch Heating + DHW

Same ECMs as 1

ASHP w/ electric resistance backup (or fully HP)

Electric resistance for NG

8

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Operating Cost Implications

Carbon Tax

NG $/GJ

Elec $/GJ (virtual rate)

Min efficiency of HP to break even

$45 in 2021 $50 in 2022 and after

12.75

26

2 - 2.6

$45 in 2021 $50 in 2022 Linear increase to $170 in 2030 Stay at $170 to 2040

15.98

26

1.6 – 2.2

$45 in 2021 $50 in 2022 Linear increase to $170 in 2030 Escalate to $300 at final year of 20 year period (linear increase $13/year)

17.16

26

1.5 – 2.1

Average utility pricing across 20-year period, includes 2% utility escalation, 3% discount rate

1. ECMs

GHGIs

Range 10.2 – 15.4

Average 13.2

ICC

Range 1.1% - 2.3%

Average 1.7%

24 scenarios

Some dependence on suite size (density)

Low density (large units) ranges from 10.3 – 13.5 GHGI

High density (small units) ranges from 12.9 – 15.4 GHGI

Approx. 40% - 50% NG, remainder electric

Click to edit Master text styles

Sample Steps – MURB CZ4

2. Partial Heating Fuel Switch

GHGIs

Range 7.8 – 10.8

Average 9.4

ICC

Range 2.4% - 3.6%

Average 3.0%

24 scenarios

Similar dependence on suite size (density)

Low density (large units) ranges from 7.8 – 8.5 GHGI

High density (small units) ranges from 10.1 – 10.8 GHGI

Approx. 25 - 35% NG, remainder electric

3. Fuel Switch Heating + DHW

GHGIs

Range 3.1 – 3.8

Average 3.5

ICC

Range 3.9% - 5.1%

Average 4.5%

24 scenarios

Similar dependence on suite size (density)

Low density (large units) ranges from 3.1 – 3.4 GHGI

High density (small units) ranges from 3.6 – 3.8 GHGI

100% electric

Uses High-rise MURB

Low rise MURB will have same ECMs, same GHGIs, slightly lower ICC.

10

1. ECMs

GHGIs

Range 20.0 – 27.0

Average 23.6

ICC

Range 0.8% – 1.7%

Average 1.3%

24 scenarios

Some dependence on suite size (density)

Low density (large units) ranges from 20.0 – 25.1 GHGI

High density (small units) ranges from 22.0 – 27.0 GHGI

Approx. 50 - 60% NG, remainder electric

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Sample Steps – MURB CZ7a

2. Partial Heating Fuel Switch

GHGIs

Range 11.3 – 15.2

Average 13.4

ICC

Range 2.3% - 3.3%

Average 2.8%

24 scenarios

Similar dependence on suite size (density)

Approx. 25 - 35% NG, remainder electric

3. Fuel Switch Heating + DHW

GHGIs

Range 4.5 – 5.3

Average 4.9

ICC

Range 3.8% - 4.8%

Average 4.3%

24 scenarios

Similar dependence on suite size (density)

100% electric

11

1. ECMs

GHGIs

Range 6.3 – 8.6

Average 7.5

ICC

Range -0.6% – -1.0%

Average -0.8%

16 scenarios

Approx. 25% - 35% NG, remainder electric

Some dependence on occupant density (adds approx. 1.3 to GHGI if double density)

Click to edit Master text styles

Sample Steps – Office CZ4

2. Partial Heating Fuel Switch

GHGIs

Range 5.0 – 7.0

Average 6.0

ICC

Range 0.4 – 0.7%

Average 0.5%

16 scenarios

Approx. 20 - 25% NG, remainder electric

Similar dependence on occupant density

3. Fuel Switch Heating + DHW

GHGIs

Range 2.5 – 3.2

Average 2.8

ICC

Range 1.6 – 2.3%

Average 2.1%

16 scenarios

100% electric

12

1. ECMs

GHGIs

Range 10.8 – 14.1

Average 12.4

ICC

Range -0.2% – 0.3%

Average 0.1%

16 scenarios

Approx. 40% - 50% NG, remainder electric

Some dependence on occupant density (adds approx. 1 to GHGI if double density)

Click to edit Master text styles

Sample Steps – Office CZ7a

2. Partial Heating Fuel Switch

GHGIs

Range 6.7 – 9.1

Average 7.9

ICC

Range 1.4 – 1.8%

Average 1.6%

16 scenarios

Approx. 23 - 27% NG, remainder electric

Similar dependence on occupant density

3. Fuel Switch Heating + DHW

GHGIs

Range 2.9 – 3.8

Average 3.3

ICC

Range 2.9 – 3.3%

Average 3.1%

16 scenarios

100% electric

13

1. ECMs

GHGIs

Range 5.9 – 8.0

Average 6.9

ICC

Range -1.4% – -3.1%

Average -2.2%

8 scenarios

Approx. 20% - 30% NG, remainder electric

Some sensitivity to space mix/archetype: mall vs big box

Mall 7.3 – 8.0

Big box 5.9 – 6.5

Click to edit Master text styles

Sample Steps – Retail CZ4

2. Partial Heating Fuel Switch

GHGIs

Range 3.4 – 3.8

Average 3.6

ICC

Range -0.2 - -1.2%

Average -0.6%

8 scenarios

Approx. 5 - 8% NG, remainder electric

3. Fuel Switch Heating + DHW

GHGIs

Range 2.6 – 2.8

Average 2.7

ICC

Range 1.3 – 2.7%

Average 2%

8 scenarios

100% electric

14

1. ECMs

GHGIs

Range 17.5 – 23.0

Average 20.2

ICC

Range 1.1% – 1.7%

Average 1.4%

8 scenarios

Approx. 40% - 60% NG, remainder electric

Sensitivity to fuel source for laundry (10%+ of energy use)

Electric 17.5 - 18.5 GHGI

NG 22.0 – 23.0 GHGI

Click to edit Master text styles

Sample Steps – Hotel CZ4

2. Partial Heating Fuel Switch

GHGIs

Range 14.2 – 18.9

Average 16.5

ICC

Range 2.4% - 3.0%

Average 2.7%

8 scenarios

Approx. 35% - 50% NG, remainder electric

3. Fuel Switch Heating + DHW

GHGIs

Range 4.8 – 4.9

Average 4.9

ICC

Range 3.9% - 4.5%

Average 4.2%

8 scenarios

100% electric

15

Sample Steps Summary

See separate spreadsheet

Click to edit Master text styles

Modelling Conditions

Emissions Factors

Consistency over time

District heat

Renewables

Backup heat sources, DHW top-up or backup

DHW savings calculations

Method in CoV Modelling Guidelines

Home cooking loads, fireplaces

Method in CoV Modelling Guidelines

Other Process Loads

E.g. swimming pool heating, commercial laundry for hotel, cooking for hotel

Click to edit Master text styles

One of the ways consistency of emissions factors over time could be dealt with is the same as LEED does for utility rates, factors can be from anytime during the project's design phase, you just have to keep a record of it.

Or just set numbers and stick to it, and signal changes WAY in advance.

17

Part 9

Click to edit Master text styles

Analysis/Approach

No HTAP results yet…

Using sample end use breakdowns and MEUI Targets

Does not account for potential impacts of % better than EnerGuide target

Click to edit Master text styles

End Use Breakdowns

Step 3, CZ4, MEUI 69, TEDI 36

Step 3, CZ4, MEUI 46, TEDI 37

Step 3, CZ4, MEUI 50, TEDI 27

Small SFD and row house

- larger % of DHW

this means that if we make a fuel switch for around 45-50% of MEUI, we would push DHW over to electric, or space heating to partially electric, for smaller dwellings. For larger, we would be pushing space heating electrification more heavily, since DHW would not be sufficient.

If we were to make a middle step around maybe 75% (threshold to be confirmed based on % backup used in heat pump modeled scenarios)

Idea would be to push small sfd to at least partially electrify both space heating and dhw

Large SFD would potentially get away with just electrifying space heating (almost fully)

20

Small SFD

Space Heating Energy (GJ) DHW Energy (GJ) Ventilation Energy (GJ) 13.67 10.9 0.59

Large SFD

Space Heating Energy (GJ) DHW Energy (GJ) Ventilation Energy (GJ) 72.59 10.9 0.96

Rowhouse

Space Heating Energy (GJ) DHW Energy (GJ) Ventilation Energy (GJ) 103.9 77.599999999999994 5.3

Sample “Steps” and Technology Implications

Size Matters

Different buildings will see different technology pushes based on size

DHW is a larger % of smaller buildings

Option 1 – TEDI and DHW based

Base GHG Steps on TEDI and DHW as a % of MEUI

Set a % of TEDI and DHW that you expect to be low-carbon fuel.

Move heating first = higher targets for small homes, lower targets for large homes

Variation between MEUI/TEDI step levels currently –

Potentially choose GHG targets based on Step 3 ECMs for lower target, Step 4 ECMs for middle target, Step 5 ECMs for upper target

Or increase stringency of lower target so it requires either some ECMs beyond Step 3 or some specifically targeted GHG savings

Sample “Steps” and Technology Implications

Option 2 – MEUI based

Base GHG Steps on MEUI

Set a % of total MEUI that you expect to be low-carbon fuel.

Smaller variation between small and large homes GHGI targets, small homes still higher targets than large homes

If you set % around the space heating % of small homes (~55%), you would be likely to exceed that in large homes if

you switch space heating to electrification, whereas small homes may struggle.

If you set % around the DHW % of small homes (~45%) they would have two options for system electrification (DHW or heating) whereas large homes would have to at least partially electrify space heating, which is a larger system for them (may lead to larger homes overshooting the target as you're not as likely to electrify 60% of your heating, but would give smaller homes more options.)

Modelling Issues

There is a "mismatch" when using a heat pump in the Proposed House. In HOT2000 you have to specify both the heat pump and the "back up" heating system, called "Type 1" and "Type 2" parts of the space heating system when specifying a heat pump. Type 1 is the back up heat; Type 2 is the heat pump. The Reference House will match the "Type 1" part only, which is NOT the heat pump but the backup furnace. This is a HOT2000 discrepancy as far as I understand it; this does not follow the "Reference House" definition at least in the BC version of Section 9.36 which is "supposed" to match the Federal version of 9.36.

Thank you!

24

1. ECMs

GHGIs

Range 13.1 – 17.3

Average 15.2

ICC

Range -0.6% – -1.7%

Average -1.0%

8 scenarios

Approx. 35% - 45% NG, remainder electric

Some sensitivity to space mix/archetype: mall vs big box

Mall 15.7 – 17.3

Big box 13.1 – 14.7

Click to edit Master text styles

Sample Steps – Retail CZ7a

2. Partial Heating Fuel Switch

GHGIs

Range 4.9 – 5.7

Average 5.3

ICC

Range 0.4 - 1.5%

Average 0.8%

8 scenarios

Approx. 5 - 10% NG, remainder electric

3. Fuel Switch Heating + DHW

GHGIs

Range 3.7 – 3.9

Average 3.8

ICC

Range 1.9 – 3.0%

Average 2.3%

8 scenarios

100% electric

25

1. ECMs

GHGIs

Range 25.4 – 32.1

Average 28.8

ICC

Range 0.7% - 1.4%

Average 1.1%

8 scenarios

Approx. 55% - 70% NG, remainder electric

Sensitivity to fuel source for laundry (10%+ of energy use)

Electric 25.4 – 27.6 GHGI

NG 29.9 – 32.1 GHGI

Click to edit Master text styles

Sample Steps – Hotel CZ7a

2. Partial Heating Fuel Switch

GHGIs

Range 16.9 – 22.0

Average 19.5

ICC

Range 2.2% - 2.9%

Average 2.5%

8 scenarios

Approx. 35% - 50% NG, remainder electric

3. Fuel Switch Heating + DHW

GHGIs

Range 5.5 – 5.7

Average 5.6

ICC

Range 3.7% - 4.4%

Average 3.0%

8 scenarios

100% electric

26

Office CZ4 NECB 2015

Heat Elec (GJ) Heat NG (GJ) Cool (GJ) Heat Rej (GJ) Fans (GJ) Pumps (GJ) Lights (GJ) Ext Lights (GJ) Plug (GJ) Elev (GJ) DHW Elec (GJ) DHW NG (GJ) 0 3859.26037376659 902.51046584979201 10.8993174312587 999.67797672748077 439.97214307339505 2185.8459174766999 47.036700000000003 1074.79624933012 120.1878 0 1132.4762389012499

Retail CZ4 big box NECB 2015

Heat Elec (GJ) Heat NG (GJ) Cool (GJ) Heat Rej (GJ) Fans (GJ) Pumps (GJ) Lights (GJ) Ext Lights (GJ) Plug (GJ) Elev (GJ) DHW Elec (GJ) DHW NG (GJ) 0 990.08634489604799 60.029407511228797 0 424.492279285812 14.086433487597601 1009.3973239844599 0 162.80601999749899 0 0 65.422644974999997

Hotel CZ4 NECB 2015

Heat Elec (GJ) Heat NG (GJ) Cool (GJ) Heat Rej (GJ) Fans (GJ) Pumps (GJ) Lights (GJ) Ext Lights (GJ) Plug (GJ) Elev (GJ) DHW Elec (GJ) DHW NG (GJ) Pool Heat (GJ) Laundry (GJ) 0 2715.1132234275001 232.78056460173801 20.645585442618099 784.173403809109 79.920651490399365 1344.346960698166 31.369199999999999 236.547050371995 68.709059999999994 0 2209.2750754227245 191.68421051500601 938.25907199999995

9.36.6.3 (i)			MEUI (kWh/m2/yr)						TEDI							TEDI							TEDI						
			Floor area of conditioned space (m2)						100%NG							75%NG							50%NG						
CZ	Cooling	Step	<50	51 - 75	76 - 120	121 - 165	166 - 210	>210	DHW	51 - 75	76 - 120	121 - 165	166 - 210	>210		DHW	51 - 75	76 - 120	121 - 165	166 - 210	>210		DHW	51 - 75	76 - 120	121 - 165	166 - 210	>210	
<3800	Not more than 50%	2	135	120	98	75	65	60	35	26	23	17	15	13	12	19	16	13	10	8	7		5	4	4	3	3	3	
		3	120	105	75	63	53	50	30	23	19	15	12	10	10	15	13	10	8	6	6		4	4	3	3	2	2	
		4	90	80	60	48	40	40	20	17	15	12	9	8	8	15	13	9	7	5	5		3	3	2	2	2	2	
		5	65	55	40	30	25	25	15	13	11	8	6	5	5	11	9	6	4	3	3		2	2	2	1	1	1	
	More than 50%	2	170	148	108	85	73	65	35	33	29	21	16	14	13	28	24	16	12	9	8		6	5	4	3	3	3	
		3	150	128	90	73	60	55	30	30	25	18	14	12	11	25	21	14	10	7	6		5	5	4	3	3	2	
		4	120	108	78	58	48	45	20	24	21	15	11	9	9	21	18	12	8	6	5		4	4	3	2	2	2	
		5	100	83	58	40	33	30	15	19	16	11	8	6	6	17	14	9	6	4	4		3	3	2	2	1	1	
3800 - 3999	Not more than 50%	2	140	125	103	85	75	70	45	28	25	19	16	15	14	22	19	15	10	8	7		5	4	4	3	3	3	
		3	135	115	90	78	68	65	40	27	22	17	15	13	13	21	17	12	10	8	7		5	4	4	3	3	3	
		4	100	90	73	58	50	50	30	20	17	14	11	10	10	15	13	9	7	6	6		4	3	3	2	2	2	
		5	70	60	45	35	30	30	20	14	12	9	7	6	6	11	9	6	4	3	3		3	2	2	1	1	1	
	More than 50%	2	180	158	118	95	83	75	45	35	31	23	18	16	15	29	24	17	12	10	8		6	5	4	4	3	3	
		3	170	143	108	88	75	70	40	33	28	21	17	15	14	27	22	15	11	9	8		6	5	4	4	3	3	
		4	135	118	88	68	58	55	30	26	23	17	13	11	11	22	19	13	9	7	6		5	4	3	3	2	2	
		5	105	88	63	45	38	35	20	20	17	12	9	7	7	18	14	9	6	5	4		4	3	2	2	2	2	
4000 - 4999	Not more than 50%	2	160	145	115	100	90	85	60	31	28	22	19	17	16	23	20	14	11	9	8		6	6	5	4	4	4	
		3	145	125	100	88	78	75	50	28	24	19	17	15	15	21	17	12	10	8	8		6	5	4	4	4	3	
		4	105	95	75	63	58	55	40	20	18	15	12	11	11	15	13	9	7	6	5		4	4	3	3	3	3	
		5	80	70	55	45	43	40	35	15	14	11	9	8	8	12	10	7	5	4	4		3	3	3	3	3	3	
	More than 50%	2	180	153	118	98	85	80	50	35	30	23	19	16	15	24	20	14	11	9	8		6	5	4	4	4	3	
		3	160	133	108	90	83	80	50	30	26	20	16	14	13	22	18	12	9	7	6		5	4	4	3	3	3	
		4	140	123	93	73	63	60	40	27	24	18	14	12	12	22	18	12	9	7	6		5	4	3	3	2	2	
		5	115	98	73	55	48	45	25	22	19	14	11	9	9	19	16	11	7	6	5		4	4	3	2	2	2	
5000 - 5999	Not more than 50%	2	185	170	140	125	115	110	80	30	33	27	24	22	21	25	22	16	13	11	10		7	7	6	6	5	5	
		3	165	145	120	108	98	95	70	32	28	23	21	19	18	22	18	13	11	8	8		6	5	5	5	5	5	
		4	120	110	90	78	73	70	55	23	21	17	15	14	14	16	14	10	7	6	6		5	5	4	4	3	3	
		5	85	80	70	60	55	55	35	18	16	14	12	11	11	14	12	9	7	5	4		4	3	3	3	3	3	
	More than 50%	2	220	198	158	135	123	115	80	43	38	31	26	24	22	31	27	19	15	13	11		8	8	7	6	6	5	
		3	200	173	138	118	105	100	70	39	34	27	23	20	19	28	24	17	13	11	10		8	7	6	5	5	5	
		4	155	138	108	88	78	75	55	30	27	21	17	15	15	22	19	13	9	7	7		6	5	5	4	4	4	
		5	130	113	88	70	63	60	35	25	22	17	14	12	12	20	17	12	9	7	7		5	4	4	3	3	3	
6000 - 6999	Not more than 50%	2	235	190	160	145	135	130	100	40	37	31	28	26	25	33	26	21	18	16	14		9	8	7	7	6	6	
		3	195	165	140	128	118	115	90	36	32	27	25	23	22	28	23	18	14	12	11		8	7	6	6	6	6	
		4	135	125	105	93	85	85	65	26	24	20	18	16	16	17	15	11	9	7	7		6	5	5	4	4	4	
		5	105	95	80	75	68	65	50	20	18	15	14	13	13	13	11	9	7	6	6		4	4	4	3	3	3	
	More than 50%	2	245	215	178	155	143	135	103	46	40	34	30	28	26	33	28	21	16	14	12		10	9	8	7	7	6	
		3	220	193	158	138	125	120	90	43	37	31	27	24	23	30	25	18	14	12	11		9	8	7	6	6	6	
		4	175	153	123	103	93	90	65	33	28	24	20	18	17	24	21	15	11	9	8		7	6	5	5	4	4	
		5	140	123	98	80	73	70	50	27	24	19	15	14	14	20	17	12	9	7	7		5	5	4	4	3	3	
>3999	Not more than 50%	2	225	210	180	165	158	150	120	44	41	36	32	30	29	27	24	18	15	13	12		10	9	8	8	8	7	
		3	200	180	155	143	133	130	105	39	36	30	28	26	25	24	20	15	13	11	11		9	8	7	7	7	6	
		4	150	140	120	108	100	100	80	29	27	23	21	19	19	18	16	12	10	8	8		6	6	6	5	5	5	
		5	115	105	90	80	75	75	60	22	20	17	15	15	15	14	12	9	7	6	6		5	5	4	4	4	4	
	More than 50%	2	260	238	198	175	163	155	123	51	46	38	34	32	30	34	29	22	17	15	13		11	10	9	8	8	6	
		3	230	208	173	153	140	135	105	46	40	34	30	27	26	31	26	19	15	12	12		10	9	8	7	7	7	
		4	185	168	138	118	108	105	80	35	33	27	23	21	20	25	21	15	12	10	9		7	7	6	5	5	5	
		5	150	133	108	90	83	80	60	29	26	21	17	16	16	21	17	13	9	8	7		6	5	5	4	4	4	

	TEDI as a % of MEUI						
CZ	Cooling	Step	<50	51 - 75	76 - 120	121 - 165	166 - 210	>210
<3800	Not more than 50%	2	36%	39%	38%	47%	54%	58%
		3	25%	30%	40%	48%	57%	60%
		4	22%	25%	33%	42%	50%	50%
		5	23%	27%	38%	50%	58%	58%
	More than 50%	2	21%	24%	32%	41%	48%	54%
		3	19%	23%	32%	41%	50%	58%
		4	16%	19%	26%	34%	42%	44%
		5	15%	18%	26%	38%	46%	58%
3800 - 3999	Not more than 50%	2	21%	25%	45%	53%	66%	64%
		3	20%	25%	44%	51%	59%	62%
		4	20%	23%	43%	52%	58%	58%
		5	29%	33%	44%	57%	67%	67%
	More than 50%	2	20%	26%	38%	47%	54%	58%
		3	24%	26%	37%	45%	53%	57%
		4	20%	25%	34%	44%	53%	56%
		5	19%	23%	32%	44%	53%	57%
4000 - 4999	Not more than 50%	2	26%	41%	53%	68%	67%	71%
		3	34%	40%	50%	57%	64%	67%
		4	36%	40%	53%	63%	73%	73%
		5	31%	36%	46%	56%	63%	63%
	More than 50%	2	31%	35%	45%	58%	61%	67%
		3	26%	33%	42%	51%	59%	63%
		4	29%	33%	43%	55%	63%	67%
		5	22%	26%	34%	45%	52%	56%
5000 - 5999	Not more than 50%	2	43%	47%	57%	64%	76%	73%
		3	42%	46%	56%	65%	71%	74%
		4	46%	50%	61%	71%	79%	79%
		5	37%	41%	50%	58%	64%	64%
	More than 50%	2	36%	40%	51%	59%	66%	70%
		3	35%	40%	51%	59%	67%	70%
		4	35%	40%	51%	63%	71%	73%
		5	27%	31%	40%	50%	58%	58%
6000 - 6999	Not more than 50%	2	40%	53%	63%	69%	74%	77%
		3	49%	55%	64%	70%	78%	78%
		4	46%	52%	62%	70%	74%	74%
		5	46%	53%	63%	71%	75%	77%
	More than 50%	2	42%	46%	56%	65%	72%	74%
		3	41%	47%	57%	65%	72%	75%
		4	38%	42%	53%	63%	70%	72%
		5	35%	41%	51%	63%	68%	71%
>3999	Not more than 50%	2	53%	57%	67%	73%	77%	80%
		3	53%	56%	68%	73%	78%	81%
		4	53%	57%	67%	74%	80%	80%
		5	52%	57%	67%	75%	80%	80%
	More than 50%	2	45%	50%	61%	69%	74%	77%
		3	44%	50%	61%	69%	75%	78%
		4	43%	48%	58%	68%	74%	78%
		5	40%	46%	56%	67%	72%	76%

Emissions Factor (kgCO2e/kWh)	
Electricity (2)	0.0289
Natural Gas	0.1937

MEUI (kWh/m2/yr)
Floor area of conditioned space (m2)

TEDI
eKWh/m2/yr

CZ	Cooling	Step	<50	51 - 75	76 - 120	121 - 165	166 - 210	>210	All Sizes
<3800	Not more than 50%	2	135	120	98	75	65	60	35
		3	120	105	75	63	53	50	30
		4	90	80	60	48	40	40	20
		5	65	55	40	30	25	25	15
	More than 50%	2	170	148	108	85	73	65	35
		3	150	128	90	73	60	55	30
		4	120	108	79	58	48	45	20
		5	90	80	58	40	33	30	15
3800 - 3999	Not more than 50%	2	140	125	100	80	75	70	45
		3	135	115	90	78	68	65	40
		4	100	90	70	58	50	50	20
		5	70	60	45	35	30	30	20
	More than 50%	2	180	158	118	95	83	75	45
		3	170	143	108	88	75	70	40
		4	135	118	88	68	58	55	30
		5	100	88	63	45	38	35	20
4000 - 4999	Not more than 50%	2	160	145	115	100	90	85	60
		3	145	125	100	88	78	75	50
		4	110	100	75	63	55	55	40
		5	80	70	55	45	40	40	35
	More than 50%	2	190	173	133	118	105	95	70
		3	180	153	118	98	85	80	60
		4	145	123	93	73	63	60	40
		5	115	98	73	55	48	45	25
5000 - 5999	Not more than 50%	2	185	170	140	125	115	110	80
		3	165	145	120	108	98	95	70
		4	130	118	90	78	73	70	55
		5	95	85	70	58	55	55	35
	More than 50%	2	220	198	158	135	123	115	90
		3	200	173	138	118	105	100	70
		4	155	138	108	88	78	75	55
		5	130	113	88	70	63	60	35
6000 - 6999	Not more than 50%	2	205	190	160	145	135	130	100
		3	185	165	140	128	118	115	90
		4	150	135	105	93	85	85	65
		5	105	95	80	70	65	65	50
	More than 50%	2	240	218	178	155	143	135	100
		3	220	193	158	138	125	120	90
		4	175	153	123	103	93	90	65
		5	140	123	98	80	73	70	50
>6999	Not more than 50%	2	225	210	180	165	155	150	120
		3	200	180	155	143	133	130	105
		4	160	148	120	108	100	100	80
		5	115	105	90	80	75	75	60
	More than 50%	2	260	238	198	175	163	155	120
		3	235	208	173	153	140	135	105
		4	185	168	138	118	108	105	80
		5	150	133	108	90	83	80	60

Emissions Factor (kgCO2e/kWh)

Electricity (2)	0.0289
Natural Gas	0.1937

For MEUI 10%MB for <50% cooled

<50	51 - 75	76 - 120	121 - 165	166 - 210	>210
24	23	17	15	13	12
23	19	15	12	10	10
17	15	12	9	8	8
13	11	8	6	5	5
27	24	18	15	13	12
24	20	15	13	10	10
19	16	12	10	8	8
14	11	8	6	5	5
28	25	19	16	15	14
25	22	17	15	13	13
19	17	14	11	10	10
14	12	9	7	6	6
29	26	20	17	15	14
27	23	18	15	13	13
20	18	14	12	10	10
15	12	9	7	6	6
31	28	22	19	17	16
28	24	19	17	15	15
20	18	15	12	11	11
15	14	11	9	8	8
32	29	23	20	18	17
29	25	20	17	15	15
21	19	15	13	11	11
16	14	11	9	8	8
33	30	27	24	22	21
32	28	23	21	19	18
23	21	17	15	14	14
18	16	14	12	11	11
37	34	28	25	23	21
33	29	24	21	19	19
24	22	18	15	14	14
19	17	14	12	11	11
40	37	31	28	26	25
36	32	27	25	23	22
26	24	20	18	16	16
20	18	16	14	13	13
41	38	32	28	26	25
37	33	28	25	23	22
27	25	21	18	17	17
21	19	16	14	13	13
44	41	35	32	30	29
39	35	30	28	26	25
29	27	23	21	19	19
22	20	17	15	15	15
45	42	35	32	30	29
40	36	31	28	26	25
30	28	24	21	20	20
23	21	18	16	15	15

For MEUI 15%MB for <50% cooled

<50	51 - 75	76 - 120	121 - 165	166 - 210	>210
17	16	12	10	8	8
15	13	10	8	7	6
12	10	8	6	5	5
8	7	5	4	3	3
18	16	12	10	9	8
16	14	10	8	7	7
13	11	8	6	5	5
9	8	6	4	3	3
19	17	13	11	10	9
17	15	12	10	9	8
13	12	9	7	6	6
9	8	6	4	4	4
20	18	15	11	10	9
18	16	12	10	9	8
14	12	10	8	7	7
10	9	6	5	4	4
21	19	15	13	12	11
19	16	13	11	10	10
13	12	10	8	7	7
10	9	7	6	5	5
22	19	16	13	12	11
20	17	13	12	10	10
15	13	10	8	7	7
11	10	8	6	5	5
24	22	18	16	15	14
21	19	15	14	13	12
15	14	12	10	9	9
12	11	9	8	7	7
25	23	19	16	15	14
22	19	16	14	13	12
16	15	12	10	9	9
13	12	10	8	7	7
26	24	21	19	17	17
24	21	18	16	15	15
17	16	13	12	11	11
13	12	10	9	8	8
27	25	21	19	18	17
25	22	18	17	15	15
18	17	14	12	11	11
15	13	11	9	9	8
29	27	23	21	20	19
26	23	20	18	17	17
19	18	15	14	13	13
15	13	12	10	10	10
30	28	24	21	20	19
27	24	20	19	17	17
20	19	16	14	13	13
16	14	12	11	10	10

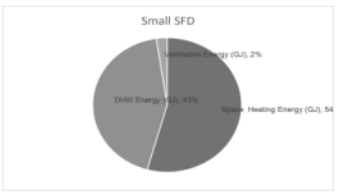
For MEUI 5%MB for <50% cooled

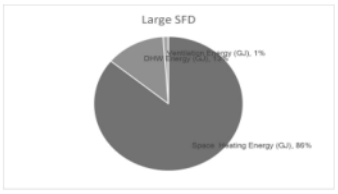
<50	51 - 75	76 - 120	121 - 165	166 - 210	>210
4	4	3	2	2	2
4	3	2	2	2	1
3	2	2	1	1	1
2	2	1	1	1	1
5	4	3	3	2	2
4	4	3	3	2	2
4	3	2	2	1	1
3	2	2	1	1	1
4	4	3	3	2	2
4	3	3	2	2	2
3	3	2	2	1	1
2	2	1	1	1	1
5	4	4	3	2	2
5	4	3	3	2	2
4	4	3	2	2	2
3	3	2	1	1	1
5	4	4	3	3	3
4	4	3	3	2	2
3	3	2	2	2	2
2	2	2	1	1	1
5	5	4	3	3	2
5	4	4	3	3	3
4	4	3	2	2	1
3	3	2	2	2	2
5	5	4	4	3	3
4	3	3	2	2	2
3	3	2	2	2	2
6	5	4	4	3	3
5	4	3	3	2	2
4	3	3	2	2	2
6	6	5	4	4	4
5	5	4	4	3	3
4	4	3	3	3	3
6	6	5	4	4	4
5	5	4	4	3	3
4	4	3	3	3	3
7	6	5	5	4	4
6	5	4	4	3	3
4	4	3	3	3	3
7	7	5	5	4	4
7	6	5	4	4	4
5	5	4	3	3	3
4	4	3	2	2	2
7	6	5	5	5	4
6	5	5	4	4	4
5	4	4	3	3	3
3	3	3	2	2	2
8	7	6	5	5	5
7	6	5	5	4	4
5	5	4	4	3	3
4	4	3	3	2	2

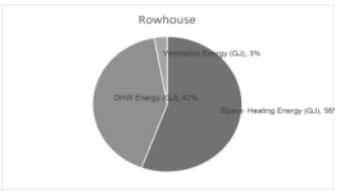
TEDI as a % of MEUI

CZ	Cooling	Step	<50	51 - 75	76 - 120	121 - 165	166 - 210	>210
<3800	Not more th	2	26%	29%	38%	47%	54%	58%
		3	25%	30%	40%	48%	57%	58%
		4	22%	25%	33%	42%	50%	50%
		5	23%	27%	38%	50%	58%	58%
	More than t	2	21%	24%	32%	41%	48%	54%
		3	19%	23%	32%	41%	50%	56%
		4	16%	19%	26%	34%	42%	44%
		5	15%	18%	26%	38%	45%	50%
3800 - 3999	Not more th	2	31%	35%	45%	53%	60%	64%
		3	30%	35%	44%	51%	59%	62%
		4	30%	33%	43%	52%	58%	58%
		5	29%	33%	44%	57%	67%	67%
	More than t	2	26%	28%	36%	47%	54%	58%
		3	24%	28%	37%	45%	53%	57%
		4	22%	25%	34%	44%	52%	56%
		5	19%	23%	32%	44%	53%	57%
4000 - 4999	Not more th	2	26%	41%	53%	68%	67%	71%
		3	34%	40%	50%	57%	64%	67%
		4	36%	40%	53%	63%	73%	73%
		5	31%	36%	46%	56%	63%	63%
	More than t	2	31%	35%	45%	58%	61%	67%
		3	28%	33%	42%	51%	59%	63%
		4	29%	33%	43%	55%	63%	67%
		5	22%	26%	34%	45%	52%	56%
5000 - 5999	Not more th	2	43%	47%	57%	64%	70%	73%
		3	42%	46%	56%	65%	71%	74%
		4	46%	50%	61%	71%	79%	79%
		5	37%	41%	50%	58%	64%	64%
	More than t	2	36%	40%	51%	59%	65%	70%
		3	35%	40%	51%	59%	67%	70%
		4	35%	40%	51%	63%	71%	73%
		5	27%	31%	40%	50%	58%	58%
6000 - 6999	Not more th	2	49%	53%	63%	69%	74%	77%
		3	49%	55%	64%	70%	76%	78%
		4	46%	52%	62%	70%	74%	76%
		5	46%	53%	63%	71%	77%	77%
	More than t	2	42%	46%	56%	65%	70%	74%
		3	41%	47%	57%	65%	72%	75%
		4	38%	42%	53%	63%	70%	72%
		5	35%	41%	51%	63%	68%	71%
>6999	Not more th	2	53%	57%	67%	73%	77%	80%
		3	53%	58%	68%	73%	79%	81%
		4	52%	57%	67%	74%	80%	80%
		5	52%	57%	67%	75%	80%	80%
	More than t	2	46%	50%	61%	69%	74%	77%
		3	44%	50%	61%	69%	75%	78%
		4	43%	48%	58%	68%	74%	78%
		5	40%	46%	56%	67%	72%	76%

Archetype:	Climate Zone:	Step 3 ECM Package:	Airtightness (ACH@50Pa)	% better than ERS	MEUI (kWh/sq m*yr))	TEDI (kWh/sq m*yr)	% better than envelope	Space Heating Energy (GJ)	Space Heating Fuel	DHW Energy (GJ)	DHW Fuel	Ventilation Energy (GJ)	Electrical Baseloads (GJ)	% Space Heating	% DHW
Small SFD	4	2.5ACH@50Pa, 0.95EF tankless DHW heater, USI 1.40 windows	2.5	2.7	69	36	-8	13.67	Gas	10.9	Gas	0.59	25.62	54%	43%
Large SFD	4	2.5ACH@50Pa, 0.95EF tankless DHW heater, USI 1.20 windows, R24 batts in walls	2.5	-9.8	46	37	-17	72.59	Gas	10.9	Gas	0.96	25.6	86%	13%
Rowhouse	4	2.5ACH@50Pa, 0.95EF tankless DHW heater	2.5	N/A	50	27	N/A	103.9	Gas	77.6	Gas	5.3	153.6	56%	42%







Jeff/UDI - GHG work - questions

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Sent: July 28, 2021 4:31:06 PM PDT

HI Hugo and Scott,

Just had a call from Jeff/UDI (cc'd) who is wondering:

1. **When we anticipate having consultation info about the GHG proposal for Jeff to share with his members**. I believe Zac thought that would be later in August, but I don't think we have a firm date yet, do we? If possible, Jeff would like to share in the UDI newsletter that comes out every second Tuesday – e.g., Aug. 9, 24, etc.
2. **GHG analysis: Do costs include BC Hydro connection costs?** And if so, what kind of connection cost?
    a. Jeff explained that most projects pay a 'standard' connection cost but periodically, such as when a new connection means a substation needs an upgrade to accommodate the new demand, the developer has to pay for that as well, and it's a random/unknown but significantly higher cost they don't know about until they get the bill from Hydro.

Jeff is away next week so I said we'd get back to him after that.

Cheers.

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

Re: Energy Step Code Council meeting (new invite) - ZEBx feedback

From: Roberto Pecora <roberto@zebx.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Bob Deeks <bdeeks@rdcfinehomes.com>, Robyn.Wark@bchydro.com
Sent: July 29, 2021 11:17:00 AM PDT

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Hi Zac,

Your group is doing a fantastic job evolving this GHG Step Code. It's a tricky endeavour, especially with lively side shows like emissions factors, overheating, capital cost implications, provincial code harmonization, etc.

I wanted to throw in my $0.02 regarding the three proposed steps (Step 1: calculate, Step 2: 6, Step 3: 3). We believe, based on discussions with several local governments, that there should be a fourth step with a GHGI of 1. A GHGI of 1 will allow LGs to better align their GHG reduction goals with the urgency of the climate crisis and the GHG reductions that scientific evidence suggests is required of society. The 2019 GGERCA emissions factor will make this challenging in the short term so GHG Step 4 won't likely be picked up by any LGs right away. As the EF settles down to (hopefully) a lower value, possibly as the result of the Clean Electricity Standard or by allowing exports to be counted against imports of electricity for the EF, the GHGI = 1 target will be more realistic, especially with the increasingly stringent ESC minimums that the CleanBC plan has charted between now and 2032.

Basically, we're suggesting that a GHGI=1 target be available for future use, despite the fact that it won't be used much in the short-term. Including it in the GHG Step Code signals a clear intent and allows the industry to warm up to the concept and prepare for the task.

Proposed CleanBC Plan amendment to include GHGI minimums:

2024: step 2 = 6
2028: step 3 = 3
2032: step 4 = 1

This gives LGs about two years to implement S1.

Happy to discuss further if you have the time.

Roberto

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Date: Wednesday, July 28, 2021 at 1:40 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com <bea.bains@fortisbc.com>, Tom.Berkhout@bchydro.com <Tom.Berkhout@bchydro.com>, alexandre.bigonesse@canada.ca <alexandre.bigonesse@canada.ca>, pcaraher@ahma-bc.org <pcaraher@ahma-bc.org>, mchorobik@communityenergy.bc.ca <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca <NConnolly@richmond.ca>, bdeeks@rdcfinehomes.com <bdeeks@rdcfinehomes.com>, diana@havan.ca <diana@havan.ca>, patrick.enright@vancouver.ca <patrick.enright@vancouver.ca>, catherine.ernst@boabc.org <catherine.ernst@boabc.org>, jfisher@udi.org <jfisher@udi.org>, ruta.fluxgold@canada.ca <ruta.fluxgold@canada.ca>, sfralin@ahma-bc.org <sfralin@ahma-bc.org>, MGatensby@aibc.ca <MGatensby@aibc.ca>, hgoodland@scius.ca <hgoodland@scius.ca>, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com <joe.iconhomes@gmail.com>, nheap@richmond.ca <nheap@richmond.ca>, SHorsburgh@rdn.bc.ca <SHorsburgh@rdn.bc.ca>,

vanessa@chbabc.org <vanessa@chbabc.org>, jjung@asttbc.org <jjung@asttbc.org>, toby.lau@bchydro.com <toby.lau@bchydro.com>, wileung@bchousing.org <wileung@bchousing.org>, Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>, mlohmann@communityenergy.bc.ca <mlohmann@communityenergy.bc.ca>, J.Madden@ubc.ca <J.Madden@ubc.ca>, Lisa.Mak@bchydro.com <Lisa.Mak@bchydro.com>, s.22 , May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca <christopher.mclellan@canada.ca>, mmcwilliam3@bcit.ca <mmcwilliam3@bcit.ca>, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, sean.pander@vancouver.ca <sean.pander@vancouver.ca>, roberto@zebx.org <roberto@zebx.org>, warrenp@bccassn.com <warrenp@bccassn.com>, hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>, ron@havan.ca <ron@havan.ca>, kelly@hkrbuilders.com <kelly@hkrbuilders.com>, lsampliner@portmoody.ca <lsampliner@portmoody.ca>, muneesh@boma.bc.ca <muneesh@boma.bc.ca>, Maxwell.Sykes@surrey.ca <Maxwell.Sykes@surrey.ca>, rthe@wesgroup.ca <rthe@wesgroup.ca>, Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>, Robyn.Wark@BCHydro.com <Robyn.Wark@BCHydro.com>, ralph.wells@ubc.ca <ralph.wells@ubc.ca>, tyler.wightman@boabc.org <tyler.wightman@boabc.org>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, chepting@enersys.ca <chepting@enersys.ca>
Cc: Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>, McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>, pauline@chbabc.org <pauline@chbabc.org>, Jay Chadha <jay@havan.ca>, Owen, Jason <JOwen@surrey.ca>, Alex Blue <ablue@EvokeBuildings.com>, Remi Charron <rcharron@bchousing.org>, Jackie Kanyuk <jackie@bcnpha.ca>, Richards, Victoria <Victoria.Richards@bchydro.com>, ian@bcnpha.ca <ian@bcnpha.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Subject: RE: Energy Step Code Council meeting (new invite)

Hi all,

Attached is the slides and Excel sheets from Alex's presentation this morning.

Hugo

-----Original Appointment-----
From: Wong, Hugo OHCS:EX
Sent: Monday, July 26, 2021 2:22 PM
To: Andersson, Dale OHCS:EX; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN; Wong, Hugo OHCS:EX; chepting@enersys.ca
Cc: Pape-Salmon, Andrew OHCS:EX; McCrae, Aura OHCS:EX; pauline@chbabc.org; Jay Chadha; Owen, Jason; Alex Blue; Remi Charron; Jackie Kanyuk; Richards, Victoria; ian@bcnpha.ca; Muncaster, Katherine EMLI:EX
Subject: Energy Step Code Council meeting (new invite)
When: Wednesday, July 28, 2021 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Update: 7-26-2021: Please see below for an updated videoconferencing link with dial-in option. If you have technical difficulties, please email hugo.wong@gov.bc.ca, or call 236 478 1406.

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft teams join link:

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or call in (audio only)
s.15 Canada, Victoria

Phone Conference ID:s.15
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RE: [External Email] - Energy Step Code Council meeting (new invite)

From: Bains, Bea <Bea.Bains@fortisbc.com>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: July 29, 2021 1:15:14 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi there,
We would be interested in doing a deeper dive and working the team and Alex on the analysis.

Thanks Bea

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Monday, July 26, 2021 2:22 PM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; Bains, Bea; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 May, Zachary OHCS:EX; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN; chepting@enersys.ca
Cc: Pape-Salmon, Andrew OHCS:EX; McCrae, Aura OHCS:EX; pauline@chbabc.org; Jay Chadha; Owen, Jason; Alex Blue; Remi Charron
Subject: [External Email] - Energy Step Code Council meeting (new invite)
When: Wednesday, July 28, 2021 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

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Update: 7-26-2021: Please see below for an updated videoconferencing link with dial-in option. If you have technical difficulties, please email hugo.wong@gov.bc.ca, or call 236 478 1406.

Hello, members and alternates of the Energy Step Code Council:

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Microsoft teams join link:

Microsoft Teams meeting

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Re: [External Email] - Energy Step Code Council meeting (new invite)

From: May, Zachary OHCS:EX
To: Bains, Bea <Bea.Bains@fortisbc.com>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: July 29, 2021 1:57:28 PM PDT

Hi Bea,

That would be helpful.
By way of this email I will ask Hugo to set up a meeting when I'm back the week of the 9th. I would like to work on a list of the specific variables that would be useful for you so we can prioritize the most useful analysis.

Best,

Zachary D. May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

On Jul 29, 2021, at 1:15 PM, Bains, Bea <Bea.Bains@fortisbc.com> wrote:

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi there,
We would be interested in doing a deeper dive and working the team and Alex on the analysis.

Thanks Bea

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Monday, July 26, 2021 2:22 PM
To: Wong, Hugo OHCS:EX; Andersson, Dale OHCS:EX; Bains, Bea; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Wacker, Holly MUNI:EX; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN; chepting@enersys.ca
Cc: Pape-Salmon, Andrew OHCS:EX; McCrae, Aura OHCS:EX; pauline@chbabc.org; Jay Chadha; Owen, Jason; Alex Blue; Remi Charron

Subject: [External Email] - Energy Step Code Council meeting (new invite)
When: Wednesday, July 28, 2021 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

CAUTION: This is an external email.
Do not respond, click on links or open attachments unless you recognize the sender.

Update: 7-26-2021: Please see below for an updated videoconferencing link with dial-in option. If you have technical difficulties, please email hugo.wong@gov.bc.ca, or call 236 478 1406.

Hello, members and alternates of the Energy Step Code Council:

This is a calendar hold to discuss GHGs in new construction. Agenda and materials to come.

Microsoft teams join link:

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or call in (audio only)
s.15 Canada, Victoria

Phone Conference ID: s.15
Find a local number | Reset PIN

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Metrics Research Steering Committee - Partial reports available

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>

To: Mark Bernhardt mark@bernhardtcontracting.com <mark@bernhardtcontracting.com>, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick.enright@vancouver.ca, Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe.iconhomes@gmail.com, ehayes@edgec.ca, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, Pete.Koepfgen@fortisbc.com, Toby.Lau@bchydro.com, Wilma Leung wileung@bchousing.org <wileung@bchousing.org>, Iain.Macdonald@nrc-cnrc.gc.ca, susan@focaleng.com, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory.McCall@vancouver.ca, roberto@zebx.org, Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya.Rumak@fortisbc.com, pauline@chbabc.org, lsampliner@portmoody.ca, David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>

Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>

Sent: July 29, 2021 2:32:05 PM PDT

Attachments: image001.png

Hello members of the Metrics Research Report Steering Committee,

We are making progress! Please find a link below to a final report that is still in progress. The link includes a report and the Part 3 spreadsheets, **with Part 9 data to come.** We thought we'd provide this material now so you could start to review it, but please note it is incomplete.

BC Energy Step Code Metrics Report Update

I will also put a copy of the report (the PDF document) in the Teams channel. You are welcome to provide comments in Teams but feel free to wait until the Part 9 content is also available.

Please keep these materials for your internal review only at this point; further direction will come (after Aug. 9) when the Part 9 data is ready . Please anticipate a meeting sometime in August.

Thank you and hope everyone enjoys a safe time this coming holiday weekend.

Kind regards,

Dale

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary May (Government of BC),

You are invited to a Zoom webinar.

Date Time: Sep 13, 2021 09:30 AM Vancouver
Topic: UDI Webinar: The Green Climate - ESC & COV Updates

Join from a PC, Mac, iPad, iPhone or Android device:

s.15

Re: REVIEW pls - UDI Webinar E-blast (SEPT 13)

From:	Michael Galope <mgalope@udi.org>
To:	Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, Yvonne Lo <ylo@udi.org>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc:	Pander, Sean <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>, Li, Charling <charling.li@vancouver.ca>
Sent:	August 9, 2021 4:23:02 PM PDT
Attachments:	image004.jpg, image010.jpg, image008.png, image012.jpg, image013.jpg, image011.jpg, image009.jpg, image006.jpg, image005.jpg, image007.jpg, image002.jpg, image001.png, image003.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Everyone,

Thank you for your text updates. I will make the necessary changes on my end and will prepare the eblast to go out this week.

Regards,

Michael Galope
Marketing and Communications Manager
Direct: 604.661.3037
Email: mgalope@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



From: "Sykes, Maxwell" <Maxwell.Sykes@surrey.ca>
Date: Sunday, August 8 at 1:04 PM
To: "May, Zachary OHCS:EX" <Zachary.May@gov.bc.ca>, Michael Galope <mgalope@udi.org>, "Enright, Patrick" <Patrick.Enright@vancouver.ca>, Yvonne Lo <ylo@udi.org>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: "Pander, Sean" <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>, "Li, Charling" <charling.li@vancouver.ca>
Subject: Re: REVIEW pls - UDI Webinar E-blast (SEPT 13)

Hi Michael,

Apologies for the deadly—been away.

Minor update to my text proposed. If it's already gone out, nbd.

Maxwell Sykes will discuss how local governments may apply the GHG performance standards as well as the issues that were considered in contributing to its development and that should be considered in approaches to implementation.

MAXWELL SYKES, MRM, HBA | CLIMATE AND ENERGY MANAGER
CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

---

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, August 6, 2021 3:43:28 PM
To: Michael Galope <mgalope@udi.org>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Yvonne Lo <ylo@udi.org>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Pander, Sean <sean.pander@vancouver.ca>; Jeff Fisher <jfisher@udi.org>; Verna Yu <vyu@udi.org>; Li, Charling <charling.li@vancouver.ca>
Subject: RE: REVIEW pls - UDI Webinar E-blast (SEPT 13)

Suggested text regarding the provincial initiatives.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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From: Michael Galope <mgalope@udi.org>
Sent: Tuesday, August 3, 2021 4:28 PM
To: Enright, Patrick <Patrick.Enright@vancouver.ca>; Yvonne Lo <ylo@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Maxwell.Sykes@surrey.ca; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Pander, Sean <sean.pander@vancouver.ca>; Jeff Fisher <jfisher@udi.org>; Verna Yu <vyu@udi.org>; Li, Charling <charling.li@vancouver.ca>
Subject: Re: REVIEW pls - UDI Webinar E-blast (SEPT 13)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Patrick,

Thanks for the clarification. I believe I have it right now, here's the writeup:

Join our expert panel on September 13th for a breakfast seminar to update you on **important changes to the BC Energy Step Code** and **City of Vancouver Sustainability Policies**.

The Province is moving forward with a Mandate Letter commitment to establish voluntary **greenhouse gas emissions targets** that local governments can apply to new construction, which will be integrated into the *BC Energy Step Code*. The City of Vancouver will also provide an update on their green building policies.

Key topics include:

- Zachary May will outline how these proposed changes to the BC Building Code may impact your projects as well as provide an update on other Building Code issues.

- Maxwell Sykes will discuss about how many local governments plan to utilize these proposed greenhouse gas targets.
- The City Vancouver will share it's experience to date with greenhouse gas targets and the Zero Emissions Building Plan, as well as updates on buildings and the Climate Emergency Action Plan.

I will wait for others to chime in before resending another test eblast.

Regards,

Michael Galope
Marketing and Communications Manager
Direct: 604.661.3037
Email: mgalope@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



From: "Enright, Patrick" <Patrick.Enright@vancouver.ca>
Date: Tuesday, August 3 at 2:12 PM
To: Michael Galope <mgalope@udi.org>, Yvonne Lo <ylo@udi.org>, "Zachary.May@gov.bc.ca" <Zachary.May@gov.bc.ca>, "Maxwell.Sykes@surrey.ca" <Maxwell.Sykes@surrey.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: "Pander, Sean" <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>, "Li, Charling" <charling.li@vancouver.ca>
Subject: RE: REVIEW pls - UDI Webinar E-blast (SEPT 13)

The City Vancouver will share it's experience to date with greenhouse gas targets and the Zero Emissions Building Plan, as well as updates on buildings and the Climate Emergency Action Plan.

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Update: Agenda attached and zoom meeting info below.

Join Zoom Meeting
s.15

****

Hi all,

Please hold this time for the next ESC Part 3 & non-residential Part 9 Subcommittee meeting. Agenda and meeting info forthcoming.

Thanks!
-Toby, Norm, & Scott

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_____

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-BCHydroDisclaimerID5.2.8.1541

URBCx 2021 SC Meeting Tomorrow - DRAFT Agenda for review and comment

From: Jessica Shoubridge <jessica@thriveconsulting.me>

To: Anna Warwick Sears <anna.warwick.sears@obwb.ca>, Tudhope, Dave R MUNI:EX <Dave.Tudhope@gov.bc.ca>, Fiona Dercole <fdercole@rdek.bc.ca>, Frances Woo <fwoo@fraserbasin.bc.ca>, George Benson <gbenson@vancouvereconomic.com>, Moy, Greg <gmoy@ibc.ca>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Jeff Fisher <jfisher@udi.org>, John Sherstobitoff <john.sherstobitoff@ausenco.com>, Craig, Ken EMBC:EX <Ken.Craig@gov.bc.ca>, Kris Holm <kholm@bgcengineering.ca>, Ulmi, Malaika (NRCan/RNCan) <malaika.ulmi@canada.ca>, Peter Mitchell <mitchell@egbc.ca>, Mark Sakai <msakai@bcrea.bc.ca>, Hastings, Nicky (NRCan/RNCan) <nicky.hastings@canada.ca>, Norma Miller <nmiller@bcrea.bc.ca>, O'Grady, Ryan N ENV:EX <Ryan.OGrady@gov.bc.ca>, Steve Litke <slitke@fraserbasin.bc.ca>, Tamsin Lyle <tamsin@ebbwater.ca>, Yvonne Lo <ylo@udi.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>

Sent: August 10, 2021 6:15:35 PM PDT

Attachments: October 7th URBC Resilience Roundtable DRAFT AGENDA .docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello, I am afraid to hit send on this email as there will be so many bounce backs!! ha! ♥

Attaching a DRAFT agenda for the October 7th resilience roundtable for your review and input at tomorrow's meeting. This is a very first cut, so happy to have all the constructive feedback. Many suggested contributors are not yet confirmed, but many are:)
This is really the bulk of our short time together.

The other items to cover are:
- registration: registration for sponsors and encouraging others to register via Eventbrite (suggestion and help with distribution and invitations).
- partner events: placeholder for George to speak (Vancouver Economic Commission) re: october 8th event / workshop
- update on PSC support and UR Global (2022)
- what have I missed?

Look forward to connecting with many of you tomorrow (or the few of you who may not be on vacation:))
♥
--
Jessica Shoubridge / *MAP* / *Founder & Principal*
Thrive Consulting / *Climate and Resilience Planning*
604.902.3303
https://www.youtube.com/channel/UC-8dzjx96lkz64Ir0ituRDg

Re: REVIEW pls - UDI Webinar E-blast (SEPT 13)

From:	Michael Galope <mgalope@udi.org>
To:	Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc:	Pander, Sean <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>, Li, Charling <charling.li@vancouver.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Sent:	August 11, 2021 2:04:17 PM PDT
Attachments:	image001.png, image005.jpg, image009.jpg, image011.jpg, image012.jpg, image013.jpg, image010.jpg, image008.png, image007.jpg, image006.jpg, image003.jpg, image002.jpg, image004.jpg

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Hi Patrick,

The webinar eblast is almost ready to go. Please provide me with the name, title and photo of the City of Vancouver panelist to be included.

Thank you all for your feedback.

Regards,

Michael Galope
Marketing and Communications Manager
Direct: 604.661.3037
Email: mgalope@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

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From: "Sykes, Maxwell" <Maxwell.Sykes@surrey.ca>
Date: Sunday, August 8 at 1:04 PM
To: "May, Zachary OHCS:EX" <Zachary.May@gov.bc.ca>, Michael Galope <mgalope@udi.org>, "Enright, Patrick" <Patrick.Enright@vancouver.ca>, Yvonne Lo <ylo@udi.org>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: "Pander, Sean" <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>, "Li, Charling" <charling.li@vancouver.ca>
Subject: Re: REVIEW pls - UDI Webinar E-blast (SEPT 13)

Hi Michael,

Apologies for the deadly—been away.

Minor update to my text proposed. If it's already gone out, nbd.

Maxwell Sykes will discuss how local governments may apply the GHG performance standards as well as the issues that were considered in contributing to its development and that should be considered in approaches to implementation.

MAXWELL SYKES, MRM, HBA | CLIMATE AND ENERGY MANAGER
CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

---

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>

Sent: Friday, August 6, 2021 3:43:28 PM
To: Michael Galope <mgalope@udi.org>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Yvonne Lo <ylo@udi.org>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Pander, Sean <sean.pander@vancouver.ca>; Jeff Fisher <jfisher@udi.org>; Verna Yu <vyu@udi.org>; Li, Charling <charling.li@vancouver.ca>
Subject: RE: REVIEW pls - UDI Webinar E-blast (SEPT 13)

Suggested text regarding the provincial initiatives.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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From: Michael Galope <mgalope@udi.org>
Sent: Tuesday, August 3, 2021 4:28 PM
To: Enright, Patrick <Patrick.Enright@vancouver.ca>; Yvonne Lo <ylo@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Maxwell.Sykes@surrey.ca; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Pander, Sean <sean.pander@vancouver.ca>; Jeff Fisher <jfisher@udi.org>; Verna Yu <vyu@udi.org>; Li, Charling <charling.li@vancouver.ca>
Subject: Re: REVIEW pls - UDI Webinar E-blast (SEPT 13)

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Join our expert panel on September 13th for a breakfast seminar to update you on **important changes to the BC Energy Step Code** and **City of Vancouver Sustainability Policies**.

The Province is moving forward with a Mandate Letter commitment to establish voluntary **greenhouse gas emissions targets** that local governments can apply to new construction, which will be integrated into the *BC Energy Step Code*. The City of Vancouver will also provide an update on their green building policies.

Key topics include:

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- Maxwell Sykes will discuss about how many local governments plan to utilize these proposed greenhouse gas targets.
- The City Vancouver will share it's experience to date with greenhouse gas targets and the Zero Emissions Building Plan, as well as updates on buildings and the Climate Emergency Action Plan.

I will wait for others to chime in before resending another test eblast.

Regards,

Michael Galope
Marketing and Communications Manager
Direct: 604.661.3037
Email: mgalope@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



From: "Enright, Patrick" <Patrick.Enright@vancouver.ca>
Date: Tuesday, August 3 at 2:12 PM
To: Michael Galope <mgalope@udi.org>, Yvonne Lo <ylo@udi.org>, "Zachary.May@gov.bc.ca" <Zachary.May@gov.bc.ca>, "Maxwell.Sykes@surrey.ca" <Maxwell.Sykes@surrey.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: "Pander, Sean" <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>, "Li, Charling" <charling.li@vancouver.ca>
Subject: RE: REVIEW pls - UDI Webinar E-blast (SEPT 13)

The City Vancouver will share it's experience to date with greenhouse gas targets and the Zero Emissions Building Plan, as well as updates on buildings and the Climate Emergency Action Plan.

MBAR Forum

From: Wilma Leung <wileung@bchousing.org>
To: Wilma Leung <wileung@bchousing.org>
Cc: Vanessa Harder <vharder@bchousing.org>, Robin Hawker <robin.hawker@integralgroup.com>, Jessica Woolliams <jwoolliams@bchousing.org>, Claire Vulliamy <cvulliamy@bchousing.org>, Maya Korbynn <mkorbynn@bchousing.org>, Sarah Rutherford <sruther@bchousing.org>, Suzanne Jay <sjay@bchousing.org>, Magdalena Szpala <mszpala@bchousing.org>, tamara@kitesh.org, Dave Aharonian <daharonian@bchousing.org>, Leigh Greenius <lgreenius@bchousing.org>, Lisa Westerhoff <lwesterhoff@integralgroup.com>, Ilana Judah <s.22 >
Sent: August 12, 2021 9:53:11 AM PDT
Attachments: ATT00001.ics, image001.png

[Hope calendar invite is properly attached this time.]

Hello MBAR Community,

I hope you are all managing as well as you could with the pandemics, wildfires, heat waves, droughts, evacuations, and their impacts on your communities and the people that you serve.

Please join us on August 25 from 1:30-2:45pm for an online MBAR Stakeholder Engagement Session. Please accept the attached invitation and forward to others who should be involved.

There will be a series of updates and announcements from BC Housing and others within the community. We'd also love to get your thoughts on the topics for upcoming 'Co-Learning' sessions planned for Sept 2021 to May 2022.

As usual, we'll provide space for networking to allow you to speak with—and get to know—others in the group.

Agenda:

- Opening
- Report-back from MBAR Engagement sessions Oct-Dec 2020
- Next steps for the MBAR Community
- Networking and Discussions
- Input on upcoming 'Co-Learning' sessions
- Announcements
    - MBAR Library
    - Provincial Adaptation Strategy
    - IBAMA Framework and Vienna House Pilot
    - Other
- Closing

Note: We'll update this invite with the access link.

Thank you, Huy chexw & Hay ce:p q̓ə,

Wilma

In the spirit of honouring the truth, I acknowledge that I live and work on the shared, ancestral and unceded homelands of the hən̓q̓əmin̓əm̓ and Sḵwxwú7mesh-speaking people. I am also hoping for the opportunity to reconcile with all our relations.

Wilma Leung (she/her/hers) | Senior Manager, Technical Research & Education | BC Housing
wileung@bchousing.org | Mobile: 604-218-1095 | www.bchousing.org/research-centre



Supporting a Strong Housing Sector. Sharing Best Practices. Enhancing Consumer Protection.
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MBAR Community,

Please join us on August 25 from 1:30-2:45pm for an online MBAR Stakeholder Engagement Session.

There will be a series of updates and announcements from BC Housing and others within the community. We'd also love to get your thoughts on the topics for upcoming 'Co-Learning' sessions planned for Sept 2021 to May 2022.

As usual, we'll provide space for networking to allow you to speak with—and get to know—others in the group.

Agenda:
- Opening
- Report-back from MBAR Engagement sessions Oct-Dec 2020
- Next steps for the MBAR Community
- Networking and Discussions
- Input on upcoming 'Co-Learning' sessions
- Announcements
* MBAR Library
* Provincial Adaptation Strategy
* IBAMA Framework and Vienna House Pilot
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Note: We'll update this invite with the access link.

Thank you, Huy chexw & Hay ce:p q,
Wilma

In the spirit of honouring the truth, I acknowledge that I live and work on the shared, ancestral and unceded homelands of the hnqminm and Swxwú7mesh-speaking people. I am also hoping for the opportunity to reconcile with all our relations.

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FW: URBCx 2021 SC Meeting Tomorrow - DRAFT Agenda for review and comment

From: May, Zachary OHCS:EX
To: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: August 12, 2021 11:38:33 AM PDT
Attachments: October 7th URBC Resilience Roundtable DRAFT AGENDA .docx, image002.jpg

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From: Jessica Shoubridge <jessica@thriveconsulting.me>
Sent: Tuesday, August 10, 2021 6:16 PM
To: Anna Warwick Sears <anna.warwick.sears@obwb.ca>; Tudhope, Dave R MUNI:EX <Dave.Tudhope@gov.bc.ca>; Fiona Dercole <fdercole@rdek.bc.ca>; Frances Woo <fwoo@fraserbasin.bc.ca>; George Benson <gbenson@vancouvereconomic.com>; Moy, Greg <gmoy@ibc.ca>; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; Jeff Fisher <jfisher@udi.org>; John Sherstobitoff <john.sherstobitoff@ausenco.com>; Craig, Ken EMBC:EX <Ken.Craig@gov.bc.ca>; Kris Holm <kholm@bgcengineering.ca>; Ulmi, Malaika (NRCan/RNCan) <malaika.ulmi@canada.ca>; Peter Mitchell <mitchell@egbc.ca>; Mark Sakai <msakai@bcrea.bc.ca>; Hastings, Nicky (NRCan/RNCan) <nicky.hastings@canada.ca>; Norma Miller <nmiller@bcrea.bc.ca>; O'Grady, Ryan N ENV:EX <Ryan.OGrady@gov.bc.ca>; Steve Litke <slitke@fraserbasin.bc.ca>; Tamsin Lyle <tamsin@ebbwater.ca>; Yvonne Lo <ylo@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Pape-Salmon, Andrew OHCS:EX <Andrew.PapeSalmon@gov.bc.ca>
Subject: URBCx 2021 SC Meeting Tomorrow - DRAFT Agenda for review and comment

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello, I am afraid to hit send on this email as there will be so many bounce backs!! ha! ♡

Attaching a DRAFT agenda for the October 7th resilience roundtable for your review and input at tomorrow's meeting. This is a very first cut, so happy to have all the constructive feedback. Many suggested contributors are not yet confirmed, but many are:)
This is really the bulk of our short time together.

The other items to cover are:
- registration: registration for sponsors and encouraging others to register via Eventbrite (suggestion and help with distribution and invitations).
- partner events: placeholder for George to speak (Vancouver Economic Commission) re: october 8th event / workshop
- update on PSC support and UR Global (2022)
- what have I missed?

Look forward to connecting with many of you tomorrow (or the few of you who may not be on vacation:))
♡
--
Jessica Shoubridge / *MAP* / *Founder & Principal*
Thrive Consulting / *Climate and Resilience Planning*
604.902.3303

URBCx 2021 Regional Resilience Roundtable
October 7th
DRAFT Agenda

9am: Welcome, Reflections, Context

Kamala Todd (Metis-Cree community planner, educator, curator and filmmaker, adjunct professor at SFU and UBC) Including reflections on the 2020 theme of active hope, resilience planning with CoV, and the first National Day for Reconciliation and what UNDRIP and DRIPA implications are for land use and community planning in BC in a time of increasing risks

& Josie Osbourne (Minister, MUNI)
Reflections on the Vancouver Island and Coastal Community's Climate Leadership Plan, Tofino efforts to better understand costal risks and manage them, the interplay between local and provincial efforts to manage climate and disaster risk

9:20am: Jessica Shoubridge (URBC Program Lead 2016-present) UR overview (global to local) and the risk and risk reduction landscape in BC (repeat themes of action items across plans and strategies: CPAS, AG Report, seismic ones, URBC action items, etc.).

- Overview of the agenda / housekeeping (Facilitator support)

Ignite Talks- Understanding, Analyzing and Communicating Risk

9:30am – Intro/context (JS)
What is a 'hazardous area' in Southwest BC? Who defines risk tolerance thresholds?
In Southwest BC, many of the same lands are exposed to numerous hazards, e.g. liquefaction, subsidence, flooding, etc. These presentations and discussions will explore multi-hazard considerations and integrated risk assessment with a focus on major hazards of concern in Southwest BC such as wildfire, seismic and flooding but also other hazards such as intense precipitation, slope stability and extreme heat that are of concern across BC. How we best analyze and communicate the results of risk assessments to inform and drive risk reduction ab d resilience building actions?

Commented [j1]: Can also add a BCREA flood mapping inventory piece here

- 9:35 - Regional microzonation mapping for the Lower Mainland (Robert, Meredith, Sheri?)
- 9:40 - West End seismic hotspot analysis (S. Chang & C. Molina Hutt)
- 9:45 - Lower Mainland Flood Management Strategy (Steve & Frances, Fraser Basin Council)
- 9:50- Showcase examples of collaboration with BC First Nations in risk assessment/analysis (Tamsin Lyle & Fiona Dercole)

Commented [j2]: • (Tamsin is likely flood, cannot recall Fiona's example- debris flows?)

10:00am Break with Song

- 10:15 - Subregional assessment of subsidence/uplift as contributing factor in SLR assessment (COV, Surrey, Port- Angela, CoV?)

- 10:20 - Risk tolerance criteria: examples from practice in BC: DNV landslide and BGC quantitative risk assessment updates for Cheekeye Fan (Kris Holme, BGC & Fiona Dercole, RDK)
- 10:35 - Financial risk assessment/analysis and work with the CCRI (William Philips, Mott MacDonald)

10:45am FACILITATED DISCUSSION

11:15 am Break with Song

Ignite Talks- Reducing Risk and Building Resilience

11:30am – Intro/context (JS)
How do risk reduction and resilience considerations vary by scale & timing of development? What measures are applicable and helpful at the parcel level, neighbourhood, community and regional scales? For existing development or new development? How do we enhance collective efforts to reduce existing risk and prevent new risk creation via more risk-sensitive development?

- 11:35 - Regional governance function via land use planning and asset management, subdivision approving function (MOTI rep)?
- 11:40- COV Large Site Rezoning Resilience Considerations (Case Study- Tamsin Mills)
- 11:45- How post-disaster is often a window of opportunity to apply transfer of density approaches- pre-disaster vs. post disaster transfer of density considerations, Pre-disaster Recovery Planning (PDRP) for the Fraser (case study) (Jessica Shoubridge &Paul Kovacs, ICLR)
- 11:55- Timing of when land is purchased/acquired, proformas developed and hazard and risk policy interventions occur, Assessment of property portfolio risks (Quadreal & Ebbwater)

12:05pm Break

- 12:30- Coastal Flood Guidelines & National Code (Enda Murphy)
- 12:35- Working to integrate hazard and risk information into built environment transformation, from seismic to thermal comfort, education and engaging with trades (Wilma, MBAR, BC Housing)
- 12:40- The role of regional planning in stopping new risk: Regional Growth Strategy (RGS) Update- hazard and risk policies (James and Edward)
- 12:45- Fire following earthquake and related built environment improvements for Vancouver (ICLR, Paul, Glenn?)
- 12:50- Provincial CPAS and EPA modernization elements that relate to theme of shifting development decision making and patterns in hazardous areas (reps from CAS and EMBC/MUNI??)
- 1pm- Challenges with retreat // relocation, Successes with parcel level resilience measures as well as the multi-hazard imperative (Matt Osler, City of Surrey)

Commented [j3]: cover some slope stability/ intense precip here?

Commented [j4]: Need architects!! See JC references

Commented [j5]: Longer break here for lunch opportunities (25 mins)

1:05pm FACILITATED DISCUSSION

1:35 Break

<u>Ignite Talks- Finance, Funding and Incentivization</u>

1:50pm – Intro/context (JS)
How can risk-based insurance and mortgages support risk reduction and resilience building? What is the role for national and provincial guidelines (e.g. seismic and flood) vs. incentivization- what works, how do they best work together? What are the increasing pressures and opportunities re: local and provincial credit ratings, resilience ratings for buildings, TCFD disclosures, etc. There is increasing concern from the global financial community but also increasing opportunity, highlighted via initiatives like Climate Bonds (CBI).

- 1:55- The challenge of local authority reliance on property tax in Canada and sustainable alternatives (Deb Harford?)
- 2pm- Resilience ratings for buildings as a driver for market transformation (Evan Reis, USRC)
- 2:05- Update on National Flood Program for High Flood Risk Properties? (Rob DePruis, IBC)
- 2:10- Liability considerations & legal solutions (Anton Tabun, Manifest Climate)
- 2:15- Finance solutions- PACE and PACE for resilience (George Benson, VEC)
- 2:20- Finance solutions- Bonds for Buildings (Ujala, CBI)

2:25pm FACILITATED DISCUSSION

2:45pm Closing & Gratitude
Synthesis of opportunities and challenges

3pm DONE

Partner events:

- October 8th, VEC/Pembina/UK Consulate, Climate Financial Risk and Resilience Workshop
- October 14th (TBC), UDI Breakfast Seminar
- TBC, Fraser Basin Council, Regional Flood Strategy- Focus on Planning & Development
- TBC, PACE Canada, Webinar re: PACE For Resilience

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Notes

Date and Time of Meeting: Wednesday June 9, 2021 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Chair: Zachary May, Building and Safety Standards Branch, Attorney General and Minister Responsible for Housing
Co-Vice Chairs: Bob Deeks, CHBA BC/RDC Fine Homes and Robyn Wark, BC Hydro
Virtual Microsoft Teams meeting

Participants

1. Bea Bains, FortisBC
2. Tom Berkhout, BC Hydro (for Robyn Wark)
3. Patrick Caraher, AHMA
4. Jay Chadha, HAVAN (for Diana Dilworth)
5. Remi Charron, BC Housing
6. Maya Chorobik, LGPN, Community Energy Association
7. Norm Connolly, Part 3/Part 9 Non-Residential Subco, PIBC
8. Patrick Enright, City of Vancouver
9. Catherine Ernst, BOABC
10. Jeff Fisher, UDI
11. Sara Fralin, AHMA
12. Joe Hart, CHBA-BC
13. Nicholas Heap, City of Richmond
14. Brian Jung, BCNPHA (for Ian Cullis)
15. Toby Lau, Part 3 Part 9 Non-Residential Subco, BC Hydro
16. Wilma Leung, BC Housing
17. Richard Mathews, District of Squamish and Part 9 Residential co-chair
18. Katherine Muncaster, EMLI (for Nat Gosman)
19. Roberto Pecora, ZEBx
20. Laura Sampliner, LGPN co-chair, City of Port Moody
21. Muneesh Sharma, BOMA
22. Maxwell Sykes, City of Surrey, UBCM
23. Ralph Wells, UBC (for John Madden)
24. Guido Wimmers, UNBC
25. BSSB: Scott Williams, Hugo Wong, Dale Andersson

26. **Guests:** Tom Berkhout, BC Hydro; Alexandre Bigonesse, NRCan; Alex Blue, Evoke Buildings; Curt Hepting, EnerSys Analytics Inc.; Daisy Lilley, ENV; Lisa Mak, BC Hydro; Brendan McEwan, AES Engineering; Adrian Mohareb, ENV; Andrew Pape-Salmon, BSSB; Victoria Richards, BC Hydro; Tanya Rumak, FortisBC; Pauline Rupp and Carmina Tupe, CHBA BC; Adrian Mohareb, Climate Action Secretariat; Holly Wacker, MUNI

27. **Regrets:** Ian Cullis, BCNPHA; Diana Dilworth, HAVAN; Robyn Wark, BC Hydro; Lisa Mak, BC Hydro; Tyler Wightman, BOABC

1. **Introduction from Zachary May, Chair, Energy Step Code Council Chair and Director, Strategic Policy, Building and Safety Standards Branch**
   - The meeting served as an opportunity to report on progress on the GHGi work, and receive an update from Evoke Buildings Inc. which is leading the metrics research analysis project.

2. **Message from Andrew Pape-Salmon, Executive Director, Building and Safety Standards Branch**

   Andrew provided information on government priorities and plans, including:
   - Affordable housing is a key government priority.
   - The 30-point housing plan may be refreshed; there is a focus on housing for the 'missing middle.'
   - Government is refreshing CleanBC by creating a Roadmap to 2030, including a pathway for new and existing buildings, with a 'buildings' consultation session to be held August 4.
   - The Reconciliation Agreement on Construction Codes will shift code development processes.
   - The importance of reconciliation with Indigenous peoples.
   - Questions from Council members focussed on:
     - Overheating and the code, given the recent heat dome
     - National harmonization affecting B.C.'s leadership on code matters
     - A five-year cycle being too long to address issues
     - B.C.'s sectoral targets for buildings

3. **Presentation from Zachary May**
   - Zac provided an overview of a *possible* technical approach for a voluntary carbon pollution standard for local government adoption for *operational* carbon:
   - Step 1: Measure only
     - Step 2: 6.0 GHGi = reduced carbon
     - Step 3: 3.0 GHGi = near carbon zero
   - Discussion with Council members focussed on:
     - Emissions factors
       - Further work is needed, but GGIRCA 2019 seems most reasonable
       - Calculating RNG emissions is challenging as there is currently no way to guarantee a consumer would use RNG
     - The desired to include embodied carbon, not just operational carbon (this is not in the regulation for this fall, but will continue to be part of the discussion)
     - GHGi as part of, or separate from, the Step Code
     - Energy generation policy (outside the scope of this work)
     - Initial metrics report findings – see presentation from Alex Blue later in the meeting
   - Andrew Pape-Salmon noted that further to the discussion on affordability and land-use planning, it is the Province's goal that local governments that require carbon performance will enable increased density without lengthy and detrimental rezoning negotiations and

public hearings. The increased fuel cost of operating a low-carbon building can be compensated by enabling density. This is not about approving larger houses as is the case in one municipality, but rather increasing the number of residential units. We will be monitoring the extent to which local governments are approving density in the context of carbon pollution standards and will consider policy responses if challenges arise.
- The GHGi discussion was suggested as an appropriate 'deep dive' for the local government peer network when the standards are publicized.

4. **Presentation from Alex Blue, Envoke Buildings**
   - Alex Blue of Envoke Buildings Inc., in collaboration with Einar Halbig of E3 Eco Group, was engaged to update the Metrics Report that will assist in determining Step Code metrics for BCBC 2022.
   - Alex provided an overview of the study findings for Part 3 buildings; data for the Part 9 analysis is still pending (see PPT presented by Alex for details).
   - Discussion with Council members focussed on emissions factors used in the analysis, the energy conservation measures used; overheating; CEDI (cooling energy demand intensity).

5. **Timelines**
   - We are aiming for the metrics/technical analysis to be finalized in August after which we will hold a meeting late August (note: this is now moved to September).
   - In September: BSSB will provide Council with policy options that can be shared with your members for feedback, to finalize a proposal by end of the month.
   - Fall: BSSB to prepare a proposal for the regulation for the Minister's consideration.

6. **Meeting adjourned at 4:00 p.m.**

Scheduling for Sept. plus follow-ups

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, ruta.fluxgold@canada.ca, sfralin@ahma-bc.org, MGatensby@aibc.ca, hgoodland@scius.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, s.22 , May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, sean.pander@vancouver.ca, roberto@zebx.org, warrenp@bccassn.com, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, lsampliner@portmoody.ca, muneesh@boma.bc.ca, Maxwell.Sykes@surrey.ca, rthe@wesgroup.ca, Wacker, Holly MUNI:EX <Holly.Wacker@gov.bc.ca>, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

Sent: August 17, 2021 4:39:48 PM PDT

Hello, Energy Step Code Council members:

I hope you've been having a wonderful summer. I wanted to provide some information on work to date, and schedule two meetings in September.

The first, on the week of Sept. 6, is intended to focus on regular Council business, as we have not discussed that in some time. The second, on the week of Sept. 20, is intended to come to consensus on an approach to opt-in carbon pollution standards for local governments.

Please fill out this Doodle poll to indicate your availability: **https://doodle.com/poll/zyzkkr5rebgu9euy?utm_source=poll&utm_medium=link**

Our goal at BSSB is still to provide some written documentation to you so you can consult with your members on how the options might affect them. We are still developing them, and appreciate that you've been very patient with us!

If you're interested in participating in an ad-hoc group to form research questions and dive deeper into the data that informs these GHG options, please let me know. We will eventually come up with one-page info sheets on common building archetypes for you to disseminate to your members by early September.

Thanks very much.
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Metrics Research Steering Committee - Partial reports available - Part 3 comments by Aug. 27 please

From:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To:	Mark Bernhardt mark@bernhardtcontracting.com <mark@bernhardtcontracting.com>, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick.enright@vancouver.ca, Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, joe.iconhomes@gmail.com, ehayes@edgec.ca, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, Pete.Koepfgen@fortisbc.com, Toby.Lau@bchydro.com, Wilma Leung wileung@bchousing.org <wileung@bchousing.org>, Iain.Macdonald@nrc-cnrc.gc.ca, susan@focaleng.com, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory.McCall@vancouver.ca, roberto@zebx.org, Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya.Rumak@fortisbc.com, pauline@chbabc.org, lsampliner@portmoody.ca, David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>
Cc:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent:	August 19, 2021 10:56:29 AM PDT
Attachments:	image001.png

Hello again,

Word version of the draft report now available in Teams for comments – here is the link.

Thank you, Alex!

Kind regards,
Dale

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Thursday, August 19, 2021 10:28 AM
To: Mark Bernhardt mark@bernhardtcontracting.com <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; joe.iconhomes@gmail.com; 'ehayes@edgec.ca' <ehayes@edgec.ca>; Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; 'susan@focaleng.com' <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Metrics Research Steering Committee - Partial reports available - Part 3 comments by Aug. 27 please

Hello again,

Further to the below, as we're still waiting for the Part 9 analysis, we would appreciate **comments on the Part 3 analysis in the draft report by Friday August 27, 2021**. Please comment using the **Teams Channel if you can**. If not, please email me and Scott.

This is the link to the draft report in PDF format in Teams. (You can also find it at the link below.)

I will see if Alex can provide a Word version I can upload to Teams as that's easier to comment in – please stay tuned.

We'll get back to you re: Part 9 as soon as we can. Thank you.

Kind regards,
Dale

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Thursday, July 29, 2021 2:32 PM
To: Mark Bernhardt mark@bernhardtcontracting.com <mark@bernhardtcontracting.com>; 'Remi Charron' <rcharron@bchousing.org>; Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>; Jeff Fisher <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; joe.iconhomes@gmail.com; 'ehayes@edgec.ca' <ehayes@edgec.ca>; Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>; 'Pete.Koepfgen@fortisbc.com' <Pete.Koepfgen@fortisbc.com>; Toby.Lau@bchydro.com <Toby.Lau@bchydro.com>; Wilma Leung wileung@bchousing.org <wileung@bchousing.org>; 'Iain.Macdonald@nrc-cnrc.gc.ca' <Iain.Macdonald@nrc-cnrc.gc.ca>; 'susan@focaleng.com' <susan@focaleng.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gregory.McCall@vancouver.ca; 'roberto@zebx.org' <roberto@zebx.org>; Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>; 'reception@concertproperties.com' <reception@concertproperties.com>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; Tanya.Rumak@fortisbc.com <Tanya.Rumak@fortisbc.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; David Sargent dave.sargent@davara.ca <dave.sargent@davara.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Metrics Research Steering Committee - Partial reports available

Hello members of the Metrics Research Report Steering Committee,

We are making progress! Please find a link below to a final report that is still in progress. The link includes a report and the Part 3 spreadsheets, **with Part 9 data to come.** We thought we'd provide this material now so you could start to review it, but please note it is incomplete.

BC Energy Step Code Metrics Report Update

I will also put a copy of the report (the PDF document) in the Teams channel. You are welcome to provide comments in Teams but feel free to wait until the Part 9 content is also available.

Please keep these materials for your internal review only at this point; further direction will come (after Aug. 9) when the Part 9 data is ready . Please anticipate a meeting sometime in August.

Thank you and hope everyone enjoys a safe time this coming holiday weekend.

Kind regards,

Dale

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

FW: Metrics report - Jeff's comments from call Aug 19, 2021

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: August 19, 2021 2:28:15 PM PDT

Zac – FYI meant to cc you. I typed this as Jeff and I talked so not perfect English.

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

From: Andersson, Dale OHCS:EX
Sent: Thursday, August 19, 2021 2:25 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: Metrics report - Jeff's comments from call Aug 19, 2021

Hi Jeff,

Thanks for your call just now. Noting your comments and questions here for Scott (and ultimately Alex). I'll chat w Scott and we will follow up if we have questions. Enjoy your week off next week and we'll chat when you're back.

Scott: My notes from Jeff's call – what you can't decipher I can explain.

1. Plain-language communications needed.
2. Glossary needed – many acronyms
3. Appendices impossible to decipher = not clear what they mean, e.g. NECB 2015 vs 2020 (what does that mean?)
4. Top 10 approaches – what are each of the 10 approaches? What are they for each item for the top 10? e.g., what measures were used in the 10 that were part of the top 10. Including this makes easier for developer/public to see what options are (e.g., 20% glazing might not fly w a LG design panel). Would be helpful to include details of the top 10 to know the options are realistic.
5. Questions: How metrics rpt work w GHG work for LGs? Will there be a separate report for that? Dale's answer: No. Jeff: it could come up at UDI's Sept 13 webinar.
6. Questions: Weather files used for Okanagan was Summerland. For South Coast Vancouver was used. Why Summerland rather than Kelowna? If most development was in Kelowna, should have used Kelowna (but they are close together to may not mean much difference).
7. Questions: Final costing #s in report: Does that include cooling costs? Dale not sure ???? Jeff – if cooling will soon be included in BCBC, costs would be helpful if included in analysis
8. Fort Nelson – Exemption for this region? GHG requirements difficult here – unique circumstances. Doesn't affect UDI members but hard for 'south coast' to tell the north what to do. Might be better to fix grid rather than buildings in this area.
9. Emissions factors – agree w Patrick Enright. Wary of huge GHG changes/modelling guidelines changes as Hydro committed to getting grid to zero. So why make adjustment to modelling guidelines etc. if Hydro making changes when many buildings will come online in the next 3 to 4 years.
10. Cooling related issue: If Prov has a cooling requirement, then need to address DE. Cooling makes ASHPs more viable. Most DE systems can't supply cooling so DE connections everyone will require cooling. Need serious DE discussion.
11. Questions: Do we have to worry about data centres? They will require a lot of energy. What gets counted in terms of who tenants are for industrial and commercial types of buildings? NEED TO CONFIRM.

Kind regards,
Dale

Dale Andersson, PhD | Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9653 | Email: dale.andersson@gov.bc.ca

RE: Metrics report - Jeff's comments from call Aug 19, 2021

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To: Jeff Fisher <jfisher@udi.org>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: August 23, 2021 8:40:20 AM PDT

Thanks Jeff, comments noted.

Zac, Hugo and Scott: Please see below.

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

From: Jeff Fisher <jfisher@udi.org>
Sent: Thursday, August 19, 2021 4:04 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: RE: Metrics report - Jeff's comments from call Aug 19, 2021

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Thanks Dale, I added a few comments.

The only other issue I would add is the question that was raised at the *Roadmap to 2030* meeting held earlier this month. Given the short timeframes that the Province is moving forward with to reduce Greenhouse Gas (GHGs) to net-zero, we should discuss whether or not we need to make regulatory changes for local governments to do so. They can and are now reducing GHG emissions through the *Energy Step Code* (*ESC*) by reducing the step requirement if the operational GHGs are lowered for a project – which UDI supports. Our time may be better spent figuring out the roadmap on how the Province should move forward with its own GHG policy. When the *ESC* was approved, we had 15 to 20 years before the Province promised to mandate net-zero energy buildings, so it made more sense to allow local governments to proceed faster if they wished. We are looking at half the time now for a similar mandate province-wide to move to net-zero GHG emissions for new buildings.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: August 19, 2021 2:25 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: Metrics report - Jeff's comments from call Aug 19, 2021

Hi Jeff,

Thanks for your call just now. Noting your comments and questions here for Scott (and ultimately Alex). I'll chat w Scott and we will follow up if we have questions. Enjoy your week off next week and we'll chat when you're back.

Scott: My notes from Jeff's call – what you can't decipher I can explain.

1. Plain-language communications needed. Maybe have a communications person take a look at it because builders and local governments from jurisdictions that are unfamiliar with or are not fans of the *ESC* will be reviewing this. We also need to clearly communicate the cost implications for the GHG reductions to everyone.
2. Glossary needed – many acronyms
3. The tables in the appendices impossible to decipher = not clear what they mean, e.g. NECB 2015 vs 2020 (what does that mean?). I had two of my Building Code Committee members review the tables and they could not understand the top line (in black) with "Proposed Design", "NECB 2015 Baseline", and "NECB 2020 Baseline" because it did not seem to link to anything on the page.
4. Top 10 approaches – what are each of the 10 approaches? What are they for each item for the top 10? e.g., what energy conservation measures were used in the 10 that were part of the top 10. Including this makes easier for developer/public to see what options are (e.g., 20% glazing might not fly w a LG design panel or natural gas equipment in a municipality that is restricting GHG emissions). Would be helpful to include details of the top 10 to know the options are realistic.
5. Questions: How metrics rpt work w GHG work for LGs and the 2030 Roadmap? Will there be a separate report for that? Dale's answer: No. Jeff: it could come up at UDI's Sept 13 webinar. Will Zachary address the Provincial and Municipal GHG regulatory approaches being considered at the UDI webinar?
6. Questions: Weather files used for Okanagan was Summerland. For South Coast Vancouver was used. Why Summerland rather than Kelowna? If most development was in Kelowna, should have used Kelowna (but they are close together to may not mean much difference).
7. Questions: Final costing #s in report: Does that include cooling costs? Dale not sure ???? Jeff – if cooling will soon be included in BCBC, costs would be helpful if included in analysis
8. Fort Nelson – Exemption for this region? GHG requirements difficult here – unique circumstances. Doesn't affect UDI members but hard for 'south coast' to tell the north what to do. Might be better to fix grid rather than buildings in this area.
9. Emissions factors – agree w Patrick Enright. Wary of huge GHG changes/modelling guidelines changes (given the other changes to the ESC that are being contemplated) as Hydro committed to getting grid to zero. So why make adjustment to modelling guidelines etc. if Hydro making changes when many buildings will come online in the next 3 to 4 years.
10. Cooling related issue: If Prov has a cooling requirement, then need to address DE. Cooling makes ASHPs more viable. Most DE systems can't supply cooling so DE connections will be mandated plus there will be requirements for everyone to have cooling systems. Need serious DE discussion.
11. Questions: Do we have to worry about data centres? They will require a lot of energy. What gets counted in terms of who tenants are for industrial and commercial types of buildings? NEED TO CONFIRM. This is important because tenancies change during the life of the a building. A regular office tenant may be replaced with game studio. Sometimes, our members don't know who their tenants will be when they are constructing a commercial/industrial building.

Kind regards,
Dale

Dale Andersson, PhD | Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9653 | Email: dale.andersson@gov.bc.ca

Introductions & Updates: UDI Sept 13 Webinar

From:	Verna Yu <vyu@udi.org>
To:	Enright, Patrick <Patrick.Enright@vancouver.ca>, Li, Charling <charling.li@vancouver.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>, Pander, Sean <sean.pander@vancouver.ca>
Sent:	August 23, 2021 9:37:49 AM PDT
Attachments:	image016.jpg, image001.png, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg, image014.jpg, image017.jpg, image015.jpg

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Good morning everyone,

Thank you all for taking part in the upcoming webinar discussing ESC and COV updates. I would like to take this opportunity to e-introduce myself, I have just joined the UDI team as the Director, Professional Development and will be overseeing the learning and events programming.

Patrick, would you be able to provide the name, title, and a photo of the City of Vancouver panelist by 1pm this afternoon so we may update this information for the event and include it in our second email blast to promote the event?

Thank you all so much for your participation and I look forward to working with you on this event.

Kind regards,

Verna

Verna Yu | Director, Professional Development
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca



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From: "Sykes, Maxwell" <Maxwell.Sykes@surrey.ca>
Date: Sunday, August 8 at 1:04 PM
To: "May, Zachary OHCS:EX" <Zachary.May@gov.bc.ca>, Michael Galope <mgalope@udi.org>, "Enright, Patrick" <Patrick.Enright@vancouver.ca>, Yvonne Lo <ylo@udi.org>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: "Pander, Sean" <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>, "Li, Charling" <charling.li@vancouver.ca>
Subject: Re: REVIEW pls - UDI Webinar E-blast (SEPT 13)

Hi Michael,

Apologies for the deadly—been away.

Minor update to my text proposed. If it's already gone out, nbd.

Maxwell Sykes will discuss how local governments may apply the GHG performance standards as well as the issues that were considered in contributing to its development and that should be considered in approaches to implementation.

MAXWELL SYKES, MRM, HBA | CLIMATE AND ENERGY MANAGER
CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

---

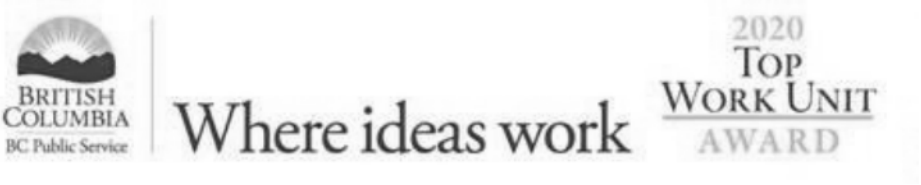
From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, August 6, 2021 3:43:28 PM

To: Michael Galope <mgalope@udi.org>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Yvonne Lo <ylo@udi.org>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Pander, Sean <sean.pander@vancouver.ca>; Jeff Fisher <jfisher@udi.org>; Verna Yu <vyu@udi.org>; Li, Charling <charling.li@vancouver.ca>
Subject: RE: REVIEW pls - UDI Webinar E-blast (SEPT 13)

Suggested text regarding the provincial initiatives.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Michael Galope <mgalope@udi.org>
Sent: Tuesday, August 3, 2021 4:28 PM
To: Enright, Patrick <Patrick.Enright@vancouver.ca>; Yvonne Lo <ylo@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Maxwell.Sykes@surrey.ca; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Pander, Sean <sean.pander@vancouver.ca>; Jeff Fisher <jfisher@udi.org>; Verna Yu <vyu@udi.org>; Li, Charling <charling.li@vancouver.ca>
Subject: Re: REVIEW pls - UDI Webinar E-blast (SEPT 13)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Patrick,

Thanks for the clarification. I believe I have it right now, here's the writeup:

Join our expert panel on September 13th for a breakfast seminar to update you on **important changes to the BC Energy Step Code** and **City of Vancouver Sustainability Policies**.

The Province is moving forward with a Mandate Letter commitment to establish voluntary **greenhouse gas emissions targets** that local governments can apply to new construction, which will be integrated into the *BC Energy Step Code*. The City of Vancouver will also provide an update on their green building policies.

Key topics include:

- Zachary May will outline how these proposed changes to the BC Building Code may impact your projects as well as provide an update on other Building Code issues.
- Maxwell Sykes will discuss about how many local governments plan to utilize these proposed greenhouse gas targets.
- The City Vancouver will share it's experience to date with greenhouse gas targets and the Zero Emissions Building Plan, as well as updates on buildings and the Climate Emergency Action Plan.

I will wait for others to chime in before resending another test eblast.

Regards,

Michael Galope
Marketing and Communications Manager
Direct: 604.661.3037
Email: mgalope@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

From: "Enright, Patrick" <Patrick.Enright@vancouver.ca>
Date: Tuesday, August 3 at 2:12 PM
To: Michael Galope <mgalope@udi.org>, Yvonne Lo <ylo@udi.org>, "Zachary.May@gov.bc.ca" <Zachary.May@gov.bc.ca>, "Maxwell.Sykes@surrey.ca" <Maxwell.Sykes@surrey.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: "Pander, Sean" <sean.pander@vancouver.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>, "Li, Charling" <charling.li@vancouver.ca>
Subject: RE: REVIEW pls - UDI Webinar E-blast (SEPT 13)

The City Vancouver will share it's experience to date with greenhouse gas targets and the Zero Emissions Building Plan, as well as updates on buildings and the Climate Emergency Action Plan.

RE: UBCM - mass timber question

From: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
To: Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>, Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: August 24, 2021 3:08:15 PM PDT
Attachments: image001.jpg

Hi Sarah:

I received the following from OMTI this morning:

"For validators, I'd recommend:

Brian Frankel, current UBCM president: bfrenkel13@gmail.com
Anne McMullin, President UDI: AMcMullin@udi.org

I would prioritize Brian Frankel since this is about local governments."

Please let me know if there's anything else I can assist with.

Thanks!
Melanie

From: Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Sent: Tuesday, August 24, 2021 11:00 AM
To: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>; Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: UBCM - mass timber question

Hi Melanie,

Just wanted to follow up and ask if you've been able to track down a contact in the Office of Mass Timber Construction who could help us reach a validator for this release? Let me know. :)

Thanks,
Sarah

From: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Sent: August 20, 2021 4:16 PM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Subject: RE: UBCM - mass timber question

No problem, I will reach out and see if they have any suggestions and get back to you.

Thanks!
Melanie

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Friday, August 20, 2021 4:05 PM
To: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Subject: RE: UBCM - mass timber question

From: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Sent: August 20, 2021 4:04 PM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Subject: RE: UBCM - mass timber question

The Office of Mass Timber Construction in the Ministry of Jobs, Economic Recovery and Innovation.

Thanks!
Melanie

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Friday, August 20, 2021 4:02 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>; Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Subject: RE: UBCM - mass timber question

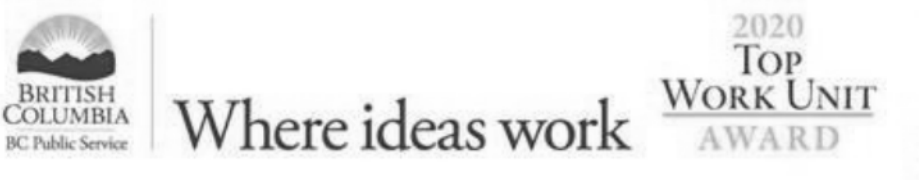
Hi Zachary, What is OMTI?

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: August 20, 2021 3:59 PM
To: Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>; Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Cc: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: RE: UBCM - mass timber question

I would ask the team at OMTI, who may have a better list of validators than us.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Sent: Friday, August 20, 2021 3:58 PM
To: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: RE: UBCM - mass timber question

Thanks very much both!

We will update the NR[s.13] and reach out to Karen about a quote.

Was there anyone else you would recommend including as a validator?

Cheers,

Sarah

From: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Sent: August 20, 2021 3:57 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Cc: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: RE: UBCM - mass timber question

Hello Sarah:

Our contact in New West is:

Karen Campbell, Architect AIBC
Project Manager, Civic Buildings & Properties
Cell: 778.222.5913
Email: kcampbell@newwestcity.ca

Thanks!
Melanie

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, August 20, 2021 3:55 PM
To: Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Cc: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>; Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Subject: RE: UBCM - mass timber question

Sarah,

s.13 it's just New West. Melanie knows who our contact is in New West.

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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From: Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Sent: Friday, August 20, 2021 3:37 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>; Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Subject: RE: UBCM - mass timber question

Hi again,

I've got our NR framed up for this announcement and will share it with you for review soon. I plan on including quotes from s.13 as validators. Does your team have a contact in each community we could connect with for those?

Also, is there anyone else you would recommend seeking out for a validating quote on this?

Thanks very much,
Sarah

From: Budd, Sarah GCPE:EX
Sent: August 18, 2021 2:53 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>; Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Subject: RE: UBCM - mass timber question

Hi Zac,

Thanks again for explaining the situation with JERI. I'm just getting started on our NR for this and was hoping you could also share any briefing materials that could inform our release. Also do you know if there are any past announcements on the topic we could refer to?

Thanks!
Sarah

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: August 17, 2021 9:41 PM
To: Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Cc: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>; Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Subject: RE: UBCM - mass timber question

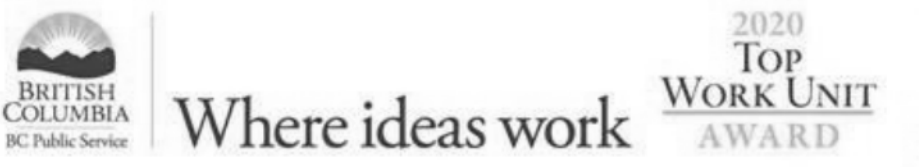
Hi Sarah,

My understanding was that Minister Khalon wanted to make an announcement, or at least his staff were recommending that. We're on track to line up the regulation for signature in the first week of Sept., which is just in time for an announcement.

s.13

Best,
Zachary D. May, MBA
Director, Strategic Policy
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Budd, Sarah GCPE:EX <Sarah.Budd@gov.bc.ca>
Sent: Tuesday, August 17, 2021 4:49 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>

Cc: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: UBCM - mass timber question

Hi Zac,

I wanted to touch base with you about the info bulletin we have planned to go out during UBCM about New Westminster s.13 joining the list of munis that will allow 12-storey mass-timber buildings.

s.13

Thanks!

Sarah Budd | Public Affairs Officer
Government Communications and Public Engagement
Ministry of Attorney General and Responsible for Housing
Cell: 250 818-5613
She/Her

FW: Metrics report - Jeff's comments from call Aug 19, 2021

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
To: alex@chbabc.org
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Jeff Fisher <jfisher@udi.org>
Sent: August 26, 2021 10:25:07 AM PDT

Hi Alex,

Sending comments along from Jeff/UDI.

Kind regards,
Dale

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

From: Jeff Fisher <jfisher@udi.org>
Sent: Thursday, August 19, 2021 4:04 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: RE: Metrics report - Jeff's comments from call Aug 19, 2021

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Thanks Dale, I added a few comments.

The only other issue I would add is the question that was raised at the *Roadmap to 2030* meeting held earlier this month. Given the short timeframes that the Province is moving forward with to reduce Greenhouse Gas (GHGs) to net-zero, we should discuss whether or not we need to make regulatory changes for local governments to do so. They can and are now reducing GHG emissions through the *Energy Step Code* (*ESC*) by reducing the step requirement if the operational GHGs are lowered for a project – which UDI supports. Our time may be better spent figuring out the roadmap on how the Province should move forward with its own GHG policy. When the *ESC* was approved, we had 15 to 20 years before the Province promised to mandate net-zero energy buildings, so it made more sense to allow local governments to proceed faster if they wished. We are looking at half the time now for a similar mandate province-wide to move to net-zero GHG emissions for new buildings.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President and Senior Policy Advisor
Urban Development Institute
Suite 1100, 1050 West Pender Street
Vancouver, BC V6E 3S7 Canada
Tel 604 661-3031|Fax 604 689-8691
Cell 604 340-8019 |E-mail jfisher@udi.org
Web www.udi.bc.ca

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: August 19, 2021 2:25 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: Metrics report - Jeff's comments from call Aug 19, 2021

Hi Jeff,

Thanks for your call just now. Noting your comments and questions here for Scott (and ultimately Alex). I'll chat w Scott and we will follow up if we have questions. Enjoy your week off next week and we'll chat when you're back.

Scott: My notes from Jeff's call – what you can't decipher I can explain.

1. Plain-language communications needed. Maybe have a communications person take a look at it because builders and local governments from jurisdictions that are unfamiliar with or are not fans of the *ESC* will be reviewing this. We also need to clearly communicate the cost implications for the GHG reductions to everyone.
2. Glossary needed – many acronyms
3. The tables in the appendices impossible to decipher = not clear what they mean, e.g. NECB 2015 vs 2020 (what does that mean?). I had two of my Building Code Committee members review the tables and they could not understand the top line (in black) with "Proposed Design", "NECB 2015 Baseline", and "NECB 2020 Baseline" because it did not seem to link to anything on the page.
4. Top 10 approaches – what are each of the 10 approaches? What are they for each item for the top 10? e.g., what energy conservation measures were used in the 10 that were part of the top 10. Including this makes easier for developer/public to see what options are (e.g., 20% glazing might not fly w a LG design panel or natural gas equipment in a municipality that is restricting GHG emissions). Would be helpful to include details of the top 10 to know the options are realistic.
5. Questions: How metrics rpt work w GHG work for LGs and the 2030 Roadmap? Will there be a separate report for that? Dale's answer: No. Jeff: it could come up at UDI's Sept 13 webinar. Will Zachary address the Provincial and Municipal GHG regulatory approaches being considered at the UDI webinar?
6. Questions: Weather files used for Okanagan was Summerland. For South Coast Vancouver was used. Why Summerland rather than Kelowna? If most development was in Kelowna, should have used Kelowna (but they are close together to may not mean much difference).
7. Questions: Final costing #s in report: Does that include cooling costs? Dale not sure ???? Jeff – if cooling will soon be included in BCBC, costs would be helpful if included in analysis
8. Fort Nelson – Exemption for this region? GHG requirements difficult here – unique circumstances. Doesn't affect UDI members but hard for 'south coast' to tell the north what to do. Might be better to fix grid rather than buildings in this area.
9. Emissions factors – agree w Patrick Enright. Wary of huge GHG changes/modelling guidelines changes (given the other changes to the ESC that are being contemplated) as Hydro committed to getting grid to zero. So why make adjustment to modelling guidelines etc. if Hydro making changes when many buildings will come online in the next 3 to 4 years.
10. Cooling related issue: If Prov has a cooling requirement, then need to address DE. Cooling makes ASHPs more viable. Most DE systems can't supply cooling so DE connections will be mandated plus there will be requirements for everyone to have cooling systems. Need serious DE discussion.
11. Questions: Do we have to worry about data centres? They will require a lot of energy. What gets counted in terms of who tenants are for industrial and commercial types of buildings? NEED TO CONFIRM. This is important because tenancies change during the life of the a building. A regular office tenant may be replaced with game studio. Sometimes, our members don't know who their tenants will be when they are constructing a commercial/industrial building.

Kind regards,
Dale

Dale Andersson, PhD | Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9653 | Email: dale.andersson@gov.bc.ca

UDI Sept. 13 Webinar - Pre-Event Meeting

From:	Verna Yu <vyu@udi.org>
To:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc:	Jeff Fisher <jfisher@udi.org>
Sent:	August 26, 2021 2:15:56 PM PDT
Attachments:	image002.jpg, image003.jpg, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good Afternoon,

Thank you all once again for joining us in discussion on **The Green Building Climate: ESC & CoV Updates**. As September is fast approaching, we would like to set-up a pre-meeting to discuss the event in more detail including event format and rundown as well as review the topics of discussion.

Please let me know if you would be available to join us on any of the following dates/times:

Tuesday, August 31: 3pm
Thursday, September 2: 1 pm
Tuesday, September 7: 11 am
Wednesday, September 8: 9 am or 1 pm

Kind regards,

Verna

Verna Yu | Director, Professional Development
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca



RE: UDI Sept. 13 Webinar - Pre-Event Meeting

From:	Enright, Patrick <Patrick.Enright@vancouver.ca>
To:	Verna Yu <vyu@udi.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc:	Jeff Fisher <jfisher@udi.org>
Sent:	August 26, 2021 2:19:38 PM PDT
Attachments:	image002.jpg, image003.jpg, image001.jpg

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Hi Verna,

All of those times work for me except:

Tuesday, August 31: 3pm
Wednesday, September 8: 1 pm

Thanks!

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
patrick.enright@vancouver.ca | 604.871.6158

For more information on green buildings, please visit http://vancouver.ca/zeroemissions

I am humbly thankful that I live and work on the territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh) nations.

From: Verna Yu <vyu@udi.org>
Sent: Thursday, August 26, 2021 2:16 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: [EXT] UDI Sept. 13 Webinar - Pre-Event Meeting

City of Vancouver security warning: Do not click on links or open attachments unless you were expecting the email and know the content is safe.

Good Afternoon,

Thank you all once again for joining us in discussion on **The Green Building Climate: ESC & CoV Updates [udi.memberzone.com]**. As September is fast approaching, we would like to set-up a pre-meeting to discuss the event in more detail including event format and rundown as well as review the topics of discussion.

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Tuesday, September 7: 11 am
Wednesday, September 8: 9 am or 1 pm

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Verna

Verna Yu | Director, Professional Development
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca [udi.bc.ca]
[twitter.com] [youtube.com] [facebook.com]

RE: UDI Sept. 13 Webinar - Pre-Event Meeting

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
To: Enright, Patrick <Patrick.Enright@vancouver.ca>, Verna Yu <vyu@udi.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Sent: August 26, 2021 4:28:50 PM PDT
Attachments: image002.jpg, image003.jpg, image001.jpg

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Hi Verna,

Below is my current availability for those times:

- Tuesday, August 31: 3pm – Yes, if necessary
- Thursday, September 2: 1 pm – Yes
- Tuesday, September 7: 11 am – Yes
- Wednesday, September 8: 9 am – Yes
- Wednesday, September 8: 1 pm – Yes

Do you expect us to be ready to speak to everything we will present?

Thanks
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

Upcoming Out of Office Alert: nothing planned

From: Enright, Patrick <Patrick.Enright@vancouver.ca>
Sent: August 26, 2021 2:20 PM
To: Verna Yu <vyu@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

Hi Verna,

All of those times work for me except:

Tuesday, August 31: 3pm
Wednesday, September 8: 1 pm

Thanks!

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
patrick.enright@vancouver.ca | 604.871.6158

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From: Verna Yu <vyu@udi.org>
Sent: Thursday, August 26, 2021 2:16 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: [EXT] UDI Sept. 13 Webinar - Pre-Event Meeting

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Thank you all once again for joining us in discussion on **The Green Building Climate: ESC & CoV Updates [udi.memberzone.com]**. As September is fast approaching, we would like to set-up a pre-meeting to discuss the event in more detail including event format and rundown as well as review the topics of discussion.

Please let me know if you would be available to join us on any of the following dates/times:

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Thursday, September 2: 1 pm
Tuesday, September 7: 11 am
Wednesday, September 8: 9 am or 1 pm

Kind regards,

Verna

Verna Yu | Director, Professional Development
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca [udi.bc.ca]
[twitter.com] [youtube.com] [facebook.com]

RE: UDI Introductions + Sept 28 Mass Timber Webinar

From:	Andrew Harmsworth <ah@ghl.ca>
To:	Verna Yu <vyu@udi.org>
Cc:	Patrick Enright (patrick.enright@vancouver.ca) <patrick.enright@vancouver.ca>, Jeff Fisher (JFisher@udi.org) <jfisher@udi.org>, Rocky Sethi (rockys@adera.com) <rockys@adera.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Yvonne Lo <ylo@udi.org>
Sent:	August 30, 2021 6:23:45 PM PDT
Attachments:	image001.jpg, image003.jpg, image002.jpg

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Thanks

We need to get organized in terms of the format, I am still unclear as to how to formulate the presentation.

I thought we had set a meeting time to discuss, but don't see it. Can we find a time.

BTW I don't have a contact for Sheryl Peters – hence she is not copied, but should be in our discussions.

Andrew Harmsworth, M Eng, P Eng, PE, CP, FEC
GHL CONSULTANTS LTD
Building Codes & Fire Science
409 Granville Street, Suite 950, Vancouver, BC V6C 1T2
P 604 689 4449 Ext 107 \ **D** 604-335-7647 \ **E** ah@ghl.ca \ **W** www.ghl.ca

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From: Verna Yu <vyu@udi.org>
Sent: August 30, 2021 3:10 PM
To: Andrew Harmsworth <ah@ghl.ca>
Subject: UDI Introductions + Sept 28 Mass Timber Webinar

Good afternoon Andrew,

Thank you for joining us for the upcoming Advancing Mass Timber in BC breakfast webinar on September 28.

I have recently joined the UDI team as the new Director of Professional Development & Programming. I look forward to virtually meeting you at the pre-event session scheduled for Tuesday, September 14 to further discuss the webinar format and rundown as well as review the topics of discussion. In the meantime, please let me know if there is anything I could be of assistance to.

I hope you have a wonderful rest of the week!

Kind regards,

Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca

Proposed agenda (subject to change) to include:

* Brief status update on GHG work and Metrics report
* Presentation from Industry Capacity Readiness Report team (SCIUS and Delphi)
* Update from the subcommittees
* Roundtable on Energy Step Code implementation

We've booked three hours, but may conclude earlier.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Dear Panel,

Please join us for a pre-meeting in preparation for our virtual breakfast seminar in discussion on UDI Webinar - Advancing Mass Timber in BC

s.15

Agenda and materials, Sept. 9 Energy Step Code Council meeting

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, ablue@EvokeBuildings.com, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Chris Atchison <chris.atchison@bccassn.com>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, ruta.fluxgold@canada.ca, sfralin@ahma-bc.org, MGatensby@aibc.ca, hgoodland@scius.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, s.22 May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, sean.pander@vancouver.ca, roberto@zebx.org, warrenp@bccassn.com, Katy Fairley <katy.fairley@bccassn.com>, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, lsampliner@portmoody.ca, muneesh@boma.bc.ca, Maxwell.Sykes@surrey.ca, rthe@wesgroup.ca, Pridie, Holly MUNI:EX <Holly.Pridie@gov.bc.ca>, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc:	Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>, Remi Charron <rcharron@bchousing.org>, pauline@chbabc.org
Sent:	September 3, 2021 5:08:24 PM PDT
Attachments:	Draft motion June 3 Part 9 sub comm.docx, BCESC Capacity Study Presentation 30 June 2021 PDF.pdf, ESCC Agenda 2021 09 09.pdf

Hi all,

Agenda and materials attached. There will be one more PowerPoint still in development from Scott that we can provide closer to the meeting.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Draft Motion
Energy Step Code Council Part 9 Residential Subcommittee

June 3, 2021

Whereas:

A. The BC ESC is to put BC on a path to meet the province's target of all new buildings being 'net zero energy ready' by 2032 and provide assurance that they perform 'as billed'.
B. Clean BC establishes a target of new homes being 80% more efficient that the current base building code by 2032 – the net-zero energy ready standard.
C. BC and Canada have committed to the Paris Accord. International norms and guidelines have been developed by agencies such as the UN and IEA identifying outcomes to be achieve in order to be Paris compliant. Such norms and guidelines are informed by climate science as reflected in IPCC reports.

Be it therefore moved that:

The Energy Step Code Council Part 9 Residential Subcommittee inform the Energy Step Code Council that the BC Energy Step Code, as currently enacted, does not enable Part 9 residential buildings in British Columbia to achieve the goals of the Energy Step Code, Clean BC or achieve performance outcomes aligned with international norms.

Background Information & Discussion

This motion is put forward by Passive House Canada (PHC) to identify the subcommittees understanding of the outcomes the Step Code achieves in relation to its identified purposes and if the subcommittee believes the Step Code Council should be informed of the misalignment of goals and outcomes.

It is brought forward after receiving feedback from subcommittee members, industry leaders, local governments and others expressing concern about the misalignment of goals and outcomes. As the decisions made in building regulation are increasingly observed by society at large, there is growing public scrutiny of the code development process and an expectation those involved will protect the public interest by ensuring codes deliver on their mandate. With the Building Act removing the ability of local government to regulate building performance, a Step Code that fails to achieve its stated purposes limits the ability of local governments to achieve their provincially mandated climate objectives.

This motion deliberately avoids describing the extent of the gap between outcomes and targets, the reasons the gap exists or what should be done to eliminate it. Each of those topics merits a more in depth discussion we seek to avoid during this meeting. The motion, if passed, is intended to be the start of a conversation if the Step Code Council wishes. If a subcommittee member understands the Step Code provisions relating to Part 9 will not achieve one or more of the three outcomes listed in the recitals to this motion, whether by a small or large margin, that subcommittee member is able to support it if he or she believes the Step Code Council should be informed.

Step Code Goals
Recital A refers to buildings performing 'as billed', a term taken from the description of the Step Code on the Step Code website. The performance gap is endemic in the industry, been the subject of many papers, some of which are cited below, and is a reality subcommittee members will be familiar with. With the continued use of HOT2000, the ERS system and the reference building approach, buildings will continue to experience a performance gap, in most cases consuming more energy than anticipated. Until robust methodologies are implemented, the performance gap will continue.

Recital B outlines the energy efficiency target contained in Clean BC which defines what a Net-Zero Ready standard is. Currently, the Step Code does not attempt to regulate "unregulated loads", which form an increasingly significant share of total energy use as efficiency increases. The targeted improvement of even the 'regulated loads' falls below 80% target, creating a clear gap between the outcomes the Step Code will be capable of delivering and the Clean BC target for Net-Zero Ready buildings.

Local governments are becoming aware of the performance gap. For example, in 2020 the City of Vancouver wrote to the Step Code Council confirming their decision to not permit the use of the reference building approach in Vancouver as it's use prevented them from achieving their climate goals. On November 30, 2020 Richmond's Mayor Brodie wrote to Ministers Eby, Heyman & Osborne outlining this city of Richmond's request to modify the Step Code. A copy of that letter, and the staff report dated Sept. 16, 2020 on which it is based, accompany this motion. Figure 1 in the City of Richmond Staff Report includes a calculation of the results of the first 37 houses permitted under the Step Code in Richmond. It compares the TEDI achieved under the Step Code as originally adopted, with reduced targets adopted in Dec. 2019 and by using the reference building approach. To achieve Step 4 using the reference building approach, those 37 homes would require approximately a 20% improvement in TEDI from base building code. Data from the first 125 homes in Richmond has now been evaluated with no material change in the average performance. With such a small improvement in TEDI, there is no prospect of improving total energy demand by 80% at Step 5. Furthermore, the targets and methodology permitted by the Step Code currently enable a home in Courtenay to achieve Step 5 with 2" X 6" bat and poly construction, low performance double paned windows, no heat pump and no HRV even without using the reference building approach or any of the numerous "cheats" available within HOT2000 and the ERS system. That level of construction does not deliver an 80% improvement in building efficiency.

Science-based International Norms
Recital C references the national and international expectations and outcomes arising out of the Paris Accord which BC has committed to. The Step Code seeks to address one of the essential aspects of climate friendly buildings - operating energy efficiency in new buildings. Other aspects such as embodied carbon, existing buildings and fuel switching are to be addressed separately. While various agencies emphasize the critical role of energy efficiency, the proposed revision of the UN Framework Guidelines for Energy Efficiency Standards in Buildings offers the clearest and most detailed description. The findings in the recent IEA Roadmap to Net Zero by 2050 report emphases the need for efficiency regardless of the availability of renewable energy, a reality recognized in the May 21, 2021 communiqué of the G7 Ministers. The Global Alliance for Buildings and Construction Global Status Report and their Global Roadmap

Toward Low-GHG and Resilient Buildings also identify a level of operating efficiency similar to or better than the outcomes delivered by Passive House buildings. Passive House outcomes have been identified because effective mitigation requires efficiency to be maximized regardless of the availability of renewable energy sources. As Passive House is currently the highest level of operating efficiency deployed internationally at scale, the identified goal is to improve upon that outcome. Additional sources of information on this subject are listed in the references below. The Clean BC target of an 80% improvement in building efficiency aligns with international science-based norms, which is presumably why it was adopted.

Additional Information

The Reference Building Approach:

- Shi X, Si B, Zhao J, Tian Z, Wang C, Jin X. 2019. Magnitude, causes, and solutions of the performance gap of buildings: a review. Sustainability 11:937
- Int. Partnersh. Energy Effic. Coop. Build. Energy Effic. Taskgroup (IPEEC BEET). 2019. Building energy performance gap issues—an international review. Rep., OECD, IPEEC, Paris. https://www.energy.gov.au/sites/default/files/the_building_energy_performance_gap-an_international_review-december_2019.pdf
- EQ Build. Perform. 2019. Sidewalk Labs Toronto Multi-Unit Residential Buildings Study: energy use and the performance gap. Rep., EQ Build. Perform., Toronto. https://be-exchange.org/wp-content/uploads/ 2019/07/SWL-MURB-Presentation-Final.pdf

Science-based Norms:

- Ürge-Vorsatz,et. al. Advances Toward a Net-Zero Global Building Sector https://www.annualreviews.org/doi/abs/10.1146/annurev-environ-012420-045843
- IEA/OECD, 2008, Energy Efficiency Requirements in Building Codes, Energy Efficiency Requirements for New Buildings
- Torrie & Herbert, The Implications of Deep Decarbonization Pathways for Electricity Grids
- Bernhardt, Addressing the Cost of Efficiency



BC Energy Step Code Capacity Study

July 30, 2021

SCIUS Advisory

DELPHI GROUP

The “BC Energy Step Code Capacity Study” was commissioned by the Province of British Columbia. This work is designed to provide accurate and authoritative information but is not intended to provide professional advice. Users are responsible for exercising professional knowledge and judgement in the application of the information.

ACKNOWLEDGEMENTS

The Province gratefully acknowledges BC Hydro and FortisBC which jointly funded this report.

ADVISORY GROUP

Dale Andersson, BSSB
Zachary May, BSSB
George Benson, Vancouver Economic Commission
Sara Rutherford, BC Housing
Kim McClymont, ZEBx
Tom Berkhout, BC Hydro
Tanya Rumak, Fortis BC
Mary McWilliam, BCIT
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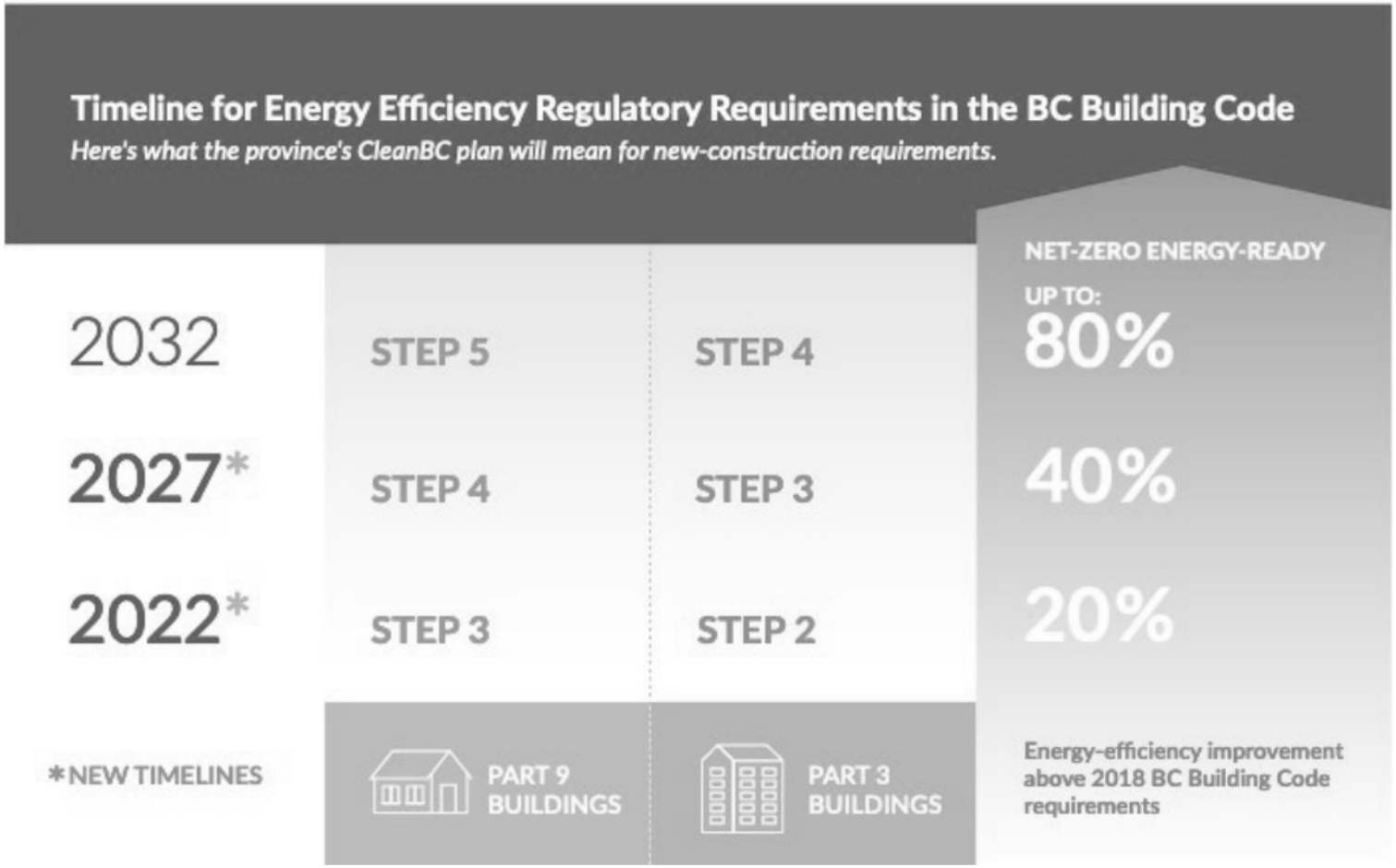

BC ENERGY STEP CODE – SCOPE AND TIMEFRAME

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PURPOSE OF STUDY

REVIEW the educational elements in place to support key construction professionals to acquire knowledge and skills to successfully implement ESC requirements through to 2032

ASSESS the current “state of readiness” of key construction professions to implement the ESC

IDENTIFY barriers hinder key professions from acquiring the knowledge and skills they need

RECOMMEND how capacity building efforts can best be directed in the coming year(s) to support the development of needed knowledge and skills



Research Methodology



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- Identifying key professions
- Engaging with institutes, associations, warranty providers and certification bodies
- Engaging with organizations that support training and capacity building.
- Identifying existing competency frameworks
- Identifying learning resources
- Identifying degree to which training is encouraged/mandated, as well as obstacles to training.
- Clarifying differences between Part 3 and Part 9 construction.



Interview

- **21 interviews** were conducted
- Included professionals in management and training roles from relevant BC organizations, industry professionals
- Questions on general preparedness, training and availability, hiring qualified workers, incentives, under-served populations, regional differences, barriers and challenges



Survey

- A BC Building Code Capacity Survey was conducted in **March and April 2021**
- The survey was disseminated directly via email through SurveyMonkey platform to over **300 individuals and organizations**
- **56 responses** were received after approximately **5 weeks**.
- Questions on general preparedness, training and availability, hiring qualified workers, incentives, under-served populations, regional differences, barriers and challenges

INTERVIEW AND SURVEY SNAPSHOT

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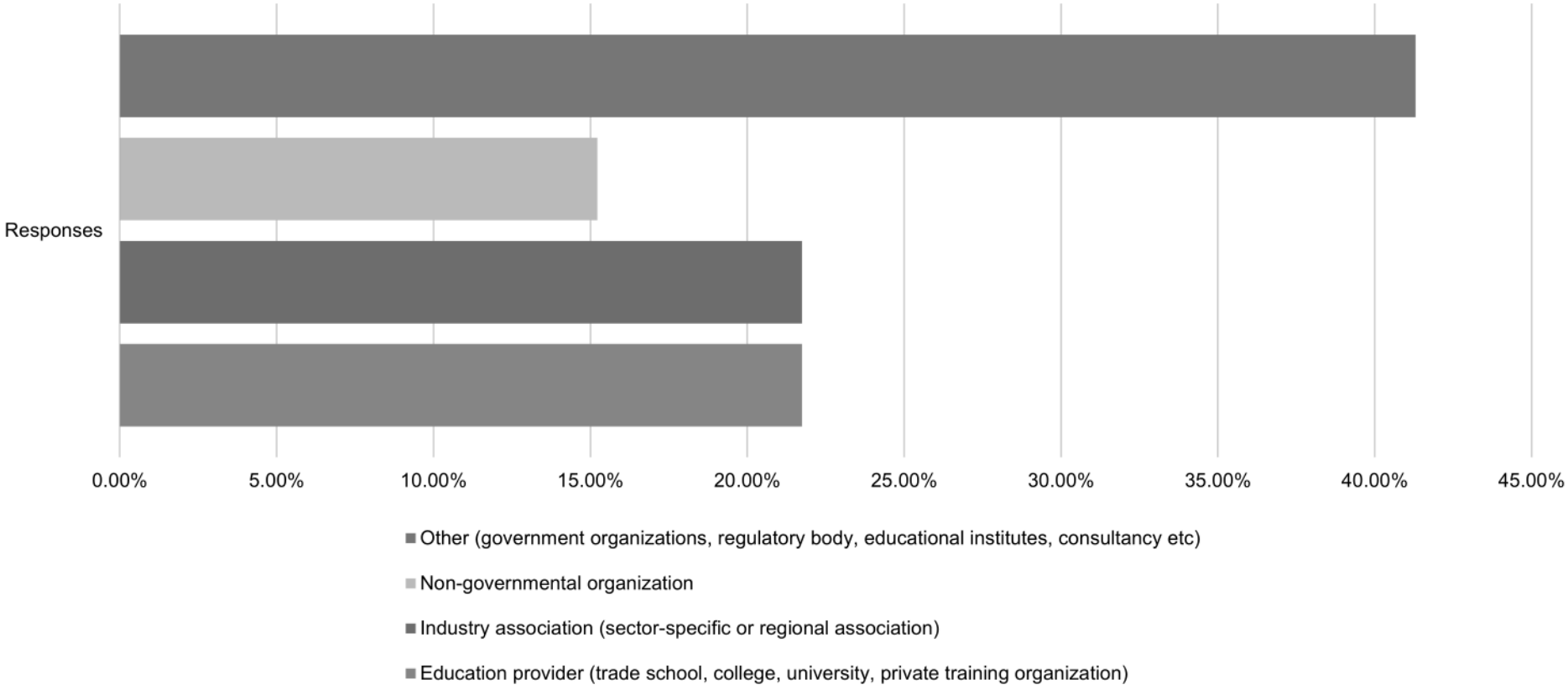
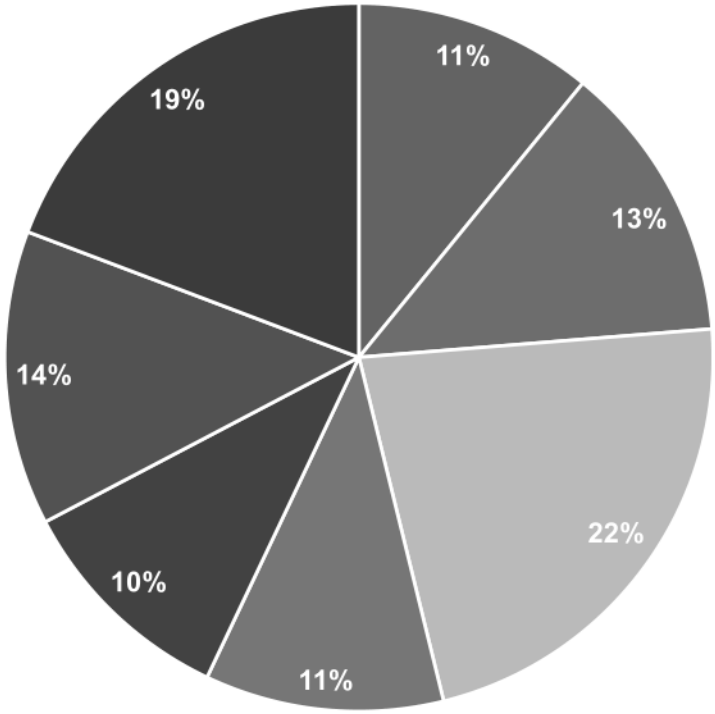
Which one of the following categories best describes your organization? (N=46)



Select any regions that fall within your organization's main scope and reach (N=46)



- Cariboo
- Kootenay
- Mainland / Southwest (includes Metro Vancouver and Fraser Valley)
- North Coast and Nechako
- Northeast
- Thompson-Okanagan
- Vancouver Island / Coast

Key Professions	Key Organization Responsible or 'Natural or Potential Lead'	Related or Supporting Organizations	Step Code Competency Framework Available?	Learning Resources available to Support Competencies?	Learning Resources List for this Profession	Step Code Status	Differences Part 3 vs Part 9	Regional Differences	Identified obstacles	
Metric	**Name (Green - required to operate, Orange - vol. membership, Red -**	**Name**	**Green - Yes, Orange - Partial / In Progress, Red - No**	**Green - Yes, Orange - Partial / In Progress, Red - No**	**Green - Yes, Orange - Partial / In Progress, Red -**	**Green - Strongly encouraged, Orange - Info available but not explicitly encouraged,**	**Major, Minor, None**	**Major, Minor, None**	**Major, Minor, None**	**Comment**
Consultants										
Developers and project managers (Part 3)	UDI	AIBC, CHBA-BC, VRCA, ICBA, EGBC	No	Partial	In progress	No	N/A	Minor; experienced developers concentrated in cities	Minor	Prepared in the short term. Will require training on the implications of ESC on building configuration, form and cost.
Architects	AIBC	RAIC, ASTTBC, CAGBC, Passive House Canada	Partial - Modelling Guidelines	Yes	Yes	Accredited (LCU) = Strongly encouraged	Minor	Minor; experienced Architects unavailable outside of cities - retirements eminent	Major	Shortage of experienced architects outside of cities is a major issue - which will critically affect compliance in regions
Engineers involved in construction of buildings, including mechanical, electrical, building envelope	EGBC	ASHRAE, BCBEC, CSME, IEEE Canada	Prof. Practice Guidelines & Modelling Guidelines	Yes	Yes	Self-reporting LCU = Not explicitly encouraged	Minor	Minor; experienced engineers concentrated in cities	Minor	Prepared in the short term. Nhowever, ability to support/advise construction activities is limited in some areas. Shortage of experienced mechancial engineers may become a problem in the future.
(Home) Designers (i.e., Part 9 buildings not requiring an architect)	BC Association of Building Designers	AIBC, ASTTBC, CAGBC, Passive House Canada	Partial (generic)	Yes	Partial	No	N/A	Minor; experienced designers unavailable outside of cities - retirements eminent	Major	Shortage of experienced Home Designers outside of cities is a major issue - which will critically affect compliance in regions
Estimators and Cost Consultants	CIQS	RICS, AIBC, VRCA, ICBA, NRCA, SICA, VICA, CHBA-BC	No	No	No	No	N/A	N/A	Major	CIQS has no education related to energy efficiency or ESC - interviews varies widely on the relevance and impact of cost advice for ESC.
Energy Advisors & Modellers - Part 3	CACEA	IBPSA BC Chapter, Passive House Canada	Yes	Yes	Yes	Not explicitly encouraged	N/A	Major; Canada is suffering a shortage of Energy Advisor with practical construction experience	Major	Shortage of Advisors (esp. in rural locations); Training needed to help EAs better support/advise construction and building officials - which will critically affect compliance
Energy Modellers - Part 3	IBPSA BC Chapter	ASHRAE BC, Passive House Canada, EGBC	Yes	Yes	Yes	Not explicitly encouraged	N/A	Minor; experienced engineers concentrated in cities	Minor	Prepared in the short term. However, ability to support/advise construction activities is limited. Lack of training on whole building airtightness testing a challenge.
Builders and Trades/subcontractors										
General contractors (Part 3)- CMs, PMs and Superintendents	None	BCCA, VRCA, ICBA, NRCA, SICA, VICA	Partial (2017 generic)	Yes	Partial	No	N/A	Minor; experienced Contractors concentrated in cities	Major	Experience in coordination, management and knowledge application required for Energy Code is mixed
Licensed residential builders (Part 9) - CMs, PMs and Superintendents	BC Housing Licensing	CHBA BC, HAVAN	Partial (2017 generic)	Yes	Yes	Yes	N/A	Minor; key gap is lack of local projects offering hands-on experience.	Minor	Taining available. Lack of local projects in rural locations offering hands-on experience will become a bigger problem if not addressed
Carpenters, Framers, AVM Barrier Installers & Envelope Trades (inc. steel stud and drywall)	None	VRCA, NRCA, SICA, VICA, ICBA, CHBA-BC. BCRCC (Union)	Partial (2017 generic)	Partial	No	No	Major	Major; trades with relevant experience or training concentrated in cities, with poor training availability in rural regions	Minor	Building envelope training needed - level of expertise dependent on trade/company experience applying skills to project and envelope types. Lack of local projects in rural locations.
Insulators	NAIMA, BCICA	VRCA, NRCA, SICA, VICA, CHBA-BC	Partial (2017 generic)	Partial	Partial	No	Minor	Minor; experienced installers concentrated in cities, but the skill difference is considered minor	Minor	Mechanical insulators are ready. Envelope insulators may require cross-training, training on air barrier and functional requirements.
Electricians	Technical Safety BC	ECA BC, VRCA, NRCA, SICA, VICA, ICBA, CHBA-BC, BC Hydro, FortisBC	Partial (2017 generic)	No	No	No	Minor	Minor; uncommon equipment familiarization	None	Generally prepared; core practices are not expected to change. However, renewable energy systems (although not technically required for ESC) require training.
HVAC Installers/Mechanical Design and Installers, and Plumbers	Technical Safety BC	TECA, MCABC, HRAI, FortisBC, BCSEA, SMACNA BC, BC Hydro, FortisBC	Partial (2017 generic)	Partial	No	No	Major	Minor; uncommon equipment familiarization	Minor	Lack of familiarity with some new equipment and systems. Training required on "grey areas" relating to testing, commissioning, balancing, etc.
Gas Fitters	Technical Safety BC	FortisBC	Partial (2017 generic)	Partial	No	No	Minor	Minor; uncommon equipment familiarization	Major	Although ESC allows for gas appliances, the introduction of other policies relating to GHG emission reductions (as anticipated in the BC Electrification Roadmap) will result in a limited role in future codes.
Roofers	RCABC	VRCA, NRCA, SICA, VICA, CHBA-BC, ICBA	Partial (2017 generic)	Partial	No	No	Minor	Minor: some roof systems suited to ESC uncommon outside of cities	None	Generally prepared.
Glazers, Window & Glass Door Installers	Fenestration BC	VRCA, NRCA, SICA, VICA, CHBA-BC, ICBA	Partial (2017 generic)	Partial	No	No	Major	Major; experienced installers concentrated in cities, availability in other regions is uncertain	Minor	Required additional "environmental separators" training; uncertain envelope responsibility means some overlap with Envelope trades
Policymakers and regulators										
Building officials	BOABC	PIBC, EGBC, AIBC, ASTTBC	Yes	Yes	Yes	Accredited (CPD) = Strongly encouraged	Major	Major; the experience applicable with Energy Codes is concentrated in cities, with the leaders "few and far between"	Major	Energy Foundations Program available that supports all SC competencies but consistent ability to apply it in practices is considered limited - possibly constraining (esp. outside urban centres).
Local Govt. Planning Department Staff &/or Sustainability Staff support Step Code	PIBC		Partial (2017 generic)	Partial	Yes	Accredited (CPD) = Strongly encouraged	Major	Major the experience applicable with Energy Codes is concentrated in cities, with the leaders "few and far between"	Minor	Ability to articulate the practical implementation of ESC Regulations may be limited - especially within those AHJs that have not formally adopted ESC.

Sample Key Professions Readiness Summary



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Key Profession Snapshot – Engineers (Mechanical, Electrical, Building Enclosure)

State of readiness	2022	2027	2032
Urban centres – Part 3	Yes	Yes	Yes
Province-wide – Part 3	Yes	Yes	Yes
Urban centres – Part 9	Yes	Yes	Yes
Province-wide – Part 9	Yes	Yes	Yes

Responsible Organization	**Engineers and Geoscientists of British Columbia (EGBC)** – regulatory body that requires continual professional development.
Related or Supporting Organizations	ASHRAE, BCBEC, CSME, IEEE Canada
Step Code Competency Framework	**Yes** - There are Professional Practice Guidelines relating to building enclosure and whole building energy modelling services.
Learning Resources to Support Competencies	**Yes** - There are a total of 32 courses directly addressing all aspects of ESC and a further 24 complementary resources. 90% are offered online and available across the province. The majority of the courses address envelope and enclosure, there are fewer related to mechanical and electrical design.
Learning Resources List for this Profession	**Yes** - EGBC lists numerous institutional and industry resources, although does not specifically call out resources related to ESC

Step Code Status	**Partial** - Engineers are required to track and report their education , but ESC training is not explicitly encouraged.
Differences Between Part 3 and Part 9	**Minor** – engineers are required to maintain their professional credentials and apply EGBC codes of practice irrespective of the type of project.
Regional Differences	**Minor** - experienced engineers may be unavailable outside of urban centres although most firms travel province-wide, especially for larger projects.
Identified Obstacles	**Minor** – possible shortage of engineers due to retirements could affect readiness over the next decade (i.e., by 2032) – especially outside of cities.
Additional notes on readiness:	• The biggest change for engineers will be in how project teams are structured and how risk related to building performance is allocated. • Issues around constructability and trade coordination design could impact readiness since these issues directly affect cost, schedule and construction outcomes. • As builders push for more collaborative and lean project delivery methods to improve productivity, engineers will need to become familiar with digital tools, componentized and prefabricated solutions.

Learning Resources Available to Support Competencies

Building Enclosure Engineers

	Design, construction & regulatory process	Building Science	Energy modelling & metrics	Airtightness	Building envelope assemblies	Insulation (building envelope)	Windows, skylights & doors	Supply chain
ESC COURSES - Pt 3	24	16	8	2	18	6	3	0
ESC COURSES - Pt 9	21	15	5	2	16	6	3	0
ALL APPLICABLE COURSES - Pt 3	30	16	8	2	20	7	4	1
ALL APPLICABLE COURSES - Pt 9	38	19	6	5	22	10	7	2

Mechanical and Electrical Engineers

	Design, construction & regulatory process	Building Science	Energy modelling & metrics	Insulation (mechanical)	Supply chain	Mechanical systems & equipment (heating, cooling and ventilation)	Electrical systems & equipment
ESC COURSES - Pt 3	24	16	8	6	0	1	5
ESC COURSES - Pt 9	21	15	5	6	0	0	5
ALL APPLICABLE COURSES - Pt 3	30	16	8	7	1	7	6
ALL APPLICABLE COURSES - Pt 9	38	19	6	10	2	10	6

Key Profession Snapshot – General Contractors - Part 3 (CMs, PMs and Superintendents)

State of readiness	2022	2027	2032
Urban centres	Yes	Partial	Partial
Province-wide	Yes	Partial	Partial

Responsible Organization	**None** – There are multiple associations to which membership is voluntary. Part 3 builders are not required to be licensed.
Related or Supporting Organizations	BCCA, ICBA, VRCA, NRCA, SICA, VICA
Step Code Competency Framework	**Partial -** There is no ESC competency framework specifically for General Contractors, although the updated 2017 framework is applicable.
Learning Resources to Support Competencies	**Partial -** There are 9 courses directly addressing all aspects of ESC and a further 17 complementary resources. The majority of the courses are offered online and available across the province. Among the competencies, “design, construction and regulatory process” competency is most widely covered. There is at least one course covering each competency. Many of the courses are not clear about applicability to Part 3 / multi-family construction.
Learning Resources List for this Profession	**Partial** – All the construction associations promote education courses generally and sometimes include ESC related events on an ad-hoc basis. There is no centralized list.
Step Code Status	**No** - There are no incentives or means of encouragement for general contractors to take training. Contractors do not require CPD credits.

Differences Between Part 3 and Part 9	**NA**
Regional Differences	**Minor** - Experienced contractors are usually more concentrated in cities, but travel province-wide.
Identified Obstacles	**Major** • There are not enough training resources for contractors, and they are one of the top groups who were identified as struggling with implementation and needing further support. • The courses that do exist are difficult for contractors to find. • There is confusion about whether Part 9 courses are applicable to Part 3 projects. Some may be, but most courses are not sufficiently well described. • The experience in coordination, management and knowledge application that required for Energy Code is mixed.

Learning Resources Available to Support Competencies

	Design, Construction & regulatory process	Building Science	Energy modelling & metrics	Airtightness	Building envelope assemblies Insulation (Building envelope & mechanical)	Windows, skylights & doors	Supply chain	Mechanical systems & equipment (heating, cooling and ventilation)	Electrical systems & equipment
ESC COURSES	9	4	0	2	6	4	1	1	2	1
ALL APPLICABLE COURSES	17	9	1	3	8	4	1	2	3	6

State of Readiness for Key Professionals



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State of Readiness by Profession for Part 3 Construction

	Urban Centres			Province-wide		
	2022	2027	2032	2022	2027	2032
Developers	Yes	Yes	Partial	Yes	Yes	Partial
Architects	Yes	Yes	Partial	Yes	Yes	Partial
Engineers (Mechanical, Electrical, Building Enclosure)	Yes	Yes	Yes	Yes	Yes	Yes
Estimators and Cost Consultants	Partial	Partial	Partial	Partial	Partial	Partial
Energy Modellers	Yes	Yes	Yes	Yes	Yes	Partial
General Contractors (Construction Managers, Project Managers and Superintendents)	Yes	Partial	Partial	Yes	Partial	Partial
Carpenters, Framers, AVM Barrier Installers & Envelope Trades	Yes	Yes	Partial	Partial	Partial	Partial
Insulators	Yes	Yes	Partial	Yes	Yes	Partial
Electricians	Yes	Yes	Yes	Yes	Yes	Yes
HVAC Installers, Mechanical Design/Installers and Plumbers	Yes	Yes	Partial	Yes	Partial	Partial
Gas Fitters	Yes	Partial	No	Yes	Partial	No
Roofers	Yes	Yes	Yes	Yes	Yes	Yes
Glazers, Window and Glass Door Installers	Yes	Yes	Partial	Yes	Yes	Partial
Building Officials	Yes	Yes	Partial	Yes	Partial	Partial
Local Government Planning and Sustainability Staff	Yes	Yes	Partial	Yes	Partial	Partial

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State of Readiness by Profession for Part 9 Construction

	Urban Centres			Province-wide		
	2022	2027	2032	2022	2027	2032
Architects	Yes	Yes	Partial	Yes	Yes	Partial
Engineers (Mechanical, Electrical, Building Enclosure)	Yes	Yes	Yes	Yes	Yes	Yes
Designers (i.e., Part 9 buildings not requiring an architect)	Yes	Yes	Partial	Yes	Yes	Partial
Energy Advisors & Modellers	Yes	Yes	Partial	Partial	Partial	Partial
Licensed Residential Builders (CMs, PMs and Superintendents)	Yes	Yes	Partial	Yes	Yes	Partial
Carpenters, Framers, AVM Barrier Installers & Envelope Trades	Yes	Yes	Partial	Partial	Partial	Partial
Insulators	Yes	Partial	Partial	Yes	Partial	Partial
Electricians	Yes	Yes	Yes	Yes	Yes	Yes
HVAC Installers, Mechanical Design/Installers and Plumbers	Yes	Yes	Partial	Yes	Partial	Partial
Gas Fitters	Yes	Partial	No	Yes	Partial	No
Roofers	Yes	Yes	Yes	Yes	Yes	Yes
Glazers, Window and Glass Door Installers	Yes	Yes	Partial	Yes	Yes	Partial
Building Officials	Yes	Yes	Partial	Yes	Partial	Partial
Local Government Planning and Sustainability Staff	Yes	Yes	Yes	Yes	Yes	Partial

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Key Performance Indicators



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To be useful, the measures and reporting mechanisms for performance management systems should be:



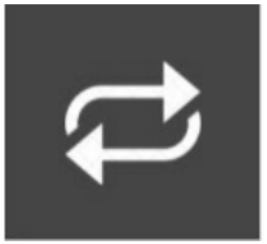
Acceptable



Meaningful



Unambiguous & Easily Understood



Repeatable



Show trends over time



Suitable



Feasible



Effective



Aligned

KPIs for responsible organizations can be used to gauge capacity of their member professions

Presence of Competency Framework for Key Profession

- **Survey question** - Do you have a competency framework or profile that describes what skills and expertise are required to meet the energy efficiency requirements of the BC Building Code and the BC Energy Step Code?
- **Rationale** - Competency frameworks describe skills and expertise required to achieve ESC.

Existence of ESC-specific education programs and resources

- **Survey question** - "What proportion of the competencies required to meet the energy efficiency requirements of the BC Energy Step Code are covered by currently available training programs?"
- **Rationale** - Key professions can develop the skills needed.

Quality of ESC-specific learning resources

- **Survey question** - Do you have assessment programs in place to ensure the education programs and/or learning resources are meeting the needs of your members effectively?
- **Rationale** - Training is effective and meets needs of key profession.

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Key profession – Builders

Responsible organization	BC Housing
Question	“How confident are you that you have in your company (or can find people with) the required technical skills to build a Step 3 building? (Step number adjusted as appropriate).”
Question Format	Ranking (1= not confident, 5 = very confident). Option to add a comment
Considerations	• Indicates readiness of trades since many are not represented by an organization • Include regional information if possible • Leading indicator

Key professions – Architects, Engineers, Builders

Responsible organization	BC Housing , AIBC , EGBC
Question	“What proportion of the projects you have worked on over the past 12 months have targeted and/or achieved Step Code 3? (Step number adjusted as appropriate).”
Question Format	Percentage of projects (0%, 10%, 20%, …100%). Option to add a comment
Considerations	• Professionals who have completed or are in progress of completing Step Code projects considered ready or in process of becoming ready. • Include regional information if possible • Lagging indicator

Findings and Recommendations



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Four goals to improving the state of readiness of key professions in BC



Findings	Recommendations
Incentives to participate in-training needed to increase enrollment	• Offer financial incentives to address real cost of training • Facilitate partnerships between project developers, training providers and industry associations to provide hands-on training • Adopt system of “Best Practice Advisors”
Lack of clarity about technical requirements of the 2022 ESC and BCBC update	• Launch a province-wide campaign on details of Building Code changes through to 2032. • Develop communications materials for local governments
Confusion about courses addressing appropriate topics at right level of experience; lack of profession-specific competency frameworks.	• Sponsor a centralized online hub listing current and relevant training offerings by region and by profession. • Develop a dedicated telephone hotline to provide support and advice • Consider reviews and testimonials system for courses • Work with training providers to develop and deliver training focused on subject matter in demand

Findings	Recommendations
Uncertainty about course quality; lack of credentials/training for trainers	• Develop a standardized evaluation tool for courses • Establish a “Certificate in Training in Low Carbon Buildings” targeted at professionals and instructors who are delivering training.
Hiring practices prioritize those with practical experience - lack of mentoring and ambiguity around value of credentials	• Develop a “Prior Learning Assessment and Recognition credential” to recognize successful prior site experience with low carbon buildings.
Delivering information in bite-sized pieces may make it more accessible.	• Develop a series of short and focused training options

Findings	Recommendations
Retirement of experienced workforce - “experience vacuum”.	• Develop knowledge sharing and mentorship opportunities
Lack of cooperation, collaboration, and communication between trades.	• Combine curricula related to effective communication, teamwork, and collaboration with “building as a system” courses and “soft skills” training.
Cross-training between trades important for higher steps	• Engage multiple disciplines in collaborative, hands-on training projects to solve technical issues
Tailored education needed for underserved populations with language barriers	• Develop training materials in other languages commonly spoken on construction sites.

Findings	Recommendations
Incentives and customized training needed in areas outside urban centers	• Where local experts do not exist in a specific profession, sponsor experienced leaders to visit regions of the province and share their knowledge. • Develop hands-on training opportunities specific to cold climate construction by sponsoring higher step “showcase” projects in Northern BC and other parts of the interior. • Consider incentives for workers in rural regions to overcome barriers in accessing training opportunities and projects.

Findings	Recommendations
Major obstacles exist for some professions in meeting higher levels of ESC.	• Develop marketing materials aimed at **Developers and Owners** that explain benefits, requirements, and costs to achieve compliance with the ESC. • Develop training for **Building Officials** that covers the practical aspects of design and construction • Combine revamped suite of training resources for **General Contractors** with an incentive program or regulatory requirements to take training. • Develop training for **Estimators and Cost Consultants** that clarifies knowledge of ESC enhancements and requirements, to help support more accurate and consistent pricing and estimating services.
Energy Advisors are scarce in rural regions	• Provide incentives for regional colleges to deliver and students to complete Energy Advisor training

Findings	Recommendations
Lack of training for building operations and commissioning to maintain performance	• Develop and provide training and ongoing support for building commissioning that enables participants to learn how to operate HVAC and other building systems to achieve desired energy-performance outcomes.
Future for gasfitters is evolving	• Provide targeted incentives for gas fitters to take training on heat pump installation and electrification of buildings.

Thank you!







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APPENDIX



Research Methodology



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Category	Description	Data entered
Key Professions	Client	Developers
	Designers and consultants	Architects
		Engineers involved in construction of buildings, including mechanical, electrical, building envelope
		Estimators and cost consultants
		(Home) Designers (i.e., Part 9 buildings not requiring an architect)
		Energy Advisors & Modellers (Pt 9)
		Energy Modellers (Part 3)
		Estimators and cost consultants
	Builders & Trades	General contractors (Part 3)
		Licensed residential builders (Part 9)
		Carpenters, Framers, AVM Barrier Installers & Envelope Trades (inc. steel stud and drywall) - Part 3 & Part 9
		Insulators - Part 3 & Part 9
		Electricians - Part 3 & Part 9
		HVAC Installers/Mechanical Design and Installers - Part 3 & Part 9
		Gas Fitters - Part 3 & Part 9
		Roofers - Part 3 & Part 9
		Plumbers - Part 3 & Part 9
		Glazers, Window & Door Installers

Category	Description	Data entered
	Regulators	Building Officials Local Govt. Planning Department Staff &/or Sustainability Staff support Step Code
Key Organization Responsible or 'Natural or Potential Lead'	Associations, unions, warranty providers and NGOs responsible for and/or certify key construction professionals	Organization name Required to operate Voluntary membership None identified
Related or Supporting Organizations	Associations, unions, warranty providers and NGOs that may be important points of contact with key professions, offer training and or voluntary certification (e.g., Passive House Canada, NAIMA, some equipment manufacturers).	Organization name
Step Code Competency Framework Available?	Does the organization have a competency framework on their website or otherwise easily available for its constituents?	Yes Partial, In Progress (references the 2017 framework) No
Learning Resources available to Support Competencies?	Are there resources available for the key professions based on evaluation of course list per key profession?	Yes Partial, In Progress No
Learning Resources available to Support Competencies?	Is there a resource list for this profession available on the key organization's website?	Yes Partial, In Progress No

Category	Description	Data entered
	Regulators	Building Officials Local Govt. Planning Department Staff &/or Sustainability Staff support Step Code
Key Organization Responsible or 'Natural or Potential Lead'	Associations, unions, warranty providers and NGOs responsible for and/or certify key construction professionals	Organization name Required to operate Voluntary membership None identified
Related or Supporting Organizations	Associations, unions, warranty providers and NGOs that may be important points of contact with key professions, offer training and or voluntary certification (e.g., Passive House Canada, NAIMA, some equipment manufacturers).	Organization name
Step Code Competency Framework Available?	Does the organization have a competency framework on their website or otherwise easily available for its constituents?	Yes Partial, In Progress (references the 2017 framework) No
Learning Resources available to Support Competencies?	Are there resources available for the key professions based on evaluation of course list per key profession?	Yes Partial, In Progress No
Learning Resources available to Support Competencies?	Is there a resource list for this profession available on the key organization's website?	Yes Partial, In Progress No

Key Performance Indicators



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KPIs for responsible organizations can be used to gauge capacity of their member professions

KPI	Survey question	Rationale / considerations
Presence of Competency Framework for Key Profession	Do you have a competency framework or profile that describes what skills and expertise are required to meet the energy efficiency requirements of the BC Building Code and the BC Energy Step Code?	The key profession knows what they need to be able to do to meet the BC ESC.
Existence of ESC-specific education programs and resources	What proportion of the competencies required to meet the energy efficiency requirements of the BC Energy Step Code are covered by currently available training programs?	Key professions can develop the skills they need.
Quality of ESC-specific learning resources	Do you have assessment programs in place to ensure the education programs and/or learning resources are meeting the needs of your members effectively?	The training is effective and meets the needs of the key profession.

Additional survey questions customized to key professions

Key profession	Responsible organization	Question	Rationale
Builders	BC Housing	How confident are you that you have in your company (or can find people with) the required technical skills to build a Step 3 building? (Step number adjusted as appropriate).	• This will indicate readiness of trades since many are not represented by an organization. Data should be saved with region information if possible. • Leading indicator of confidence in skillset of available labor in near term.
Architects, engineers and builders	BC Housing, AIBC and EGBC	What proportion of the projects you have worked on over the past 12 months have targeted and/or achieved Step Code 3? (Step number adjusted as appropriate).	• Professionals who have completed or are in progress of completing Step Code projects can be considered ready or in process of becoming ready. • Data should be tagged with region information if possible. • Lagging indicator of readiness
Architects, engineers and builders	BC Housing, AIBC and EGBC	The next update to the energy efficiency requirements of the BC Building code will be in 2022 (adjust year as appropriate). What are your challenges in meeting future Steps?	• Qualitative information regarding technical barriers and gaps in preparedness can be gathered. Anticipated popular responses could be provided as check boxes, with other issues able to be added. • Leading indicator of readiness that may help shape future actions.
Architects, engineers, builders, building officials	BC Housing, AIBC, EGBC, BOABC	How many training courses relevant to the Energy Step Code have you taken over the past 12 months?	• When combined with responses to the number of projects and challenges faced, this data would provide insight into the correlation of training, its effect on readiness, and continued challenges in meeting performance requirements.

Key profession	Responsible organization	Question	Rationale
Building Officials	BOABC	When you think about the projects you were involved with over the past twelve months, what proportion of those projects required blower door / air tightness? Of these, what proportion passed the blower door / air tightness test first time?	• Identifies how frequently these tests are passed • A lagging indicator of builders' readiness to build to the intended performance and how much rework is required to achieve goals. • Data should be tagged with region information if possible.
Building Officials	BOABC	What percentage of occupancy permits were NOT issued on the first attempt as a result of energy step code related issues?	• Occupancy permits are a general indicator of construction quality and performance but will not pinpoint issues that are related to energy efficiency • A lagging indicator of skillset readiness to achieve performance goals. • Data should be tagged with region information if possible.
Building Officials	BOABC	The next update to the energy efficiency requirements of the BC Building Code will be in 2022 (adjust year as appropriate). Do you have access to training you need to be able to evaluate buildings as will be required by the next level of the Code?	• Indicates readiness of building officials • A leading indicator of training availability to prepare building officials for future code updates. • Data should be tagged with region information if possible.
Building Officials	BOABC	Are you prepared to evaluate buildings at a higher Step Code level than what is currently required?	• A leading indicator of effectiveness of training resources available. • Data should be tagged with region information if possible.

KPIs for jurisdictions (such as provincial and regional policy makers and stakeholders) can be used to monitor overall progress:

KPI	Data and collection strategy	Rationale / considerations
Predicted TEDI (Thermal Energy Demand Intensity) and EUI (Energy Use Intensity) for new projects	Annual collection of building permit data	TEDI (Thermal Energy Demand Intensity) and EUI (Energy Use Intensity) are key performance criteria for energy efficient new construction projects. This would provide a leading indicator of readiness for project teams by recording intended building performance and comfort level with new Steps. This data is not routinely collected by local governments and resources would need to be made available to assist.
Overall availability of training by region	Survey questionnaire - The survey that accompanied this report can be performed annually to determine if key professions are getting access to the training necessary to deliver ESC compliant projects effectively.	This data would be a leading indicator. Enrollment statistics and student demographics may also be requested from the providers or may be available through statistics on Employer Training Grants. Costs may be incurred to collect this data from course providers, as well as to compile and analyze the data and host the results. Quality would be dependent upon response rate.

KPI	Data and collection strategy	Rationale / considerations
Industry satisfaction with training / training effectiveness	Survey questionnaire to course participants: • What version of the building code (or Step Code) was referenced for this course? (Check box) • To what extent did the course content align with your expectations when you signed up for it? (1 = it was not what I expected at all - 5 = it was exactly what I expected) • Will the information you learned in this course improve your ability to deliver projects at higher levels of the Energy Step Code than you were previously able to? (Yes, No, Not sure) • Did the instructor(s) have a good understanding of the practical requirements and challenges on a standard job site? (1 = not at all – 5 = very knowledgeable) • What other training would you like to see offered that is not currently available or accessible and would help you in your job delivering high-performance buildings? (Comment)	Training providers need to deliver training effectively – i.e., in formats, time frames and pedagogical approaches that suit the trainees. Exit surveys and/or feedback forms can be used to gather participants feedback on course effectiveness. The data provides leading indicators of: • Students are able to find the training they need • Students are satisfied with the training • Potential technical challenges and gaps.

The number of certified projects under a variety of building standards broken out by type of building and region.

- **Pros:** Easily accessible, historic data
- **Cons:** Not representative of mainstream construction, only captures top percentage who seek certification. Residential projects may not be accurately represented (often included into “mixed, use, retail, etc.)

Price per square foot of projects in different areas based on different levels of ESC adoption

- **Pros:** Check of incremental price premiums and if they are normalizing based on readiness
- **Cons:** Data broken out by building type, not by region, so no data on ESC adoption.

The number of housing starts by region

- **Pros**: Indicator of impacts of ESC requirements
- **Cons:** Not an indicator of ESC demand; does not address readiness.

Energy use and GHG emissions related to residential, commercial & institutional buildings in BC

- **Pros:** Meta-level indicator that the impacts of buildings are reducing overall.
- **Cons:** Not possible to break out new construction projects; does not address readiness.

Building permit values, broken out by local government.

- **Pros:** Meta-level indicator or industry health and issues affecting construction economy.
- **Cons:** No indication of ESC level of buildings; does not address readiness.

Number of LCUs/CPD credits awarded for energy efficiency related training programs.

- **Pros:** Indication of key professions' choice of training to fulfill education requirements.
- **Cons:** currently not public data - Information may not be currently recorded by type of course.

Number of projects that receive high performance building incentives.

- **Pros:** Leading indicators of how many builders hit the targets early.
- **Cons**: Currently not public data. May not be representative of the mainstream; data may be proprietary; does not address readiness by profession.

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Package

Date and Time of Meeting: Thursday September 9, 2021 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Joining Option 1: Webinar link: Click here to join the meeting
Joining Option 2: New call in option (audio only):
s.15

Chair: Zachary May, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro
Meeting Materials

- Agenda (below)

Contacts if You Require Assistance

- Hugo Wong, BSSB – 236 478 1406 (call only); hugo.wong@gov.bc.ca

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
1:00 p.m.	Welcome, Introductions and Opening Remarks	Zachary May, ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Approve of agenda
1:05 p.m.	Energy Step Code and CleanBC targets	Zachary May, ESCC Chair	▪ Discussing a motion raised during a Part 9 Subcommittee meeting on June 3, 2021
1:15 pm.	Status update on GHG and Metrics Report work	Zachary May, ESCC Chair	▪ Review process to date
1:20 p.m.	Presentation from Industry Capacity Readiness Report team	Helen Goodland (Scius Advisory) and Ben Clark (Delphi)	▪ To review findings from an industry readiness report
1:50 p.m.	Roundtable	Energy Step Code Council	▪ To table issues related to Energy Step Code implementation from your membership
2:20 p.m.	Update from subcommittees	Subcommittee chairs	▪ Communications and Capacity Building Subcommittee ▪ Part 3 and Part 9 Non-Residential Subcommittee ▪ Part 9 Residential Subcommittee ▪ Local Government Peer Network
2:40 p.m.	Break		
2:50 p.m.	20%-better and harmonization – Part 3	Scott Williams, BSSB	To discuss: ▪ Proposed strategy for achieving BC's commitment to improve energy efficiency by 20% in 2022 and harmonization with model national codes

			▪ Role of the working groups and subcommittees
3:20 p.m.	20%-better and harmonization – Part 9	Scott Williams, BSSB	To discuss: ▪ Proposed strategy for achieving BC's commitment to improve energy efficiency by 20% in 2022 and harmonization with model national codes ▪ Role of the working groups and subcommittees
3:55 p.m.	Next steps	Zachary May, Chair	
4 p.m.	Adjournment	All	

RE: UDI Sept. 13 Webinar - Pre-Event Meeting

From: Verna Yu <vyu@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Sent: September 7, 2021 9:28:20 AM PDT
Attachments: image001.jpg, image002.jpg, image003.jpg, UDI- Premeeting Agenda - 09.13.2021 Event.pdf

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning Panel,

I hope everyone had a relaxing long weekend as we head in to the Fall!

With the September 13 breakfast webinar just around the corner, we would like to confirm a date for a pre-meeting this week to go through each presentation topic as well as confirm the format, and order of presentation.

Would you all be available to connect tomorrow morning at 9am or 1pm?

Kind regards,

Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca

From: Verna Yu
Sent: August 26, 2021 2:16 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher (jfisher@udi.org) <jfisher@udi.org>
Subject: UDI Sept. 13 Webinar - Pre-Event Meeting

Good Afternoon,

Thank you all once again for joining us in discussion on **The Green Building Climate: ESC & CoV Updates**. As September is fast approaching, we would like to set-up a pre-meeting to discuss the event in more detail including event format and rundown as well as review the topics of discussion.

Please let me know if you would be available to join us on any of the following dates/times:

Tuesday, August 31: 3pm
Thursday, September 2: 1 pm
Tuesday, September 7: 11 am
Wednesday, September 8: 9 am or 1 pm

Kind regards,

Verna

Verna Yu | Director, Professional Development
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca


"The Green Building Climate: ESC & COV Updates"
Webinar Pre-Meeting

AGENDA

1. Purposed Format
   - 10-12 minutes each – individual overview
   - Moderated Q&A / fireside chat

2. Confirm order of panel presentation

3. Discuss Potential Questions

Proposed Schedule:

TIME	ACTIVITY	DURATION	LEAD
9:15	Dry Run / Zoom testing	15	
9:30	UDI Introduction Introduce Moderator: Kathy Wardle	3	Jeff Fisher
9:33	Overview	3-5	Kathy Wardle
9:38	Presentation 1	10-12	
9:50	Presentation 2	10-12	
10:02	Presentation 3	10-12	
10:14	Moderated Q&A / fireside chat	15-20	All
10:30	Webinar concludes		Kathy Wardle

RE: Agenda and materials, Sept. 9 Energy Step Code Council meeting

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To: Bob Deeks <bdeeks@rdcfinehomes.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 9, 2021 12:16:35 PM PDT
Attachments: image001.png, image002.jpg, image003.jpg

No problem, thanks for letting us know, Bob.

Hugo

From: Bob Deeks <bdeeks@rdcfinehomes.com>
Sent: Thursday, September 9, 2021 12:11 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Agenda and materials, Sept. 9 Energy Step Code Council meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Guys,
I may be 10-15 min late for our call today.
Best regards,

Bob Deeks
President – Certified Housing Professional

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Cell: 604.967.1142 **Office:** 604.932.3618 **Email:** bob@rdcfinehomes.com
203-1390 Alpha Lake Road, Whistler, BC V8E 0H9
www.rdcfinehomes.com

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: September 3, 2021 5:08 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; ablue@EvokeBuildings.com; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Chris Atchison <chris.atchison@bccassn.com>; Bob Deeks <bdeeks@rdcfinehomes.com>; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; MGatensby@aibc.ca; hgoodland@scius.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; Katy Fairley <katy.fairley@bccassn.com>; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Pridie, Holly MUNI:EX <Holly.Pridie@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>; Remi Charron <rcharron@bchousing.org>; pauline@chbabc.org
Subject: Agenda and materials, Sept. 9 Energy Step Code Council meeting

Hi all,

Agenda and materials attached. There will be one more PowerPoint still in development from Scott that we can provide closer to the meeting.

Best,
Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Pre-Meeting Call for ESC event

From: Verna Yu <vyu@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 9, 2021 2:21:25 PM PDT
Attachments: image004.jpg, image003.jpg, image002.jpg, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary,

That works out well. I will schedule something in our calendars for 3:30 tomorrow.

Cheers,
Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 9, 2021 2:20 PM
To: Verna Yu <vyu@udi.org>
Subject: RE: Pre-Meeting Call for ESC event

Hi Verna,

I'm free tomorrow morning at 10:30am or after 3pm.

Hope that works. I can also meet over lunch, if that's required.

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 TOP WORK UNIT AWARD

From: Verna Yu <vyu@udi.org>
Sent: Thursday, September 9, 2021 12:10 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Pre-Meeting Call for ESC event

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Zachary,

Would you be available for a quick call tomorrow with Jeff and I? Jeff had a couple of items to check in with you on.

Kind regards,
Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca



RE: UDI Sept. 13 Webinar - Pre-Event Meeting

From:	Verna Yu <vyu@udi.org>
To:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>, Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc:	Jeff Fisher <jfisher@udi.org>
Sent:	September 9, 2021 4:11:57 PM PDT
Attachments:	image001.jpg, image003.jpg, image004.jpg, image002.jpg, UDI- Premeeting Minutes - 09.13.2021 Event v1.pdf

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon Panel,

Please see attached for an updated copy of our meeting minutes with information regarding order of speaking as well as some purposed questions. The Q&A and discussion will be adjusted depending how long each presentation is.

You should all have the panel zoom link set in your calendar invitation for 9:15 am on Monday, September 13 to allow us time to do a dry run through and ensure that everyone is comfortable and able to share screens for your presentation. The webinar will go live at 9:30 am.

If you have any questions, please do let me know.

Kind regards,

Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 7, 2021 10:51 PM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

Slides to follow later this week, but here's my outline for the Province's update:

Energy Step Code

- BC is committed to improved harmonization with the model national codes and supporting Province's CleanBC commitment to improve energy efficiency in the BC Building Code by 20% in 2022.
    - This will involve incorporating the latest revisions to the national codes, expected at the end of 2021, with the Energy Step Code, to ensure that all buildings are more efficient and on the path towards the Province's 2032 goal of Net Zero Energy Ready
    - For communities already requiring the Energy Step Code, this will not be a significant change
    - For communities not referencing the Energy Step Code the 2022 Code update the Energy Step Code will become the minimum standard
        - Exact technical details are being worked out through the ESC Council, but it's roughly Step 3 for Part 9 buildings and Step 2/3 for Part 3 buildings

- Full impact analysis of the changes is being completed to ensure that the approach in 2022 continues to support affordable energy efficiency through flexible performance-based regulation
- Working with the ESCC to seek recommendations on the details, but 2022 will be built on the success of the Energy Step Code and moving the province up the steps and towards our long-term energy efficiency commitments.

Carbon Pollution Standards

- Mandate letter commitment to enable local governments to set their own carbon pollution standards
- This is a high priority and work is underway, with the hope of finalizing recommendations this fall
- Developing a standardized Provincial carbon pollution (GHG) standard that could be added to the Energy Step Code
- Local governments would be able to reference this standard the same way as the ESC – no formal opt-in
- Building on experience of Vancouver and other jurisdictions, and feedback from industry and utility partners
- Likely looking at GHG targets that would require decarbonization from measure-only, to decarbonizing one or both key energy using systems (heat and hot water), as well as considering full building decarbonization.
- We are collaborating within government to ensure that these standards are prepared for innovations in low-carbon energy (renewable natural gas, district energy, renewable electricity)
- These proposed standards would be in addition to the Province's energy efficiency commitments, to ensure that all buildings are making efficient use of the energy they use.
- We are hoping to have all local governments who currently have low-carbon policies migrate to this provincial standard, which will be more enforceable, transparent, and consistent across the Province.

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
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Where ideas work

2020 TOP WORK UNIT AWARD

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Sent: Tuesday, September 7, 2021 8:47 PM
To: Verna Yu <vyu@udi.org>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Verna et al.,

Note that I will not have a PPT nor outline by then. I will have a list of points that I plan to hit by the meeting, but likely will not make the PPT until the wkd.

Given we won't have the full contingent during tomorrow's meeting, if we're able to shorten it to closer to 30 minutes I would appreciate it.

Thanks,

Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY

Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

Upcoming Out of Office Alert: nothing planned

From: Verna Yu <vyu@udi.org>
Sent: September 7, 2021 3:00 PM
To: 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

Hi Everyone,

Thank you all for confirming. I have just sent out an invitation for a zoom meeting for 1pm tomorrow afternoon.

Patrick and Zachary – if your schedule changes, please do join us, but we can work out a time to connect over the next couple of days. Please also share with us your presentation/outline so we may review this together.

Kind regards,
Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca



From: Kathy Wardle <Kathy.Wardle@perkinswill.com>
Sent: September 7, 2021 2:06 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: Re: UDI Sept. 13 Webinar - Pre-Event Meeting

Hi everyone,
I can do 1pm tomorrow as well.
Thanks,
Kathy

Kathy Wardle
Director of Sustainability, Principal
604 808 3970

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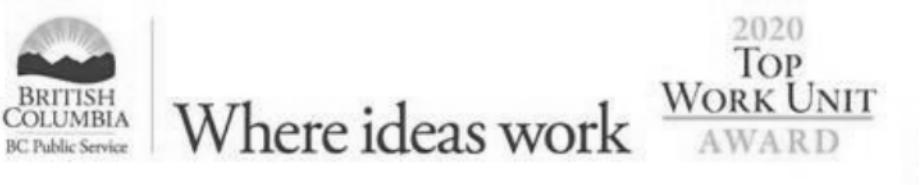
From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, September 7, 2021 12:06:22 PM

To: Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

I have a conflict tomorrow at those times as well. I'm free after 2:30pm, but maybe the best approach is to send around an outline, as Patrick proposes, and we can comment via email or with one-on-one calls where required?

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Enright, Patrick <Patrick.Enright@vancouver.ca>
Sent: Tuesday, September 7, 2021 11:41 AM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Sorry I have a conflict at 1pm. But perhaps I can finish my draft slide deck this afternoon and share it with the group, and then you can send me any take-aways from your discussion and I can adjust it to respond the goals and message of the group.

Cheers,

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
patrick.enright@vancouver.ca | 604.871.6158

For more information on green buildings, please visit http://vancouver.ca/zeroemissions

I am humbly thankful that I live and work on the territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh) nations.

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Sent: Tuesday, September 07, 2021 9:40 AM
To: Verna Yu <vyu@udi.org>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: [EXT] RE: UDI Sept. 13 Webinar - Pre-Event Meeting

City of Vancouver security warning: Do not click on links or open attachments unless you were expecting the email and know the content is safe.

Hi Verna et al.

I can do 1pm for up to an hour, but not 9am.

Thanks
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca [surrey.ca]

Upcoming Out of Office Alert: nothing planned

From: Verna Yu <vyu@udi.org>
Sent: September 7, 2021 9:28 AM
To: 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting
Importance: High

Good morning Panel,

I hope everyone had a relaxing long weekend as we head in to the Fall!

With the September 13 breakfast webinar just around the corner, we would like to confirm a date for a pre-meeting this week to go through each presentation topic as well as confirm the format, and order of presentation.

Would you all be available to connect tomorrow morning at 9am or 1pm?

Kind regards,

Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
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From: Verna Yu
Sent: August 26, 2021 2:16 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher (jfisher@udi.org) <jfisher@udi.org>
Subject: UDI Sept. 13 Webinar - Pre-Event Meeting

Good Afternoon,

Thank you all once again for joining us in discussion on **The Green Building Climate: ESC & CoV Updates [can01.safelinks.protection.outlook.com]**. As September is fast approaching, we would like to set-up a pre-meeting to discuss the event in more detail including event format and rundown as well as review the topics of discussion.

Please let me know if you would be available to join us on any of the following dates/times:

Tuesday, August 31: 3pm
Thursday, September 2: 1 pm
Tuesday, September 7: 11 am
Wednesday, September 8: 9 am or 1 pm

Kind regards,

Verna

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"The Green Building Climate: ESC & COV Updates"
Webinar Pre-Meeting

Meeting Minutes

1. Purposed Format
   - 10-12 minutes each – individual overview
   - Moderated Q&A / fireside chat

2. Confirm order of panel presentation

- **Zachary May** will outline how the proposed changes to the BC Building Code may impact your projects as well as provide an update on other Building Code issues. / Energy step code & Carbon Pollution Standards
- **Maxwell Sykes** will discuss how local governments may apply the GHG performance standards; issues that were considered in developing the performance standards; and what should be considered in implementing them.
- **Patrick Enright** will share its experience to date with GHG targets and the *Zero Emissions Building Plan*, as well as updates on building policies and the *Climate Emergency Action Plan*.

3. Discuss Potential Questions

Proposed Schedule:

TIME	ACTIVITY	DURATION	LEAD
9:15	Dry Run / Zoom testing	15	
9:30	UDI Introduction Introduce Moderator: Kathy Wardle	3	Jeff Fisher
9:33	Overview	3-5	Kathy Wardle
9:38	Presentation 1	10-12	Zachary May
9:50	Presentation 2	10-12	Maxwell Skyes
10:02	Presentation 3	10-12	Patrick Enright
10:14	Moderated Q&A / fireside chat	15-20	All
10:30	Webinar concludes		Kathy Wardle

Purposed Questions:

1. At the time of development, the ESC was driven by managing heating loads. With our changing climate and weather patterns, can anyone on the panel predict when there will be a time when cooling is the main concern?

2. Is the Province looking at introducing a GHGI target for buildings? If so, what is the timeline?

3. What are the most cost effective ways to deliver high ESC step buildings that use low carbon in building operations?

4. As we drive down operational carbon emissions, embodied carbon becomes more important to address. Will the Province introduce an embodied carbon metric? What are the key lessons from the CoV's process of mandating LCA on rezoning projects? How good is the data? What is the COV's plan for rezoning updates? (this may already be addressed in Patrick's presentation. How would you track/administer and not delay approval processes? How big on impact based on the life-cycle of a building?

5. Why spend time on the regulatory framework for LGs to regulate carbon. The time-frames are short to achieve the Provincial low carbon target. Why not just focus on the 8-9 year road-map we need to reduce carbon to near zero in all new construction?

6. What is the long term strategy for DE systems? How can I lower my GHGs if I am mandated to connect to an older DE system that is releasing GHGs? Will there be special rules for these situations? Also, DE systems do not generally provide cooling, so there is no savings as with heat pumps. This will make DE systems even less viable and cost competitive.

7. What incentives, if any, are needed to support a transition to a low carbon economy & building sector? Incentives for new and existing buildings

8. Why doesn't the Province stick to the COV Modeling for the emissions factors because there is already too much change occurring with the ESC, and the BCH emissions factors will be going down anyway fairly soon. The Government needs to do its part, by improving the grid.

9. Is BCH going to required to remove the tier 2 rates and the extra connection fees with EVC and carbon mandates

10. RNG? yes/no, how would you confirm use? Discuss the push for building electrification

11. Do you have concerns over industry capacity issues - First it's the ESC, now electrification/heat pumps and then embodied carbon?

12. How do you ensure that you are not throwing money to buildings that will be knocked down and redeveloped?

13. Industry concern: We have an approach that is working. LGs can lower carbon by using ESC as an incentive - Lower the step if you lower carbon. We have already heard from some LGs that they will mandate highest step of the ESC now and very low carbon reductions of they are allowed to regulate carbon.

14. Should the power be linked to low-carbon land use?

15. What will be the impact of the carbon tax on the metrics?

FYI: New Step Code Industry Capacity Study Now Available

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>

To: yasmin@empowerme.ca, s.22 Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, pbell@communityenergy.bc.ca, George Benson gbenson@vancouvereconomic.com <gbenson@vancouvereconomic.com>, Tom.Berkhout@bchydro.com, Luiz Bezerra - luiz.bezerra@passivehousecanada.com <luiz.bezerra@passivehousecanada.com>, Burns, Susan G AEST:EX <Susan.Burns@gov.bc.ca>, gcarignan@communityenergy.bc.ca, Jovan Cheema Jovan@homeperformance.ca <Jovan@homeperformance.ca>, NConnolly@richmond.ca, catherine.ernst@boabc.org, chenelle@vicabc.ca, Jeff Fisher <jfisher@udi.org>, ruta.fluxgold@canada.ca, Sara Fralin sfralin@ahma-bc.org <sfralin@ahma-bc.org>, MGatensby@aibc.ca, Jeremy.Heryet@fortisbc.com, s.22 , Jason Jung, AScT <jjung@asttbc.org>, Sabine@icba.ca, jackie@bcnpha.ca, Langevin, Patric (NRCan/RNCan) <patric.langevin@canada.ca>, janice.larson@ubc.ca, kathryn.lemieux@canada.ca, s.22 ALubyk@okanagan.bc.ca, lyle@camosun.ca, Lisa.Mak@bchydro.com, Jen@refbc.com, Kimberley McClymont kim@zebx.org <kim@zebx.org>, Mary McWilliam mmcwilliam3@bcit.ca <mmcwilliam3@bcit.ca>, colin@domeenergy.ca, Narváez, Kally (NRCan/RNCan) <kally.narvaez@canada.ca>, snash@egbc.ca, Emily_Pearson@vancity.com, s.22 , Warren Perks <warrenp@bccassn.com>, s.22 Pye, Andrew EMLI:EX <Andrew.Pye@gov.bc.ca>, Chris Ray - cray@kelowna.ca <CRay@kelowna.ca>, Tanya.Rumak@fortisbc.com, pauline@chbabc.org, Sarah Rutherford - BC Housing <srutherford@bchousing.org>, aschatz@cagbc.org, bsoutham@reibc.org, Peter Sundberg <Peter.Sundberg@citygreen.ca>, jwagenaar@cagbc.org, s.22 Robyn.Wark@BCHydro.com, Candace Witkowskyj <cwitkowskyj@lgma.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, s.22

Cc: Mary McWilliam mmcwilliam3@bcit.ca <mmcwilliam3@bcit.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>

Sent: September 9, 2021 4:28:20 PM PDT

Hello members of the Step Code Capacity Building and Communications Subcommittee,

On behalf of the Working Group that has guided this project, I'm delighted to announce the BC Energy Step Code Capacity Study is now available online. This study looks at the **readiness of key construction professions to implement the BC Energy Step Code in 2022, 2027 and 2032**. We hope it will be of interest - and assistance - to you and many others.

Thank you to:

- FortisBC and BC Hydro who funded the study
- The consulting team, led by Helen Goodland, Scius Advisory in partnership with Delphi Group, that did the work
- The members of the Matrix Working Group who helped develop the scope of work and provided guidance to the consultants

Helen Goodland/Scius, and Ben Clark/Delphi Group, will give a presentation about the study at our next CBCSC meeting on Sept. 22, 2021. If you don't have the invite already, please let me know.

Til then, if you'd like to read the report, you can find it at https://energystepcode.ca/reports/#capacity. Direct links to the two parts are:

2021 BC Energy Step Code Industry Capacity Study (PDF, 12MB)
Report Appendix with the study matrix and resource lists (Excel)

Thank you and please be in touch if you have questions.

Kind regards,
Dale

Dale Andersson, PhD | Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9653 | Email: dale.andersson@gov.bc.ca

RE: UDI Sept. 13 Webinar - Pre-Event Meeting

From: Enright, Patrick <Patrick.Enright@vancouver.ca>
To: Verna Yu <vyu@udi.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>

Sent: September 10, 2021 11:40:05 AM PDT
Attachments: image002.jpg, image003.jpg, image004.jpg, image001.jpg

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Hi Everyone,

Sorry for the delay on this, please find below the outline I will be following for my presentation on Monday:

Outline for Sept 13 UDI Webinar:

Experience to date with GHGI

a. Past steps on GHGI – rezoning, code (show chart of steps)

   i. KEY MESSAGE: we have used carbon performance standards for new buildings to reduce GHG emissions by ~70% in just 5 years

   ii. KEY MESSAGE: we have made great progress in Vancouver, thanks to the hard work of industry

b. GHGI data of actual project designs (show scatter or bar chart)

   i. Average GHGI in rezoning apps in 2020/21 is ~3.2 kgCO2e/m2 (limits are 6 and 5 in residential)

   ii. Zoom in on projects in 5.5 range – what did they do? Electric heat? HP or baseboards? gas DHW? Give insights, breakdown on tenure if possible

      1. You can meet GHGI 6 with electric resistance heat

   iii. Zoom in on projects in ~1-3 range – what did they do?

      1. Lots of people are voluntarily exceeding the limit

   iv. KEY MESSAGE: projects are meeting and exceeding our carbon requirements in policy and code (do not fear a carbon limit!)

c. Success stories – Near-Zero Emissions Buildings (ZEBx Case Studies):

   i. 825 Pacific – GHGI of 0.34!! Airtightness of 0.098 L/sm2 @ 75Pa!!

   ii. Firehall 17 – GHGI of 0.2!! old firehall was 60!

   iii. Gastown Childcares – GHGI of 0.7, typical childcare is 20!

iv. Outside Vancouver – Skeena Residences, Kelowna – GHGI of 0.66, airtightness of 0.08 L/sm2 @ 75Pa!!

v. Outside Vancouver – Carrington View, West Kelowna – GHGI of 0.16!! TEUI of 32.8!! (after -17 for solar PV)

Climate Emergency New Building Updates (Part 3)

a. Content:

i. KEY MESSAGE: this is our plan to address the Climate Emergency in Part 3

1. This will also make it easier/cheaper for existing buildings to decarbonize

ii. Zero Emissions Heating and Hot Water (and make-up air)

1. Such as: GHGI 3 (electric hot water and MUA)

iii. Reducing Embodied Carbon

1. Such as: lower carbon concrete (SCM's), less foam insulation, etc.

a. Mass timber would more than achieve any target we set

iv. Building Resilience – avoiding future overheating

1. Such as: future weather, more stringent overheating limits – still TBD

b. Structure:

i. Rezoning – 7+ storeys (all of above)

ii. Focus on code-only for 4-6 storeys (ZE hot water, more minimal on EC and resilience)

iii. KEY MESSAGE: we need to do our part to make approvals simple, efficient, and streamlined, while addressing Council priorities

c. Timing:

i. Consultation planned for Winter: Nov-Feb

ii. Council: Mar-May 2022

iii. KEY MESSAGE: we look forward to engaging with you on how to make this next step work for everyone

Please let me know if you have any questions or concerns, and I look forward to presenting on Monday!

Also, **Verna**: would it be possible to get a link to the session for my colleague Charling Li and manager Sean Pander?

Thank you!

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver

patrick.enright@vancouver.ca | 604.871.6158

For more information on green buildings, please visit http://vancouver.ca/zeroemissions

I am humbly thankful that I live and work on the territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh) nations.

From: Verna Yu <vyu@udi.org>
Sent: Thursday, September 09, 2021 4:12 PM
To: 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: [EXT] RE: UDI Sept. 13 Webinar - Pre-Event Meeting

City of Vancouver security warning: Do not click on links or open attachments unless you were expecting the email and know the content is safe.

Good afternoon Panel,

Please see attached for an updated copy of our meeting minutes with information regarding order of speaking as well as some purposed questions. The Q&A and discussion will be adjusted depending how long each presentation is.

You should all have the panel zoom link set in your calendar invitation for 9:15 am on Monday, September 13 to allow us time to do a dry run through and ensure that everyone is comfortable and able to share screens for your presentation. The webinar will go live at 9:30 am.

If you have any questions, please do let me know.

Kind regards,

Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
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From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 7, 2021 10:51 PM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

Slides to follow later this week, but here's my outline for the Province's update:

Energy Step Code

- BC is committed to improved harmonization with the model national codes and supporting Province's CleanBC commitment to improve energy efficiency in the BC Building Code by 20% in 2022.
    - This will involve incorporating the latest revisions to the national codes, expected at the end of 2021, with the Energy Step Code, to ensure that all buildings are more efficient and on the path towards the Province's 2032 goal of Net Zero Energy Ready
    - For communities already requiring the Energy Step Code, this will not be a significant change
    - For communities not referencing the Energy Step Code the 2022 Code update the Energy Step Code will become the minimum standard
        - Exact technical details are being worked out through the ESC Council, but it's roughly Step 3 for Part 9 buildings and Step 2/3 for Part 3 buildings

- Full impact analysis of the changes is being completed to ensure that the approach in 2022 continues to support affordable energy efficiency through flexible performance-based regulation
- Working with the ESCC to seek recommendations on the details, but 2022 will be built on the success of the Energy Step Code and moving the province up the steps and towards our long-term energy efficiency commitments.

Carbon Pollution Standards

- Mandate letter commitment to enable local governments to set their own carbon pollution standards
- This is a high priority and work is underway, with the hope of finalizing recommendations this fall
- Developing a standardized Provincial carbon pollution (GHG) standard that could be added to the Energy Step Code
- Local governments would be able to reference this standard the same way as the ESC – no formal opt-in
- Building on experience of Vancouver and other jurisdictions, and feedback from industry and utility partners
- Likely looking at GHG targets that would require decarbonization from measure-only, to decarbonizing one or both key energy using systems (heat and hot water), as well as considering full building decarbonization.
- We are collaborating within government to ensure that these standards are prepared for innovations in low-carbon energy (renewable natural gas, district energy, renewable electricity)
- These proposed standards would be in addition to the Province's energy efficiency commitments, to ensure that all buildings are making efficient use of the energy they use.
- We are hoping to have all local governments who currently have low-carbon policies migrate to this provincial standard, which will be more enforceable, transparent, and consistent across the Province.

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Sent: Tuesday, September 7, 2021 8:47 PM
To: Verna Yu <vyu@udi.org>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

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Hi Verna et al.,

Note that I will not have a PPT nor outline by then. I will have a list of points that I plan to hit by the meeting, but likely will not make the PPT until the wkd.

Given we won't have the full contingent during tomorrow's meeting, if we're able to shorten it to closer to 30 minutes I would appreciate it.

Thanks,

Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY

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13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca [can01.safelinks.protection.outlook.com]

Upcoming Out of Office Alert: nothing planned

From: Verna Yu <vyu@udi.org>
Sent: September 7, 2021 3:00 PM
To: 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

Hi Everyone,

Thank you all for confirming. I have just sent out an invitation for a zoom meeting for 1pm tomorrow afternoon.

Patrick and Zachary – if your schedule changes, please do join us, but we can work out a time to connect over the next couple of days. Please also share with us your presentation/outline so we may review this together.

Kind regards,
Verna

Verna Yu | Director of Professional Development & Programming
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From: Kathy Wardle <Kathy.Wardle@perkinswill.com>
Sent: September 7, 2021 2:06 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: Re: UDI Sept. 13 Webinar - Pre-Event Meeting

Hi everyone,
I can do 1pm tomorrow as well.
Thanks,
Kathy

Kathy Wardle
Director of Sustainability, Principal
604 808 3970

Get Outlook [can01.safelinks.protection.outlook.com] for iOS

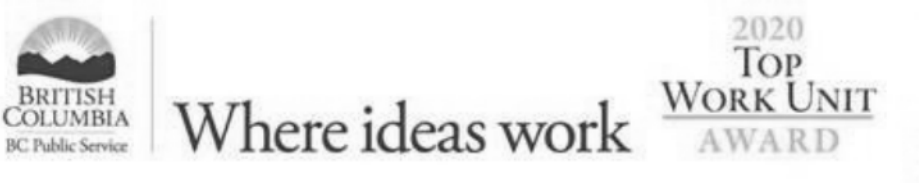
From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, September 7, 2021 12:06:22 PM

To: Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

I have a conflict tomorrow at those times as well. I'm free after 2:30pm, but maybe the best approach is to send around an outline, as Patrick proposes, and we can comment via email or with one-on-one calls where required?

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



From: Enright, Patrick <Patrick.Enright@vancouver.ca>
Sent: Tuesday, September 7, 2021 11:41 AM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Sorry I have a conflict at 1pm. But perhaps I can finish my draft slide deck this afternoon and share it with the group, and then you can send me any take-aways from your discussion and I can adjust it to respond the goals and message of the group.

Cheers,

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
patrick.enright@vancouver.ca | 604.871.6158

For more information on green buildings, please visit http://vancouver.ca/zeroemissions [can01.safelinks.protection.outlook.com]

I am humbly thankful that I live and work on the territories of the xʷməθkʷəy̓əm (Musqueam [can01.safelinks.protection.outlook.com]), Sḵwx̱wú7mesh (Squamish [can01.safelinks.protection.outlook.com]), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh [can01.safelinks.protection.outlook.com]) nations.

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Sent: Tuesday, September 07, 2021 9:40 AM
To: Verna Yu <vyu@udi.org>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: [EXT] RE: UDI Sept. 13 Webinar - Pre-Event Meeting

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Hi Verna et al.

I can do 1pm for up to an hour, but not 9am.

Thanks
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

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13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca [surrey.ca] [can01.safelinks.protection.outlook.com]

Upcoming Out of Office Alert: nothing planned

From: Verna Yu <vyu@udi.org>
Sent: September 7, 2021 9:28 AM
To: 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting
Importance: High

Good morning Panel,

I hope everyone had a relaxing long weekend as we head in to the Fall!

With the September 13 breakfast webinar just around the corner, we would like to confirm a date for a pre-meeting this week to go through each presentation topic as well as confirm the format, and order of presentation.

Would you all be available to connect tomorrow morning at 9am or 1pm?

Kind regards,

Verna

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udi.bc.ca [can01.safelinks.protection.outlook.com] [can01.safelinks.protection.outlook.com]
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Cc: Jeff Fisher (jfisher@udi.org) <jfisher@udi.org>
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Good Afternoon,

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Please let me know if you would be available to join us on any of the following dates/times:

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Thursday, September 2: 1 pm
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Verna

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[can01.safelinks.protection.outlook.com] [can01.safelinks.protection.outlook.com]

RE: UDI Webinar Pre-Meeting

From: May, Zachary OHCS:EX
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: September 12, 2021 11:24:39 PM PDT
Attachments: image001.jpg

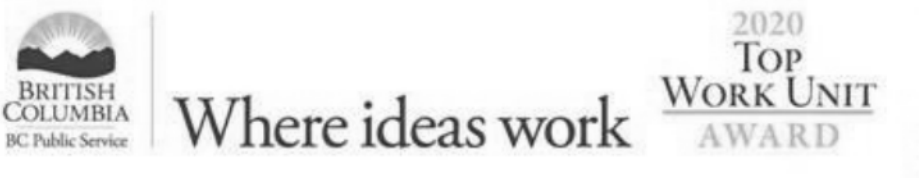
Hi Verna,

Is there any chance we can get Tiffany Warkentin (cc'd) a link to the session tomorrow morning? Happy to pay for a ticket but registration is closed.

I really should have thought of this last week!

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



-----Original Appointment-----
From: Verna Yu <vyu@udi.org>
Sent: Thursday, September 9, 2021 2:23 PM
To: Verna Yu; Jeff Fisher; May, Zachary OHCS:EX
Subject: UDI Webinar Pre-Meeting
When: Friday, September 10, 2021 3:30 PM-4:30 PM (UTC-08:00) Pacific Time (US & Canada).
Where: s.15

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

UDI Webinar Moderator is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting
s.15

Page 086 of 394

Withheld pursuant to/removed as

s.15

Automatic reply: UDI Webinar Pre-Meeting

From: Verna Yu <vyu@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 12, 2021 11:24:45 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thank you for your email!

I will be away from my desk on Monday, September 13 with limited access to my emails in preparation for the UDI Webinar: *The Green Building Climate: ESC & CoV Updates*

Please contact Andrea Nicholls at anicholls@udi.org if this is an urgent matter or if you require your event log-in information.

I look forward to connecting with you upon my return.

Kind regards,

Verna

RE: UDI Sept. 13 Webinar - Pre-Event Meeting

From:	May, Zachary OHCS:EX
To:	Verna Yu <vyu@udi.org>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, Kathy Wardle <Kathy.Wardle@perkinswill.com>, Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc:	Jeff Fisher <jfisher@udi.org>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent:	September 12, 2021 11:31:02 PM PDT
Attachments:	UDI Webinar - Energy and Carbon updates Sept 2021.pdf, image005.jpg, image006.jpg, image007.jpg, image004.jpg

Hi Kathy, Max, and Patrick,

My slides attached for reference. Planning to keep to 10-15 minutes.

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
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2020 Top Work Unit Award

From: Verna Yu <vyu@udi.org>
Sent: Thursday, September 9, 2021 4:12 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon Panel,

Please see attached for an updated copy of our meeting minutes with information regarding order of speaking as well as some purposed questions. The Q&A and discussion will be adjusted depending how long each presentation is.

You should all have the panel zoom link set in your calendar invitation for 9:15 am on Monday, September 13 to allow us time to do a dry run through and ensure that everyone is comfortable and able to share screens for your presentation. The webinar will go live at 9:30 am.

If you have any questions, please do let me know.

Kind regards,

Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 7, 2021 10:51 PM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

Slides to follow later this week, but here's my outline for the Province's update:

Energy Step Code

- BC is committed to improved harmonization with the model national codes and supporting Province's CleanBC commitment to improve energy efficiency in the BC Building Code by 20% in 2022.
    - This will involve incorporating the latest revisions to the national codes, expected at the end of 2021, with the Energy Step Code, to ensure that all buildings are more efficient and on the path towards the Province's 2032 goal of Net Zero Energy Ready
    - For communities already requiring the Energy Step Code, this will not be a significant change
    - For communities not referencing the Energy Step Code the 2022 Code update the Energy Step Code will become the minimum standard
        - Exact technical details are being worked out through the ESC Council, but it's roughly Step 3 for Part 9 buildings and Step 2/3 for Part 3 buildings
    - Full impact analysis of the changes is being completed to ensure that the approach in 2022 continues to support affordable energy efficiency through flexible performance-based regulation
    - Working with the ESCC to seek recommendations on the details, but 2022 will be built on the success of the Energy Step Code and moving the province up the steps and towards our long-term energy efficiency commitments.

Carbon Pollution Standards

- Mandate letter commitment to enable local governments to set their own carbon pollution standards
- This is a high priority and work is underway, with the hope of finalizing recommendations this fall
- Developing a standardized Provincial carbon pollution (GHG) standard that could be added to the Energy Step Code
- Local governments would be able to reference this standard the same way as the ESC – no formal opt-in
- Building on experience of Vancouver and other jurisdictions, and feedback from industry and utility partners
- Likely looking at GHG targets that would require decarbonization from measure-only, to decarbonizing one or both key energy using systems (heat and hot water), as well as considering full building decarbonization.
- We are collaborating within government to ensure that these standards are prepared for innovations in low-carbon energy (renewable natural gas, district energy, renewable electricity)
- These proposed standards would be in addition to the Province's energy efficiency commitments, to ensure that all buildings are making efficient use of the energy they use.
- We are hoping to have all local governments who currently have low-carbon policies migrate to this provincial standard, which will be more enforceable, transparent, and consistent across the Province.

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 TOP WORK UNIT AWARD

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Sent: Tuesday, September 7, 2021 8:47 PM
To: Verna Yu <vyu@udi.org>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Verna et al.,

Note that I will not have a PPT nor outline by then. I will have a list of points that I plan to hit by the meeting, but likely will not make the PPT until the wkd.

Given we won't have the full contingent during tomorrow's meeting, if we're able to shorten it to closer to 30 minutes I would appreciate it.

Thanks,
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca

Upcoming Out of Office Alert: nothing planned

From: Verna Yu <vyu@udi.org>
Sent: September 7, 2021 3:00 PM
To: 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

Hi Everyone,

Thank you all for confirming. I have just sent out an invitation for a zoom meeting for 1pm tomorrow afternoon.

Patrick and Zachary – if your schedule changes, please do join us, but we can work out a time to connect over the next couple of days. Please also share with us your presentation/outline so we may review this together.

Kind regards,
Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca



From: Kathy Wardle <Kathy.Wardle@perkinswill.com>
Sent: September 7, 2021 2:06 PM

To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: Re: UDI Sept. 13 Webinar - Pre-Event Meeting

Hi everyone,
I can do 1pm tomorrow as well.
Thanks,
Kathy

Kathy Wardle
Director of Sustainability, Principal
604 808 3970

Get Outlook for iOS

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, September 7, 2021 12:06:22 PM
To: Enright, Patrick <Patrick.Enright@vancouver.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

I have a conflict tomorrow at those times as well. I'm free after 2:30pm, but maybe the best approach is to send around an outline, as Patrick proposes, and we can comment via email or with one-on-one calls where required?

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 Top Work Unit Award

From: Enright, Patrick <Patrick.Enright@vancouver.ca>
Sent: Tuesday, September 7, 2021 11:41 AM
To: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Verna Yu <vyu@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Sorry I have a conflict at 1pm. But perhaps I can finish my draft slide deck this afternoon and share it with the group, and then you can send me any take-aways from your discussion and I can adjust it to respond the goals and message of the group.

Cheers,

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
patrick.enright@vancouver.ca | 604.871.6158

For more information on green buildings, please visit http://vancouver.ca/zeroemissions

I am humbly thankful that I live and work on the territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh) nations.

From: Sykes, Maxwell <Maxwell.Sykes@surrey.ca>
Sent: Tuesday, September 07, 2021 9:40 AM
To: Verna Yu <vyu@udi.org>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: [EXT] RE: UDI Sept. 13 Webinar - Pre-Event Meeting

City of Vancouver security warning: Do not click on links or open attachments unless you were expecting the email and know the content is safe.

Hi Verna et al.

I can do 1pm for up to an hour, but not 9am.

Thanks
Max

MAXWELL SYKES | CLIMATE AND ENERGY MANAGER

CITY OF SURREY
Sustainability Office
13450 104th Ave, Surrey, BC, Canada V3T 1V8
C 604.317.0422 | T 604.592.7022 | F 604.591.4357 www.surrey.ca [surrey.ca]

Upcoming Out of Office Alert: nothing planned

From: Verna Yu <vyu@udi.org>
Sent: September 7, 2021 9:28 AM
To: 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'Kathy Wardle' <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Sept. 13 Webinar - Pre-Event Meeting
Importance: High

Good morning Panel,

I hope everyone had a relaxing long weekend as we head in to the Fall!

With the September 13 breakfast webinar just around the corner, we would like to confirm a date for a pre-meeting this week to go through each presentation topic as well as confirm the format, and order of presentation.

Would you all be available to connect tomorrow morning at 9am or 1pm?

Kind regards,

Verna

Verna Yu | Director of Professional Development & Programming
Urban Development Institute

vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca [can01.safelinks.protection.outlook.com]
[can01.safelinks.protection.outlook.com] [can01.safelinks.protection.outlook.com]
[can01.safelinks.protection.outlook.com]

From: Verna Yu
Sent: August 26, 2021 2:16 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; Enright, Patrick <Patrick.Enright@vancouver.ca>; Kathy Wardle <Kathy.Wardle@perkinswill.com>
Cc: Jeff Fisher (jfisher@udi.org) <jfisher@udi.org>
Subject: UDI Sept. 13 Webinar - Pre-Event Meeting

Good Afternoon,

Thank you all once again for joining us in discussion on **The Green Building Climate: ESC & CoV Updates [can01.safelinks.protection.outlook.com]**. As September is fast approaching, we would like to set-up a pre-meeting to discuss the event in more detail including event format and rundown as well as review the topics of discussion.

Please let me know if you would be available to join us on any of the following dates/times:

Tuesday, August 31: 3pm
Thursday, September 2: 1 pm
Tuesday, September 7: 11 am
Wednesday, September 8: 9 am or 1 pm

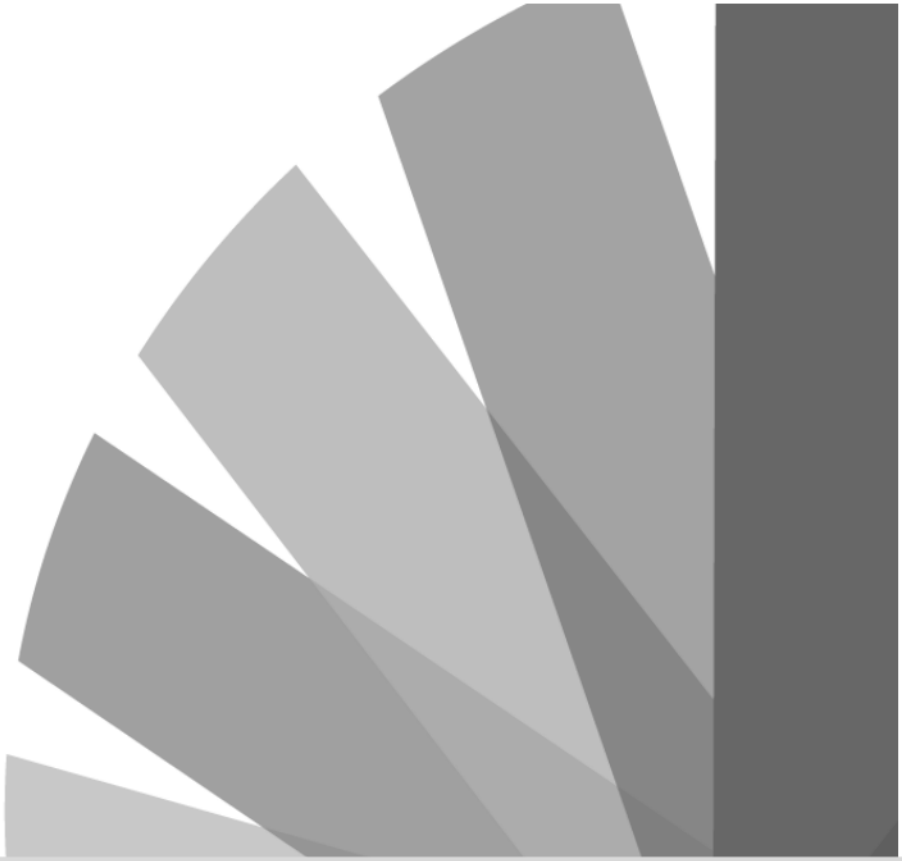
Kind regards,

Verna

Verna Yu | Director, Professional Development
Urban Development Institute
vyu@udi.org *Direct:* 604.661.3038
udi.bc.ca [can01.safelinks.protection.outlook.com]
[can01.safelinks.protection.outlook.com] [can01.safelinks.protection.outlook.com]
[can01.safelinks.protection.outlook.com]

ENERGY STEPCODE

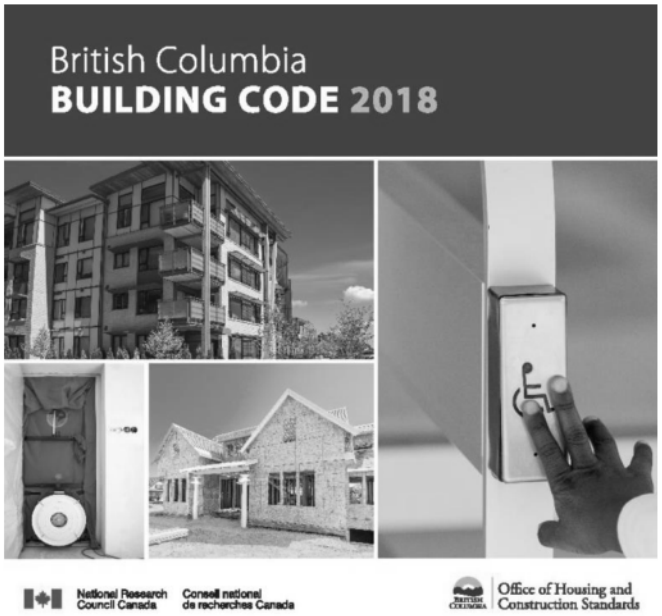
BUILDING BEYOND THE STANDARD



Zachary May
A/Executive Director
Building and Safety Standards Branch

UDI Webinar – Update on Energy Step Code
and Carbon Pollution Standards
September 13, 2021





Upcoming Changes to Provincial Building Regulations:

1. 20% improvement to energy efficiency in 2022 (Energy Step Code)

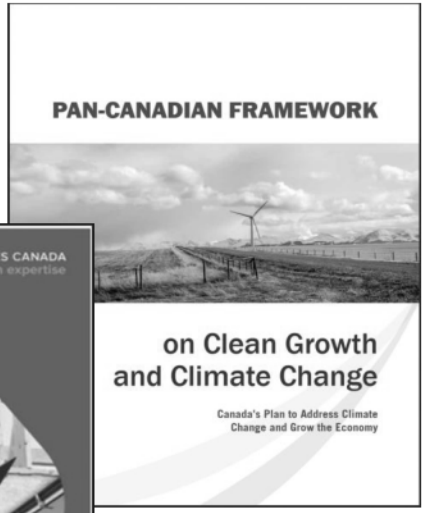
2. Carbon pollution standards for new construction (New)

Provincial & National Policy



CleanBC (2018)

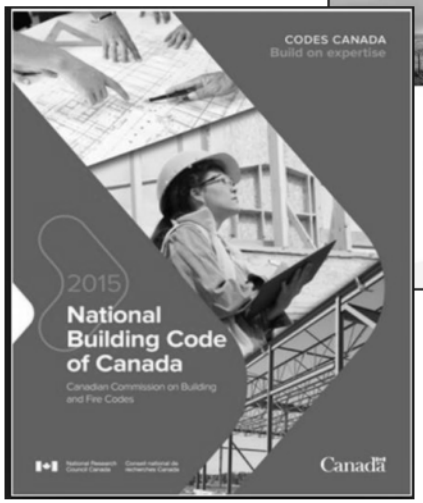
Net Zero Energy Ready by 2032
in BC Building Code



Pan-Canadian Framework (2016)

Net Zero Energy Ready by 2030 in
National Codes

Reconciliation Agreement on Construction Codes (2021)



CleanBC & Energy Step Code

	PART 9 BUILDINGS	PART 3 BUILDINGS	NET-ZERO ENERGY-READY UP TO:
2032	STEP 5	STEP 4	80%
2027*	STEP 4	STEP 3	40%
2022*	STEP 3	STEP 2	20%

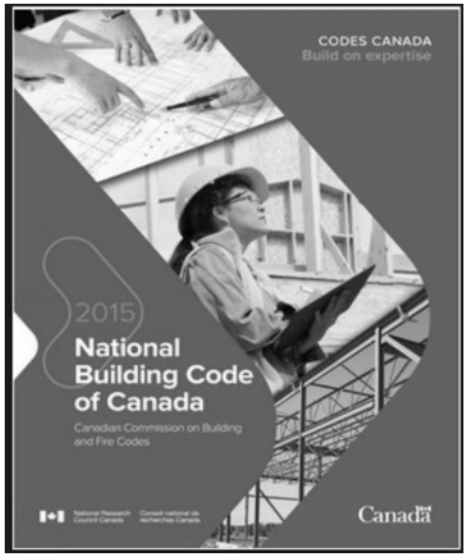
*NEW TARGET DEADLINES

Energy-efficiency improvement above 2018 BC Building Code requirements

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

20% Improvement in 2022





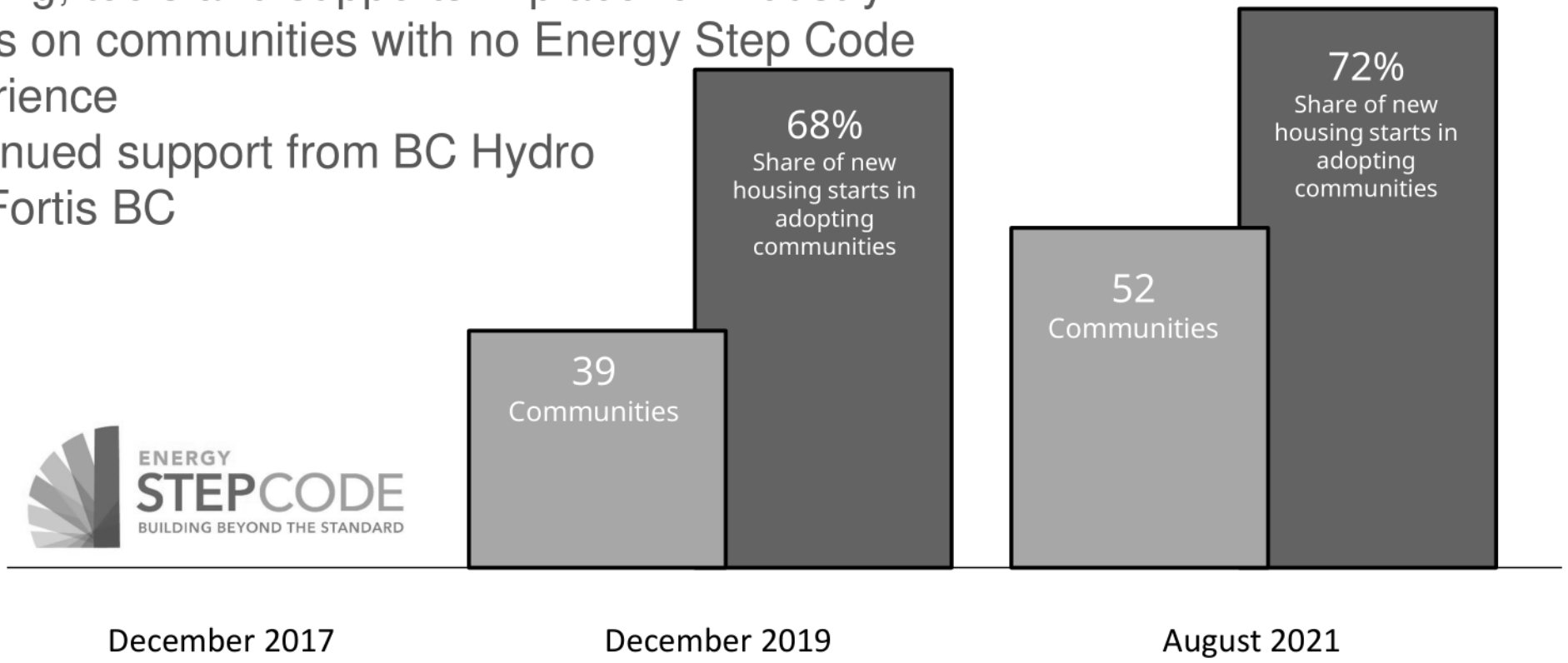
20% Improvement in Energy Efficiency in 2022:

- Build on success of the Energy Step Code
  - Step 3 for Part 9 housing
  - Step 2* for Part 3 buildings
- Support improved harmonization with national codes
- Develop recommendations through the Energy Step Code Council
- Impact analysis currently underway

*pending technical analysis to determine which step achieves 20% improvement

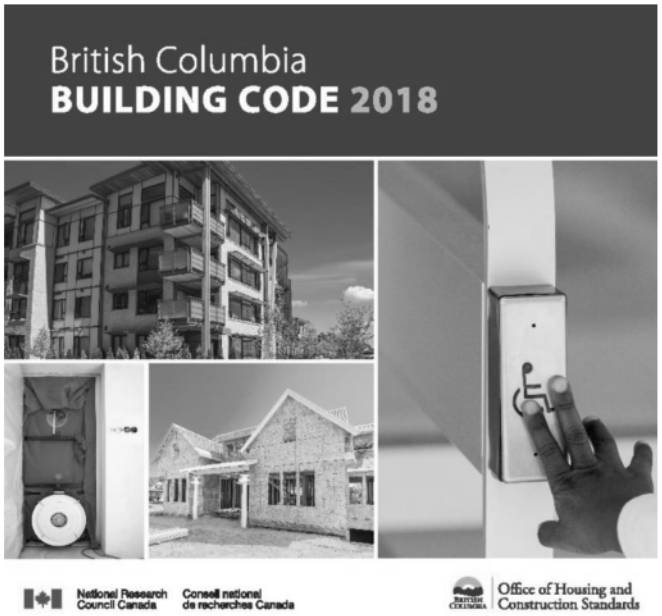
Preparing for Success

- Significant capacity development by local governments who are ready for 2022
- Training, tools and supports in place for industry
- Focus on communities with no Energy Step Code experience
- Continued support from BC Hydro and Fortis BC



ENERGY STEPCODE
BUILDING BEYOND THE STANDARD



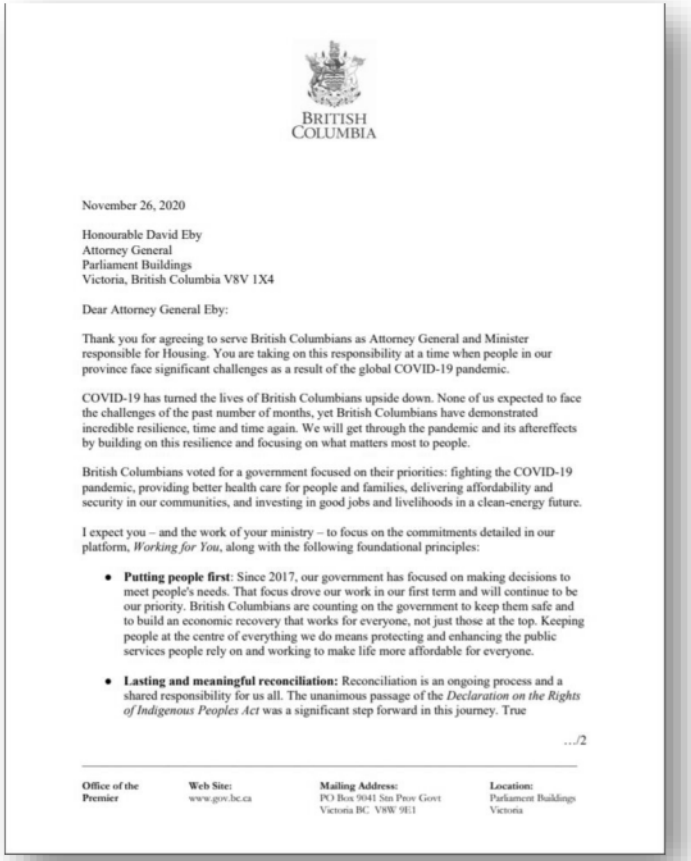


Upcoming Changes to Provincial Building Regulations:

1. 20% improvement to energy efficiency in 2022 (Energy Step Code)

2. Carbon pollution standards for new construction (New)

Mandate Letter – Carbon Pollution



BRITISH COLUMBIA

November 26, 2020

Honourable David Eby
Attorney General
Parliament Buildings
Victoria, British Columbia V8V 1X4

Dear Attorney General Eby:

Thank you for agreeing to serve British Columbians as Attorney General and Minister responsible for Housing. You are taking on this responsibility at a time when people in our province face significant challenges as a result of the global COVID-19 pandemic.

COVID-19 has turned the lives of British Columbians upside down. None of us expected to face the challenges of the past number of months, yet British Columbians have demonstrated incredible resilience, time and time again. We will get through the pandemic and its aftereffects by building on this resilience and focusing on what matters most to people.

British Columbians voted for a government focused on their priorities: fighting the COVID-19 pandemic, providing better health care for people and families, delivering affordability and security in our communities, and investing in good jobs and livelihoods in a clean-energy future.

I expect you – and the work of your ministry – to focus on the commitments detailed in our platform, *Working for You*, along with the following foundational principles:

- **Putting people first**: Since 2017, our government has focused on making decisions to meet people's needs. That focus drove our work in our first term and will continue to be our priority. British Columbians are counting on the government to keep them safe and to build an economic recovery that works for everyone, not just those at the top. Keeping people at the centre of everything we do means protecting and enhancing the public services people rely on and working to make life more affordable for everyone.
- **Lasting and meaningful reconciliation:** Reconciliation is an ongoing process and a shared responsibility for us all. The unanimous passage of the *Declaration on the Rights of Indigenous Peoples Act* was a significant step forward in this journey. True

.../2

Office of the Premier | **Web Site:** www.gov.bc.ca | **Mailing Address:** PO Box 9041 Stn Prov Govt Victoria BC V8W 9E1 | **Location:** Parliament Buildings Victoria

Attorney General and Minister Responsible for Housing:

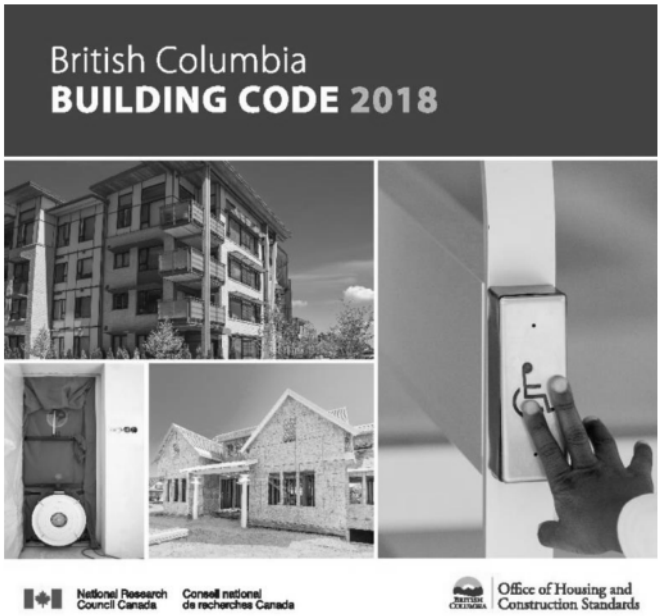
"[…] supporting local governments to set their own carbon pollution performance standards for new buildings."

Other commitments and priorities:

- Homes for BC – 10-year housing plan
- Sectoral targets and engagement on CleanBC related to carbon pollution
- Existing Buildings Code by 2024

Carbon Pollution Standards



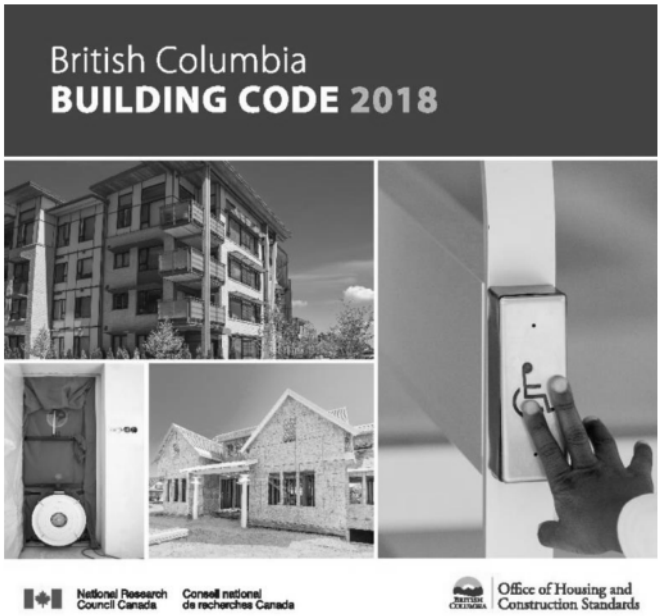


Carbon Pollution (GHG) Standards:

- Several local governments already addressing carbon pollution in some form
- Establish a standardized provincial approach similar to Energy Step Code
- Carbon requirements in addition to energy efficiency requirements
- Consulting with Energy Step Code Council to seek input on appropriate performance levels and enforcement

Carbon Pollution Standards





Technical Considerations:

- Considering performance levels from ‘measure only’ to full decarbonization
  - space heat and hot water will be most directly impacted
- Focus on performance codes that provide flexibility and allow for future innovation
  - same energy modelling as Energy Step Code
- Working to provide long term certainty on how codes address carbon pollution

Other Building Code Activities



Projects and Commitments Related to the Code:

- Reconciliation Agreement on Construction Codes
- Existing Buildings (CleanBC)
- Accessibility
- Next edition of the BC Building Code

Reminder: UDI Webinar: The Green Climate - ESC & COV Updates starts in 1 hour

From: Zoom <no-reply@zoom.us>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 13, 2021 8:25:00 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary May (Government of BC),

This is a reminder that "UDI Webinar: The Green Climate - ESC & COV Updates" will begin in 1 hour on:
Date Time: Sep 13, 2021 09:30 AM Vancouver

Join from a PC, Mac, iPad, iPhone or Android device:

Click Here to Join
Note: This link should not be shared with others; it is unique to you.
Add to Calendar Add to Google Calendar Add to Yahoo Calendar

Or join by phone:

s.15

You can cancel your registration at any time.

Zoom Link - UDI Webinar: The Green Climate - ESC & COV Updates

From:	Andrea Nicholls <anicholls@udi.org>
To:	Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Jeff Fisher <jfisher@udi.org>, Verna Yu <vyu@udi.org>
Sent:	September 13, 2021 8:47:46 AM PDT
Attachments:	image008.png, image012.jpg, image016.jpg, image018.jpg, image019.jpg, image020.jpg, image017.jpg, image014.png, image015.jpg, image013.jpg, image010.jpg, image011.jpg, image009.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning Tiffany,

Please see below for your Zoom link for the UDI Webinar: The Green Climate - ESC & COV Updates, which will be held this morning at 9:30am.

Thanks, and enjoy!

Kind regards,
Andrea

Hi Tiffany,

Thank you for registering for "UDI Webinar: The Green Climate - ESC & COV Updates".

Please submit any questions to: vyu@udi.org

Date Time: Sep 13, 2021 09:30 AM Vancouver

Join from a PC, Mac, iPad, iPhone or Android device:

s.15

Andrea Nicholls
Executive Assistant to the President & CEO
Email: anicholls@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: September 13, 2021 8:16 AM
To: Andrea Nicholls <anicholls@udi.org>
Subject: FW: UDI Webinar Pre-Meeting

Tiffany Warkentin please

Verna Yu
Director, Professional Development & Programming
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From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 12, 2021 11:25 PM
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: RE: UDI Webinar Pre-Meeting

Hi Verna,

Is there any chance we can get Tiffany Warkentin (cc'd) a link to the session tomorrow morning? Happy to pay for a ticket but registration is closed.

I really should have thought of this last week!

Best,
Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca



-----Original Appointment-----
From: Verna Yu <vyu@udi.org>
Sent: Thursday, September 9, 2021 2:23 PM
To: Verna Yu; Jeff Fisher; May, Zachary OHCS:EX
Subject: UDI Webinar Pre-Meeting
When: Friday, September 10, 2021 3:30 PM-4:30 PM (UTC-08:00) Pacific Time (US & Canada).
Where: s.15

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UDI Webinar Moderator is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting
s.15

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Notes

Date and Time of Meeting: Thursday Sept 9, 2021 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Chair: Zachary May, Building and Safety Standards Branch, Attorney General and Minister Responsible for Housing
Co-Vice Chairs: Bob Deeks, CHBA BC/RDC Fine Homes and Robyn Wark, BC Hydro
Virtual Microsoft Teams meeting

Participants

1. Bea Bains, FortisBC
2. Jay Chadha for Diana Dilworth, HAVAN
3. Remi Charron for Wilma Leung, BC Housing
4. Maya Chorobik, CEA and LGPN Co-chair
5. Norm Connolly, Richmond/PIBC, and P3 Subco Co-chair
6. Patrick Enright, City of Vancouver
7. Katy Fairley for Warren Perks, BCCA
8. Sara Fralin, AHMA
9. Jeff Fisher, UDI
10. Maura Gatensby, AIBC
11. Nicholas Heap, City of Richmond and outgoing P9 Subco co-chair
12. Toby Lau, BC Hydro and P3 Subco Co-chair
13. Megan Lohmann, CEA and UBCM rep
14. John Madden, UBC
15. Richard Mathews, Squamish and Part 9 Subco co-chair
16. Mary McWilliam, BCIT & CBC Subcommittee Co-chair
17. Katherine Muncaster for Nat Gosman, EMLI
18. Roberto Pecora, ZEBx
19. Harshan Radhakrishnan, EGBC
20. Ron Rapp, HAVAN and Part 9 Subco co-chair
21. Pauline Rupp for Joe Hart, CHBA
22. Laura Sampliner, Port Moody and LGPN Co-chair
23. Muneesh Sharma, BOMA
24. Maxwell Sykes, City of Surrey/UBCM Rep
25. Holly Wacker, Ministry of Municipal Affairs
26. Guido Wimmers, UNBC
27. BSSB: Tiffany Warkentin, A/Director, Strategic Policy and incoming ESCC chair; Dale Andersson, CBC Subcommittee Co-chair; Scott Williams, Senior Energy Codes Administrator, Hugo Wong, Policy Analyst
28. **Guests**: Tom Berkhout, BC Hydro, Alexandre Bigonesse, NRCan; Charling Li, City of Vancouver; Adrian Mohareb, CAS; Lily Shields-Anderson, UDI
29. **Regrets**: Catherine Ernst, BOABC; Jason Jung, ASTTBC; Lisa Mak, BC Hydro; Kelly Reid, HKR Builders/CHBA BC; Tyler Wightman, BOABC

Welcome, Introductions, and Opening Remarks (Zachary May)

- Objectives for the meeting:
  - 1. Provide an overview of the fall work plan to deliver 20%-better energy efficiency in the next iteration of the BC Building Code.
  - 2. Provide an overview of a new report on industry capacity for 2022, 2027 and 2032.
  - 3. Hear from Council members and Subcommittees.
- New Interim Chair: Zac will start 12 months leave in October. Tiffany Warkentin, Acting Director of Strategic Policy for the Building and Safety Standards Branch, will act as interim chair for this period. Tiffany has been with BSSB for about a year, and has been a solicitor in small communities with experience in real estate and development. She will be taking over most of Zac's duties for that time.

Energy Step Code and CleanBC targets (Zachary May)

- See attachment provided with the agenda.
- This issue concerns a motion raised during Part 9 subcommittee meeting on June 3, 2021.
- The ESCC and subcommittees primarily operate on consensus rather than formal majority votes. The ESCC is not a decision-making body, but provides input on how to implement mandate items.
- In summary, the motion identifies shortcomings with the reference building approach, and says the ESC does not do enough to meet provincial climate targets. The motion will be shared with the Council and Zac will provide a written response.
- ESC is one tool in CleanBC, but is not the only tool. Happy to raise and document any concerns.
- Encourage members who have concerns with the reference building approach or other issues to advance them through the national Standing Committee on Energy Efficiency as the best venue.
- Continued commitment for harmonization means reference building approach stays. Assume that we will harmonize first.
- Current desire to maintain EUI targets in B.C., with revisit in 2025.

Industry Capacity Readiness Report: Presentation from Helen Goodland, Scius Advisory and Ben Clark, Delphi Group

- See slideshow and report examining the readiness of key construction professions to implement the BC Energy Step Code in 2022, 2027 and 2032
- Report available at https://energystepcode.ca/reports/#capacity.
- Direct links:
    - 2021 BC Energy Step Code Industry Capacity Study (PDF, 12MB)
    - Download the study matrix and resource lists (Excel)
- This study was a project of a working group of the Capacity Building and Communications Subcommittee; there was interest in updating an earlier capacity study from 2017 to assess progress since then and determine how best to direct current and future efforts and resources.
- Thank you to FortisBC and BC Hydro for funding the study.
- Questions and discussion on the following points:
    - Members sent congratulations to sectors identified as ready for the future code changes, including EGBC.
    - General contractors for Part 3 buildings identified as partially ready. Not a homogenized sector. Need to be clear which courses are required for which professions. Unlike homebuilders, no similar requirement for CPD, while being very busy and facing labour shortages. More practical, learning-by-doing courses are better than classroom learning.
    - Many courses available, but lack of interest from multiple sectors, such as in Prince George. Smaller buildings would make it easier, but we prefer larger single-family homes or MURBs. Extra insulation in those buildings don't yield significant improvement.
    - Study found many courses available, but not specific enough in what they taught.

- Knowledge management lens should be applied to this issue.
- Good interest from recent builder breakfast in Richmond, where the upcoming 20%-better message has been reinforced.
- Suggestion to include training in tender documents so successful bidders attend education by default.
- EGBC is pleased to post a series of Continuing Education Webinar Series on Deep Energy and Emissions Retrofit of Existing Buildings. The first event in this series on September 29th will provide an introduction to deep retrofits, as explored through the project examples of subject matter experts. Please share this info with your networks. More info: https://www.egbc.ca/Events/Events/2021/21SEPIDR

Council Member Roundtable

- UDI breakfast seminar Sept. 13 featuring Patrick Enright, Maxwell Sykes, and Zachary May on ESC and GHGs.
- HAVAN will have monthly update on ESC implementation in Metro Vancouver, with next one on Sept. 15. Will include more forward-looking information on when municipalities want to step up, versus what they're doing now. HAVAN has online courses, but will reintroduce in-person learning as well.
- HAVAN has started to track local government Step Code adoption on a monthly basis – see https://havan.ca/wp-content/uploads/2021/08/Step-Code-Tracking-Sheet-August-15.pdf
- Max offers to send out promotion material as needed via a City of Surrey e-newsletter, with 500-600 subscribers.
- Question on how H2k works with primary and secondary fuel types, and if CoV energy modelling guidelines will be updated to work with new provincial GHG options. Will defer to CoV but more answers at late September meeting.
- Upcoming ZEBx webinar on labelling, in partnership with CHBA-BC and their NZER label. BERM launch later with a talk from Tom Berkhout and a guest from California. Happy to spread the word on energy efficiency or GHG content.
- ZEBx and BOMA are hosting an event on Sept. 21 for commercial members on deep energy retrofits. https://www.boma.bc.ca/events-sponsorship/event-calendar/event-details/?EventID=398
- Building a Legacy toolkit is expanding with more resources. Lots happening in the North – see https://energystepcode.ca/northern-and-rural-resources/.

Updates from Subcommittees

- **Part 3 and Part 9 Subcommittees:** See meeting notes from Part 3 and Part 9 subcommittees.
  - Building officials should ask Fred Tewfik at City of Richmond for access to tool which scrapes key data from HOT2000 full house reports into Excel.

- **LGPN:** Two quarterly meetings thus far. Compliance form updates, LCES pathways report. Some LGPN participation in CleanBC Roadmap to 2030 consultation, with letter sent to some provincial staff seeking more engagement on this topic. Next meeting is November 3, with no scheduled Deep Dive but possible topics could include Upper Steps, low-carbon building toolkit, electrification impact study results from BC Hydro, and others.
- **Capacity Building and Communications**
    - 'Convene and catalyze role' – Fall meetings Sept. 22, 2021 + Date TBD Nov. 2021
    - Fall/winter workplan being finalized
- Industry Capacity Study: Next Steps
    - Working on implementation plan for recommendations
    - Likely a new/reconfigured WG for this
- Communications Working Group
    - Website (small restructuring June 2021)
    - Newsletter – restarting later fall 2021
    - BCBC 2022 communications plan: Started
- Gentle Reminder
    - Events for the calendar, newsletter or website ideas = always welcome – please send to dale.andersson@gov.bc.ca or hugo.wong@gov.bc.ca

20%-better Workplan and Harmonization, Scott Williams, BSSB

- See PowerPoint
- Seeking to retain Step Code targets for applicable buildings. NECB for buildings without Step Code requirements. May remove ASHRAE 90.1 in new construction, referring instead to NECB 2020 and tiered approach. Long B.C. history of that standard, but with viable national standards, need for 90.1 is diminished. May take time to adjust.
- Overheating needs more work. Lots of headway on ASHRAE 55. Encourage BC participation on national Cooling as a Load committee, with reassessment in 2022. If national committee slows down, BC can use ASHRAE 55 as a backstop and draw from BC-specific work.
- No formal request for cooling in buildings yet, but we are assuming a social need.
- On Part 9, an RFP will soon be issued for technical research into smaller homes, colder climates, and log homes. CSA F280 might be a stopgap. Subcos and working groups will lead on this.
- Plan to introduce 20%-better energy efficiency by Dec. 2022, as an update to the BCBC 2018. The rest of the Code is planned to be updated for 2023.
- A new national code is expected by end of 2021. Will wait until that introduction to further clarify roadmap to 20%-better.
- Questions about communications, and high-level messaging sooner is better.
- Will seek recommendation from technical subcommittees on peak load cooling in proposed NBC.

- Only real option is to keep Steps (i.e., numbering) as they are, putting “reserved” on some Lower Steps to make them an ineligible option for compliance.

Thank You!

From: Verna Yu <vyu@udi.org>
To: Kathy Wardle <Kathy.Wardle@perkinswill.com>, Enright, Patrick <Patrick.Enright@vancouver.ca>, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: September 13, 2021 12:10:55 PM PDT
Attachments: image003.jpg, image005.jpg, image007.jpg, image008.png, image006.jpg, image004.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning Panel,

Thank you all so much for joining us this morning for the webinar! You can now view the video of this morning's session:

Topic: UDI Webinar: The Green Climate - ESC & COV Updates
Start Time : Sep 13, 2021 09:13 AM

Meeting Recording:
s.15

Hope everyone has a great rest of the day!

Kind regards,
Verna
Verna Yu
Director, Professional Development & Programming
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Email: vyu@udi.org

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Hello new and long-time members of the Step Code Capacity Building and Communications Subcommittee, and hello to our guests,

Update Sept. 13, 2021: Adding the agenda.

This is our first fall 2021 meeting. We look forward to presentation from Helen Goodland/Scius Advisory and Ben Clark/Delphi Group about the Step Code industry readiness study they prepared for our Subcommittee's 'Matrix Working Group.'

Thank you. Please be in touch if you have questions. We look forward to speaking with you next week.

Kind regards,
Dale Andersson/BSSB and Mary McWilliam/BCIT
Subcommittee co-chairs

Note: This will be a TEAMS meeting but we now have a dial-in option – see details below.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council
Capacity Building and Communications Subcommittee (CBCSC)

MEETING AGENDA

Date: Wednesday September 22, 2021
Time: 10:00 a.m. to 12:00 p.m.
Subcommittee Co-chairs: Mary McWilliam, BCIT; Dale Andersson, BSSB
Microsoft Teams Online Meeting:
Click here to join the meeting or
Call s.15

Role of the Subcommittee: Three Subcommittees (and various working groups) support the Energy Step Code Council and ultimately the successful implementation of the Step Code across British Columbia. The CBCSC has responsibilities to "convene and catalyze" capacity-building efforts; communicate the 2022 plan; track key capacity metrics; support case studies; address key training gaps; and monitor EA capacity.

Time	AGENDA ITEM
10:00	1. **Welcome and Introductions** – Mary McWilliam a. New Members Welcome b. Territorial Acknowledgements
10:10	2. **Step Code Industry Capacity Study 2021** (Matrix Working Group) a. Introduction – Dale Andersson b. Presentation by consultants – Helen Goodland/Scius Advisory and Ben Clarke/Delphi Group (20 min) c. Q&A (25 min) Report is available online at: https://energystepcode.ca/reports/#capacity ▪ 2021 BC Energy Step Code Industry Capacity Study (PDF, 12MB) ▪ Download the study matrix and resource lists (Excel)
11:00	3. **Capacity Study Implementation Plan Discussion** – Tom Berkhout
11:20	**4. New Tools/Resources/Updates** a. Gaëtane Carignan, Community Energy Association i. Local government Step Code survey 2021 ii. Local government Step Code adoption tracker iii. Other b. Others? Please share
11:40	5. **Energy Step Code Council Update** – Dale Andersson a. GHG work per mandate letter[1]

[1] Minister Eby's mandate letter: "Build on our government's work to require new buildings and retrofits to be more energy efficient and cleaner by supporting local governments to set their own carbon pollution performance standards for new buildings." See https://www2.gov.bc.ca/assets/download/FEE0C298D76D435485E143A23907AABB.

	b. 2022 BC Building Code Update i. Spring 2022 legislation for end of 2022 Effective Date
11:45	**6. Working Groups** a. Communications Working Group – Dale Andersson i. Updated Vol 2 of the brand guidelines (see details below) ii. Small restructuring of www.energystepcode.ca June 2021 iii. Communications Plan 2022 b. Energy Advisor Working Group – Dale Andersson c. Educators Working Group – Mary McWilliam
11:55	7. Next Meeting and Adjournment – Mary McWilliam

BC Energy Step Code Brand Handbook

Available online at https://energystepcode.ca/implementation-tools/#brandhandbook:

- The BC Energy Step Code Brand Handbook consists of two files intended to be used together:
  - Volume 1: Design Guidelines (PDF, 1MB)
  - Volume 2: Style and Brand Usage Guidelines (PDF, 1MB)
- The handbook provides design and style guidance for governments, organizations or companies that want to use the brand to communicate accurate information about the standard to constituents, customers or stakeholders

Changes to Volume 2 effective September 2021:

- Brand name remains: BC Energy Step Code (no periods in BC, words capitalized)
- Handbook now permits 'Step Code' or 'ESC' as acceptable shortened forms (formerly there were no short forms permitted apart from 'regulation' or 'standard')
- Handbook now permits use of 'adopt' as well as 'reference' to refer to when a local govt adopts/references the Step Code (formerly the guidelines stipulated the use of 'reference')
- Both changes were made to align with terms people use
- Please take note if you prepare training materials

Pre-Meeting Agenda: Advancing Mass Timber in BC

From:	Verna Yu <vyu@udi.org>
To:	Andrew Harmsworth <ah@ghl.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>, Rocky Sethi <rockys@adera.com>
Cc:	Jeff Fisher <jfisher@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent:	September 13, 2021 2:49:53 PM PDT
Attachments:	image005.jpg, image003.jpg, image002.png, image007.jpg, image006.jpg, UDI- Premeeting Agenda - 09.28.2021 Event.pdf, image004.jpg

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Good afternoon Panel,

I hope everyone had a great weekend! I have attached the agenda outline for discussion tomorrow in advance of the webinar "Advancing Mass Timber in BC" on Tuesday, September 28.

Event Page: http://udi.memberzone.com/events/details/udi-webinar-advancing-mass-timber-in-bc-1726

Look forward to seeing you tomorrow at 2pm.

Kind regards,

Verna

Verna Yu
Director, Professional Development & Programming
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Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
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"Advancing Mass Timber"
Webinar Pre-Meeting

AGENDA
Tuesday, September 14, 2021 | 2:00 pm – 3:00 pm

- Purposed Format
  - 10-12 minutes each – individual overview on topic
  - 15-20 minutes conversation / moderated Q&A

- Confirm order of presentation/topics
  - Patrick Enright, Senior Green Building Engineer - City of Vancouver
  - Andrew Harmsworth, Principal - GHL Consultants Ltd.
  - Zachary May, Acting Executive Director, Building & Safety Standards Branch - Province of British Columbia

- Discuss Potential Questions

Proposed Schedule:

TIME	ACTIVITY	DURATION	LEAD
9:15	Dry Run	15	
9:30	UDI Introduction Thank Sponsors	2	Jeff Fisher
9:32	Sponsor Remarks – BC Housing	2-3	Sheryl Peters
9:35	Introduction & Overview	5	Rocky Sethi
9:40	Presentation 1	10-12	
9:52	Presentation 2	10-12	
10:04	Presentation 3	10-12	
10:16	Moderated Discussion Q&A w/moderator	15-20	All
10:30	Webinar concludes		Rocky Sethi

Metro Vancouver's draft Climate 2050 Buildings & Transportation Roadmaps - Stakeholder Feedback on Climate Adaptation Actions

From: PE - AQCC Admin Support <PE-AQCCAdminSupport@metrovancouver.org>

To: Nav Hundle <Nav.Hundle@metrovancouver.org>, Morgan Braglewicz <Morgan.Braglewicz@metrovancouver.org>, Erik Blair <Erik.Blair@metrovancouver.org>, Jason Emmert <Jason.Emmert@metrovancouver.org>, Chris Chong <Chris.Chong@metrovancouver.org>, Edward Nichol <Edward.Nichol@metrovancouver.org>, XT:Bates-Frymel, Laurie ENV:IN <laurie.bates-frymel@metrovancouver.org>, Craig Sobering <Craig.Sobering@metrovancouver.org>, Josephine Clark <Josephine.Clark@metrovancouver.org>, Megan Gerryts <Megan.Gerryts@metrovancouver.org>, Jamie Vala <Jamie.Vala@metrovancouver.org>, Aby Sharma <Aby.Sharma@metrovancouver.org>, Marina Richter <Marina.Richter@metrovancouver.org>, O'Grady, Ryan N ENV:EX <Ryan.OGrady@gov.bc.ca>, rick.truong@bchydro.com, Laura Sampliner <lsampliner@portmoody.ca>, DBuchanan@surrey.ca, margarita.pacis@vancouver.ca, EDesautels@coquitlam.ca, tgreen@davidsuzuki.org, hrad@egbc.ca, Amber.Lee@fnha.ca, dana.wong@fortisbc.com, mstanyer@fraserbasin.bc.ca, cmurphy@fraserbasin.bc.ca, echia@fraserbasin.bc.ca, angie.woo@fraserhealth.ca, Angela.Danyluk@vancouver.ca, Tamsin.Mills@vancouver.ca, Tjasa.Demsar@surrey.ca, Krista Robinson (krobinson@tol.ca) <krobinson@tol.ca>, Caitlin.Cooper@Translink.ca, Eve.Hou@Translink.ca, Peter.Lipscombe@Translink.ca, Tony.Vi@Translink.ca, chris.hoff@tc.gc.ca, jfisher@udi.org, rdemkiw@udi.org, emily.peterson@vch.ca, craig.brown@vch.ca, christine.rigby@portvancouver.com, Jennifer_Aldcroft@yvr.ca, adapt@sfu.ca, alison@flipsidesustainability.com, Black, Leanne EMBC:EX <Leanne.Black@gov.bc.ca>, MacDonald, Peter M EMBC:EX <Peter.M.MacDonald@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, chris.radziminski@vancouver.ca, meaghan.nortondaniel@vancouver.ca, mszpala@bchousing.org, karentw@pembina.org, tompierrefs@pembina.org, gbenson@vancouvereconomic.com, ian@bcnpha.ca, mariko@zebx.org, roberto@zebx.org, Robyn.Wark@bchydro.com, rlepage@rdh.com, clove@rdh.com, Tom.Berkhout@bchydro.com, mlabrie@localpractice.ca, jcutbill@lateralagency.ca, DRamslie@concertproperties.com, lwesterhoff@integralgroup.com, jamie.gray@quadreal.com, littlej@portcoquitlam.ca, woodsm@portcoquitlam.ca, Katherine.Isaac@vancouver.ca

Cc: Conor Reynolds <Conor.Reynolds@metrovancouver.org>, Roger Quan <Roger.Quan@metrovancouver.org>, Lucy Duso <Lucy.Duso@metrovancouver.org>, Mark Seinen <Mark.Seinen@metrovancouver.org>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Gordon, Nicole <Nicole.Gordon@portvancouver.com>, Leo Glaser <LGlaser@concertproperties.com>, Jeffrey Fitzpatrick <Jeffrey.Fitzpatrick@metrovancouver.org>, Brianna Bishop <bbishop@vancouvereconomic.com>, Cornes, Kevan <KCornes@coquitlam.ca>, David Lapp <dlapp@iclr.org>, Li, Charling <charling.li@vancouver.ca>, Harrington, Padraig <PHarrington@coquitlam.ca>, Tammy Liu <tliu@tol.ca>, Paul Cordeiro <pcordeiro@tol.ca>, alison_shaw@sfu.ca, Sheryl Cumming <Sheryl.Cumming@metrovancouver.org>, Richard Demkiw <rdemkiw@UrbDevIns.onmicrosoft.com>, Winkler, Andrea <Andrea.Winkler@vancouver.ca>, Magel, Gareth <gareth.magel@tc.gc.ca>, Pander, Sean <sean.pander@vancouver.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, Hall, Daniel <Daniel.Hall@fortisbc.com>, Betsy Agar <betsya@pembina.org>

Sent: September 14, 2021 9:15:21 AM PDT

Attachments: image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Sent on behalf of Nav Hundle

Hello everyone,

Please note that for today's Climate 2050 draft Buildings and Transportation Roadmap stakeholder engagement session on adaptation, we will be using the Miro to facilitate discussion and feedback. Miro is an online collaborative platform, which allows participants to add sticky notes with their thoughts and feedback on to a board. We will be providing instructions this afternoon on how to navigate Miro, but you are welcome to view the Miro board in advance to become familiar with the platform.

https://miro.com/app/board/o9J_lxqzoes=/
Please also note that Miro is not compatible with Internet Explorer, and can be accessed using other web browsers such as Chrome.

Meeting Agenda

- Overview of *Climate 2050* resilience actions
- General questions
- Breakout room discussions – Transportation & Buildings
- Summary & next steps

We look forward to the session this afternoon. If you have any questions, please contact Nav Hundle at navjot.hundle@metrovancouver.org.

Thank you.

Navjot Hundle
Policy Analyst , Air Quality & Climate Change
Parks & Environment
t. 604.216.3262



This communication may contain information and advice that is confidential and/or privileged. If you are not the intended recipient, you may not disseminate, distribute or copy this communication. You are asked to delete it and contact the sender as soon as possible.

Totally get the issue with the materials in development. I'll play the boring gov't man with no exciting ideas

The bullets help. I'm trying to focus on a desire to hear from UDI members what key changes would be helpful as we engage in national code discussions. Trying to avoid encouraging or discouraging provincial regulations until we have clarity from Cabinet.

Best,

Zachary D. May, MBA

Executive Director (Acting)

(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hutchinson, Jarrett JERI:EX <Jarrett.Hutchinson@gov.bc.ca>
Sent: Tuesday, September 14, 2021 2:49 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Pre-Meeting: UDI Webinar 09.28

Hi Zac,

s.13

You could talk about:

• We keep hearing about how the sweet spot for taller wood buildings is 7-12 storeys. That's the bread and butter mainstream that requires tapping into. Now that there is are prescriptive regulatory solutions for that, will industry swim with the current and pursue that archetype?

• The early adopter allowed everyone to take EMTC more seriously. Because it was real. Proof is the (1) EGBC/AIBC PPG that BSSB steered, and (2) TSBC issuing a bulletin about how to apply an electrical code that traditionally only had to interface with combust/non-combust. Those resources are in place and we hope the body of knowledge is rounded out further before barn doors are kicked open and EMTC is province wide.

• The early adopter has been good for industry and local governments. Voluntary opt-in by LG's provides industry a map of which areas are keen to see this type of innovation within their back yard.

Sorry I couldn't take this off your hands. But hopefully the bullets above are helpful.

Let me know if you'd like to discuss.

Thanks

Jarrett Hutchinson | Executive Director

Office of Mass Timber Implementation

250-208-7277

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 14, 2021 2:34 PM
To: Hutchinson, Jarrett JERI:EX <Jarrett.Hutchinson@gov.bc.ca>
Subject: RE: Pre-Meeting: UDI Webinar 09.28

Hi Jarrett,

I got roped into this breakfast seminar a couple months ago, but I have very little to offer as a panelist. Is this something you or someone on the team may be willing to step in on to discuss areas of research and possible priority for OMTI? I'm not able to say much without getting ahead of the work in your office.

FYI – there was also some concerns about gender diversity on the panel in the summer and I suggested they reach out to Trilby or Lee, but it sounds like that didn't happen.

Please reach out directly if you or someone on the team is willing to replace me.

Best,

Zachary D. May, MBA

Executive Director (Acting)

(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Andrew Harmsworth <ah@ghl.ca>
Sent: Tuesday, September 14, 2021 2:06 PM
To: Yvonne Lo <ylo@udi.org>; Yvonne Lo <ylo@udi.org>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; Jeff Fisher <jfisher@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; 'Rocky Sethi' <rockys@adera.com>; 'Speters@bchousing.org' <Speters@bchousing.org>; Lily Shields-Anderson (lshieldsanderson@udi.org) <lshieldsanderson@udi.org>
Cc: Verna Yu <vyu@udi.org>
Subject: RE: Pre-Meeting: UDI Webinar 09.28

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Andrew Harmsworth, M Eng, P Eng, PE, CP, FEC

GHL CONSULTANTS LTD
Building Codes & Fire Science

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P604 689 4449 Ext 107 \ D604-335-7647 \ Eah@ghl.ca \ Wwww.ghl.ca

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-----Original Appointment-----
From: Yvonne Lo <ylo@udi.org>
Sent: July 20, 2021 10:04 AM
To: Yvonne Lo; 'Andrew Harmsworth'; 'Enright, Patrick'; Jeff Fisher; 'Zachary.May@gov.bc.ca'; 'Rocky Sethi'; 'Speters@bchousing.org'; Lily Shields-Anderson (lshieldsanderson@udi.org)
Cc: Verna Yu
Subject: Pre-Meeting: UDI Webinar 09.28
When: September 14, 2021 2:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Zoom

Dear Panel,

Please join us for a pre-meeting in preparation for our virtual breakfast seminar in discussion on UDI Webinar - Advancing Mass Timber in BC

s.15

Page 125 of 394

Withheld pursuant to/removed as

s.15

URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#1100 – 1050 West Pender Street
Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
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Agenda

1. Welcome and Chair's Remarks
2. Hon. David Eby, Attorney General, Minister Responsible for Housing

2.1. Market Update (10 min)

- Executive Committee member updates
- AST decision

2.2. Housing Target Methodology (15 min)

- Current target framework – RGS
- Determining housing needs for the future
- Implementation tools

2.3. Barriers to Market Rental Housing (15 min)

- Burnaby – Inclusionary Zoning and Density Bonus policies
- Vancouver – Vacancy control of SROs
- Cost Escalation – construction and operation

2.4. Update on Provincial initiatives (20 min)

- Broadway Area Plan engagement with COV
- Municipal regulation of tenancies outside of the RTA

2.5. Next Steps

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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www.udi.bc.ca

September 7, 2021

Pietro Calendino
Chair, Planning and Development Committee
City of Burnaby
4949 Canada Way
Burnaby, BC, V5G 1M2

Dear Chair Calendino:

Re: Barriers to the Delivery of Market Rental Housing in Burnaby

Introduction

The City of Burnaby has worked over the past few years to increase the amount of affordable housing units being built throughout the City, while also protecting existing tenants. UDI has been supportive of these efforts. Several UDI members and I participated on the *Mayor's Task Force on Community Housing*, and our Burnaby Liaison Committee worked with staff throughout the development of the *Rental Use Zoning Policy and Implementation Framework* and the *Tenant Assistance Policy*. For the most part, UDI has been supportive of both policies and views them as models for other communities.

However, the City's current approach to the approval of 100% Purpose Built Rental (PBR) buildings is making them unviable for many proponents. As a result, projects are being delayed and some could potentially be cancelled. Thousands of PBR units are at stake, which is the very form of housing for families and individuals that Burnaby has committed to provide following your extensive and commendable public engagement process. PBR not only serves a diversity of residents including varying income levels, ages and employment types, but is also a fundamental part of the housing continuum that the City needs. The City's current approach to PBR effectively prioritizes strata and below-market housing types by making market rental challenging to deliver.

There are two key barriers – the City's inclusionary zoning policy being applied to the PBR projects, and a potential significant change to the density bonusing process.

This letter speaks to three issues:

1. Rental Versus Strata Valuations;
2. Inclusionary Zoning; and
3. Density Bonusing.

Rental Versus Strata Valuations

For the most part, new affordable housing in Burnaby has been delivered alongside new strata residential. However, rental is not the same as strata. Strata floor space has a significantly higher value

than rental floor space. The City has previously recognized this issue with regard to the density bonusing program. Up until now, PBR projects were charged substantially lower density bonus rates - approximately 50% of what equivalent strata buildings would be expected to pay. This was intended to support the feasibility of rental projects, which are valued lower than comparable strata residential projects.

It is not possible for purpose built rental to take on the same level of affordable housing and density bonus expectations as strata residential, and City policies, procedures, and decision-making that do not differentiate in this regard will significantly undermine our members' ability to deliver this much-needed housing form.

In addition, Burnaby's approach to market rental housing across multiple policies has been unclear. If changes in the City's approach are occurring, it is critical that they be communicated to builders who are purchasing sites and developing proposals based on published policy.

Inclusionary Zoning

As noted above, UDI is generally supportive of the City's 20% inclusionary zoning policy because the costs of the program are offset by a 1.1 FAR increase in strata residential floor space being offered to proponents. While this is appropriate for strata developments, it is unworkable for PBR projects because by their very nature, they do not include strata ownership units. If the additional RM density is used to build market rental housing units, the increase in value as a result of the additional density will not offset the costs to provide the required affordable housing units. This is due to strata residential floor space being far more valuable than market rental floor space as noted above.

Density Bonus Payment for Rental

Although no Bulletin or Policy has been released, we understand the Density Bonusing approach has substantially changed – in a way that will undermine our members' ability to deliver market rental.

Some of our members have been informed that PBR projects will be assessed as if they were strata projects to determine the appropriate density bonus value. This approach presents a fundamental change to project economics, as those higher costs may not be able to be absorbed, rendering PBR projects (or the rental component of other projects) unviable. We understand that there could be a potential mechanism to offset the increased density bonuses such as a grant from the City; however, there is no clarity about whether such an approach has been adopted, or how it would be operationalized.

Even if offsets were available, subject to Council approval, such an approach will likely add both time and risk to PBR projects, because there would be no certainty regarding the eligibility, amount, or timing of a grant. It would become too risky to purchase a site and invest in designs/plans for a project proposal to find out much later in the process that it is not viable because the density bonus will have to be paid, with no guarantee of an offsetting grant. Builders will more likely develop 100% PBR projects and voluntary rental units in jurisdictions without this length and risky process. The end result would be a very limited supply of new market rental homes being built, if any.

For those development proposals already underway, it is very difficult to adjust financial commitments after sites have been purchased, and equally as difficult to modify in-stream applications when significant new expectations are introduced without warning. The potential changes to the Density Bonusing approach are very consequential and will dramatically impact the economics of projects, with no clear path for mitigation aside from re-assessing and re-designing them. This would set project timelines back significantly, further impacting their viability and possibly resulting in the cancellation of in-stream PBRs

and rental units, which would undermine the affordability of rental housing in Burnaby. The delivery of PBR represents a critical housing form to fulfill the needs of residents.

As a result of these two issues, we are aware of several PBR projects that may not proceed or may need to be altered significantly, so thousands of planned rental housing units may not be developed in Burnaby. This includes the Starlight Developments project near Lougheed Station, where the proponent is seeking to build 1,200 new infill market rental housing units without any displacement of the existing 528 households on the site. Others, such as Grosvenor, with a large masterplan development project in Brentwood are re-evaluating their ability to deliver the voluntary market rental component of their project. Their proposal calls for approximately 2,000 rental housing units. The significance of these issues cannot be understated, as the imposition of the inclusionary zoning policy and potential new density bonusing approach would amount to what is effectively a moratorium on PBR.

Recommendations

UDI has several recommendations for the City:

- We ask Council to consider having a consultant review the economics of 100% PBR projects compared with strata developments and provide recommendations on whether the inclusionary zoning policy should apply to market rental projects – or what adjustments should be made to the policy to accommodate PBR projects.
- If the change, noted above, to the City's density bonusing approach for PBR and voluntary market rental housing is occurring, we ask that the City reconsider it and acknowledge the fundamental differences between market rental and strata properties. Density bonus valuation for PBR should reflect PBR economics.
- Whether or not changes are made to the City's approach, a Bulletin needs to be released detailing the approach for the density bonusing of PBR projects and voluntary market rental housing. Builders are proceeding with their developments and purchasing sites in Burnaby to build 100% PBR or include rental in their developments, and it appears that other than the two developers mentioned above, the rest of the industry is unaware that there may be a significant change in the density bonusing approach. As noted above, they will have difficulty adjusting their financial commitments and may not proceed with their market rental proposals.

UDI has been pleased to work with Burnaby as it developed very positive policies to increase the number of affordable housing units in the City while protecting tenants. However, a key component of Burnaby's Housing System – 100% PBR projects and voluntary rental units - are becoming almost impossible to build. The voluntary rental component of many mixed tenure developments may have to be re-evaluated, removed, or rendered less affordable, because of the approach the City is taking with regard to inclusionary zoning and density bonus payments for rental. We ask Council review these issues and our recommendations to resolve them.

Yours sincerely,



Anne McMullin
President & CEO, Urban Development Institute

RE: Pre-Meeting Agenda: Advancing Mass Timber in BC

From:	Sheryl Peters <speters@bchousing.org>
To:	Verna Yu <vyu@udi.org>, Andrew Harmsworth <ah@ghl.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Rocky Sethi <rockys@adera.com>
Cc:	Jeff Fisher <jfisher@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent:	September 14, 2021 5:42:12 PM PDT
Attachments:	image009.jpg, image011.jpg, image002.png, image012.jpg, image013.jpg, image010.jpg, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

All – Here is the 'lone' BC Housing project. Bigger than I recall. Currently still undergoing design development and municipal approvals (incl. bldg. dept), but proceeding nonetheless:

122-unit subsidized rental building announced - Kelowna News - Castanet.net

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Sheryl (Lim) Peters | Provincial Director, Redevelopment | Development & Asset Strategies
Office: (604) 439-4142 | speters@bchousing.org | www.bchousing.org

---

From: Verna Yu <vyu@udi.org>
Sent: September 13, 2021 2:50 PM
To: 'Andrew Harmsworth' <ah@ghl.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; Sheryl Peters <speters@bchousing.org>; 'Rocky Sethi' <rockys@adera.com>
Cc: Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: Pre-Meeting Agenda: Advancing Mass Timber in BC

Good afternoon Panel,

I hope everyone had a great weekend! I have attached the agenda outline for discussion tomorrow in advance of the webinar "Advancing Mass Timber in BC" on Tuesday, September 28.

Event Page: http://udi.memberzone.com/events/details/udi-webinar-advancing-mass-timber-in-bc-1726

Look forward to seeing you tomorrow at 2pm.

Kind regards,

Verna

Verna Yu
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



RE: Pre-Meeting Agenda: Advancing Mass Timber in BC

From:	Rocky Sethi <rockys@adera.com>
To:	Sheryl Peters <speters@bchousing.org>, Verna Yu <vyu@udi.org>, Andrew Harmsworth <ah@ghl.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc:	Jeff Fisher <jfisher@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent:	September 14, 2021 5:47:12 PM PDT
Attachments:	image004.jpg, image002.png, image007.jpg, image006.jpg, image005.jpg, image003.jpg, image001.jpg

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A little bigger than 12 units!

Looks great.

Rocky Sethi | Chief Operating Officer
c 778.928.2726 | d 604.637.4301 | t 604.684.8277 | rockys@adera.com
BUILDINGS FOR BETTER LIVES at adera.com

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From: Sheryl Peters <speters@bchousing.org>
Sent: Tuesday, September 14, 2021 5:42 PM
To: Verna Yu <vyu@udi.org>; 'Andrew Harmsworth' <ah@ghl.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; Rocky Sethi <rockys@adera.com>
Cc: Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: Pre-Meeting Agenda: Advancing Mass Timber in BC

All – Here is the 'lone' BC Housing project. Bigger than I recall. Currently still undergoing design development and municipal approvals (incl. bldg. dept), but proceeding nonetheless:

122-unit subsidized rental building announced - Kelowna News - Castanet.net

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Office: (604) 439-4142 | speters@bchousing.org | www.bchousing.org

---

From: Verna Yu <vyu@udi.org>
Sent: September 13, 2021 2:50 PM
To: 'Andrew Harmsworth' <ah@ghl.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; Sheryl Peters <speters@bchousing.org>; 'Rocky Sethi' <rockys@adera.com>
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Event Page: http://udi.memberzone.com/events/details/udi-webinar-advancing-mass-timber-in-bc-1726

Look forward to seeing you tomorrow at 2pm.

Kind regards,

Verna

Verna Yu
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

Hello Steering Committee members,

Update Sept. 16: This meeting is cancelled as we still await the Part 9 analysis which has been delayed due to technical challenges with the software. Please watch for a new invite coming for later in September or very early October.

Update Sept. 8, 2021: With apologies, we need to reschedule this meeting (again). It will now be Sept. 21 from 10 am to noon Pacific (not Sept. 16). Reason for postponement: We await all the Part 9 results and want to give you sufficient review time prior to our discussion. Documents to come as soon as they are ready.

Thank you for your continued patience.
Dale

Please join at the link below or use the new phone-in option.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

UDI Webinar - Advancing Mass Timber - Meeting Minutes

From:	Verna Yu <vyu@udi.org>
To:	Rocky Sethi <rockys@adera.com>, Andrew Harmsworth <ah@ghl.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>
Cc:	Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent:	September 17, 2021 10:34:13 AM PDT
Attachments:	image004.jpg, image006.jpg, image007.jpg, image008.png, image005.jpg, UDI- Premeeting Agenda - 09.28.2021 Event Minutes v2.pdf, image003.jpg

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Good morning everyone,

Happy Friday!

I have attached a copy of the updated notes based on our discussion on Tuesday. You will find the purposed scheduling with order of presentation as well as some key points to address for the webinar on Tuesday, September 28.

Rocky/Zack – is it worth it to double check with OMTI and reconfirm if there is anyone from the office who might want to join the panel or listen in to the webinar?

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

FW: ICAC Council meeting

From: May, Cheryl OHCS:EX <Cheryl.May@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Ramsay, Launa P OHCS:EX <Launa.Ramsay@gov.bc.ca>
Sent: September 17, 2021 5:04:38 PM PDT
Attachments: image001.gif, image002.jpg

Please let me know if you have any items that we would want on the agenda (beyond the roundtable)

For the roundtable, I'll ask Launa to start an eApp for speaking notes.

Thanks,

Cheryl

From: Sue Bate <sbate@bchousing.org>
Sent: Friday, September 17, 2021 4:28 PM
To: Ann McMullin <amcmullin@udi.org>; May, Cheryl OHCS:EX <Cheryl.May@gov.bc.ca>; Chris Atchison <chris.atchison@bccassn.com>; Chris Gardner <chris@icba.ca>; Colleen Wilson <colleen.wilson@aviva.com>; Howard Friedman (external) <howard.friedman2@travelers.com>; Mark Sakai <msakai@bcrea.bc.ca>; Mark Vernon <mvernon@aibc.ca>; Neil Moody <neilmoody@chbabc.org>; Mitchell, Peter FLNR:IN <mitchell@apeg.bc.ca>; Ron Rapp <ron@havan.ca>; Scott McIntyre (external) <smcintyre@egi.ca>; XT:McCurry, Theresa GCPE:IN <tmccurry@asttbc.org>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Tony Gioventu (external) <tony@choa.bc.ca>; Tyler Wightman <tyler.wightman@boabc.org>
Cc: XT:Shen, Cathy BCHM:IN <cshen@bchousing.org>
Subject: ICAC Council meeting

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Happy Friday everyone.

The ICAC Council meeting is fast approaching again at the end of October – as noted in the invite, this will be virtual given the current guidelines around meeting in person which are still in place. In the meantime we are putting together the agenda for the meeting so if you have any items that you would like to specifically speak to that would not form part of the round table update, please let me know by September 24th.

Have a good weekend.

Sue

BC HOUSING

Sue Bate EA to CEO|Executive Office
Office: 604-439-4736 |Cell: 604-512-7849 | sbate@bchousing.org | www.bchousing.org
1701 - 4555 Kingsway, Burnaby, BC V5H 4V8 Canada

My work hours may differ from yours, please don't feel obligated to respond to me during hours that are outside of your work schedule.

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Package

Date and Time of Meeting: Thursday February 4, 2022 | Time: 9:00 a.m. to 12:00 p.m. Pacific Time
Microsoft Teams: Click here to join the meeting

s.15

Acting Chair: Tiffany Warkentin, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro
Meeting Materials

- Agenda (below)
- Draft carbon pollution standard best practices bulletin

Contacts if You Require Assistance

- Hugo Wong, BSSB – 236 478 1406 (call only); hugo.wong@gov.bc.ca

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
9:00 a.m.	Welcome, introductions and opening remarks	Tiffany Warkentin, Acting ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Approval of agenda
1:10 pm.	Subcommittee report out	Hugo Wong, Scott Williams, Alex Blue	▪
1:30 p.m.	Project timelines, carbon pollution standards	BSSB	▪ New timelines for carbon pollution standards
1:45 p.m.	Best practices bulletin	Hugo Wong, BSSB	
2:30 p.m.	Break		
3:40 pm.	Roundtable		▪ To discuss how GHGi may disadvantage smaller homes ▪ Discussing pros/cons of a total GHG approach/emissions cap in some scenarios
4 p.m.	Adjournment	All	

RE: UDI - Advancing Mass Timber

From: Verna Yu <vyu@udi.org>
To: Vasey, Jeff JERI:EX <Jeff.Vasey@gov.bc.ca>, Hutchinson, Jarrett JERI:EX <Jarrett.Hutchinson@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Rocky Sethi <rockys@adera.com>
Sent: September 21, 2021 4:08:06 PM PDT
Attachments: image001.jpg, image002.jpg

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Good afternoon Jeff and Jarrett,

Further to Rocky's note, I have registered you both for the event next week. A recording link of the session will also be sent out post-event.

If your schedules allow and you would like to participate in the panel discussion, please do let me know and I can set up a meeting invitation for your calendars.

Thank you so much!

Kind regards,
Verna

From: Rocky Sethi <rockys@adera.com>
Sent: September 19, 2021 9:24 PM
To: Vasey, Jeff JERI:EX <Jeff.Vasey@gov.bc.ca>; Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>
Subject: UDI - Advancing Mass Timber

Gents,

On Sept 28th, 9:15-10;30 AM, UDI is hosting a webinar aimed to update the members of UDI on progress in Mass Timber.

Link to reg page: http://udi.memberzone.com/events/details/udi-webinar-advancing-mass-timber-in-bc-1726

We wanted to ask whether either of you would be available to attend. Not to actively participate, but it might she some light on industry concerns and areas of interest.

If you wanted to shed some light on what OMTI is up to, I am sure we can carve some time out for this.

I have cc'd to UDI staff, and Zach from BSSB, who is on the panel (I am moderating).

Let me/us know! I hope one (or both) of you can make it.

Cheers,

Rocky Sethi | Chief Operating Officer
d 604.637.4301 | t 604.684.8277 | rockys@adera.com

Suite 2200 1055 Dunsmuir Street | Four Bentall Centre, PO Box 49214 | Vancouver BC V7X 1K8
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Agenda and materials, Energy Step Code Council meeting

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, bea.bains@fortisbc.com, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, ablue@EvokeBuildings.com, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Chris Atchison <chris.atchison@bccassn.com>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, ruta.fluxgold@canada.ca, sfralin@ahma-bc.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, s.22 , May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, sean.pander@vancouver.ca, roberto@zebx.org, warrenp@bccassn.com, Katy Fairley <katy.fairley@bccassn.com>, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, lsampliner@portmoody.ca, muneesh@boma.bc.ca, Maxwell.Sykes@surrey.ca, rthe@wesgroup.ca, Pridie, Holly MUNI:EX <Holly.Pridie@gov.bc.ca>, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, pauline@chbabc.org
Cc:	Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>, Remi Charron <rcharron@bchousing.org>, Jackie Kanyuk <jackie@bcnpha.ca>, ian@bcnpha.ca, Li, Charling <charling.li@vancouver.ca>, Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>
Sent:	September 21, 2021 4:14:46 PM PDT
Attachments:	Metrics One-Pagers v5.2.docx, ESCC agenda 2021 09 22.docx

Hello everyone,

Please find an agenda and another document with a series of examples illustrating the impacts of a potential stepped carbon pollution standard on buildings. Please note the document is not quite finished. For example, there is no information yet on the hotel archetype. Our intent is to take your input and questions during the meeting, and send you a finalized document shortly after the meeting so you can send it to your members and colleagues. It will also be a useful springboard for the policy and implementation discussion we hope to have later in the meeting.

Thank you to those who reviewed an earlier version of the document and provided comments.

Looking forward to it.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
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Carbon pollution standards: example GHG intensities and ICC samples

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Preface

The following high-level summaries are designed to isolate and highlight some potential financial and technical implications of a stepped carbon pollution standard for buildings in British Columbia which local governments may opt-in to.

The following pages contain one example each of a multi-unit residential building, office, retail space, hotel, and single-family home in Climate Zones 4 and 7a. In each case, the building design and envelope remains static at Step 2, while different mechanical systems are systematically introduced to meet certain stepped GHG intensity (GHGI) thresholds, which are measured in kilograms of carbon dioxide equivalent per year per square metre of building floor area ($kgCO2e/m^2/year$). The thresholds are not finalized, but intended as samples.

Each archetype also includes a secondary table, which illustrates the amount of renewable gas (RG) required to achieve the same stepped GHGI targets if all-gas equipment were used. The use of RG to meet the GHGI thresholds would only be available if the RG were purchased in such a way that the building would permanently use low-carbon fuels regardless of change in owner or ratepayer.

This analysis is limited by design, and is not representative of all buildings in all situations.

This analysis, along with further consultation with members of the Energy Step Code Council and other policy direction, will inform future decisions or best practice guidelines on the following:

- Whether GHG and Energy Steps should be indexed together
- Whether the highest levels of energy efficiency are required to cost-effectively achieve the lowest GHG outcomes
- Whether targets require adjustment for different archetypes, climate zones, or other situations.

The data that informs these tables is from the 2021 update to the BC Energy Step Code Metrics Research Report, written by Evoke Buildings and E3 Eco Group. More examples may be found in the Metrics Research Report. Thanks to Alex Blue, Einar Halbig, Donald Fast, and M'Beth Schoenfeld.

Assumptions

- *Electricity emissions factor: 0.011kg CO2e/kWh as listed currently in the BC Building Code*
- *Natural Gas emissions factor: 0.185kg CO2e/kWh as listed currently in the BC Building Code*
- *Renewable gas emissions factor: 0.00105551915kg CO2e/kWh (converted from 0.29kg CO2e/GJ as described in the BC Best Practices Methodology for Quantifying Greenhouse Gas Emissions)*
- *Cost of 100% conventional natural gas: $0.042 $/kWh*
- *Cost of 100% RNG blend: $0.066 $/kWh*
- *Cost of BC Hydro residential electricity: $0.094 $/kWh (Step 1) or $0.141 $/kWh (Step 2)*
- *Cost of BC Hydro commercial electricity: $0.068 $/kWh + 12.4 $/kW*

Other assumptions:

- *Other costing data, such as panel size or service upgrade charges, are not included in this analysis given the unique nature of those costs to each project.*

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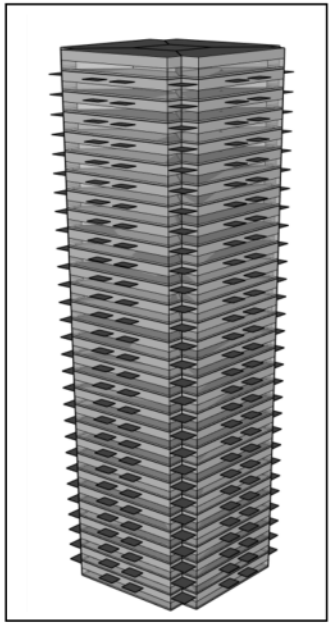
Overall highlights from analysis

- The analysis prioritizes maintaining the envelope/other characteristics constant over achieving draft target levels. Relatively small variations at the upper target levels are likely to be able to be made up by reducing loads or switching some additional portion of the building energy to lower emissions fuels such as electricity or RNG, and some variation would be expected between buildings based on space mix, density, etc.
- A GHGI of 1 would drive EUI reductions beyond current Step Code targets for all archetypes.
- RNG has a lower emissions factor than electricity in this analysis; therefore lower totals are possible.
- RNG costs are effectively breakeven with traditional NG costs over the 20-year analysis period, as RNG leads to a much reduced carbon tax.

High-rise MURB

Base case

- Step 2 envelope
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- Vertical surface area to floor area ratio (VFAR): 0.6
- Medium density (approx. 55m2 average unit size)
- Cooling equipment: Packaged terminal air conditioner (PTAC) units in suites, or fan coils if heating system is FC



Base Case	Climate Zone 4	Climate Zone 7a
Step 2	Walls R-7 Roof R-40 WWR 40% Window USI 2.0 SHGC 0.3 Infiltration: No savings beyond code 60% HRV	Walls R-10 Roof R-40 WWR 20% Window USI 1.2 SHGC 0.3 Infiltration: half of code level 80% HRV

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High-Rise MURB - Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	11.7	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	10.2	N/A	10.2
2	6 (Option a)	7.8	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	10.8	55%	10.2
2	6 (Option b)	6.4	Electric baseboard	Gas	-3	-0.1%	9.9		
2	3	3.2	Air-source heat pump w/ 30% NG backup	Electric resistance	42	1.4%	9.9	80%	10.2
2	1 (Option a)	1.3	Electric baseboard	Electric resistance	-3	-0.1%	10.4	100%	10.2
2	1 (Option b)	1.2	ASHP, no NG backup	Electric resistance	65	2.1%	9.5		

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High-Rise MURB - Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	12.6	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	11.0	N/A	11.0
2	6 (Option a)	7.5	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	11.6	60%	11.0
2	6	6.5	Electric baseboard	Gas	-4	-0.1%	13.2		
2	3	3.2	Air-source heat pump w/ 30% NG backup	Electric resistance	49	1.5%	10.9	85%	11.0
2	1 (Option a)	1.4	Electric baseboard	Electric resistance	-4	-0.1%	11.4	100%	11.0
2	1 (Option b)	1.4	ASHP, no NG backup	Electric resistance	74	2.3%	10.7		

Highlights from analysis

- If the envelope were Step 4, annual operational costs would be reduced by up to 25%
- Larger units/lower density yields lower GHGIs
- A wood framed low/mid-rise would have lower ICC at the same performance level, or higher performance at the same cost.

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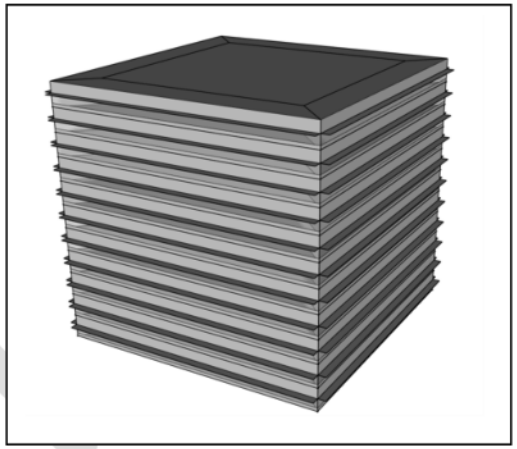
Office

Base case



- Step 2 envelope
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- 25% lighting savings

Base Case	Climate Zone 4	Climate Zone 7a
Step 2	Walls R-7 Roof R-40 WWR 50% Window USI 2.0 SHGC 0.3 Infiltration: No savings beyond code 60% HRV	Walls R-20 Roof R-20 WWR 30% Window USI 1.2 SHGC 0.3 Infiltration: half of code level 80% HRV

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Office - Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	6.0	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	7.7	N/A	7.7
2	6 (option a)	4.2	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	7.8	0%	7.7
2	6 (option b)	4.0	Air-source heat pump w/ 30% NG backup	High eff. gas (95%)	42	1.4%	7.3		
2	3	1.9	Air-source heat pump w/ 30% NG backup	Electric resistance	42	1.4%	7.3	60%	7.7
2	1	0.9	ASHP, no NG backup	Electric resistance	65	2.1%	7.0	95%	7.7

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Office - Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	5.9	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	8.6	N/A	8.6
2	6 (option a)	4.1	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	8.6	0%	8.6
2	6 (option b)	3.9	Air-source heat pump w/ 30% NG backup	High eff. gas (95%)	49	1.6%	8.2		
2	3	1.8	Air-source heat pump w/ 30% NG backup	Electric resistance	49	1.6%	8.2	60%	8.5
2	1	0.8	ASHP, no NG backup	Electric resistance	75	2.4%	8.0	95%	8.5

Highlights from analysis

- Current highest target would likely not drive a technology change for most projects.
- DHW is fairly low for this archetype; larger focus on space heating.
- If the envelope were Step 4, annual operational costs would be very similar.
- Occupant density affects GHGI for the first two GHG Steps. Adds approximately 1 to the GHGI if density doubles. Occupant density does not affect the GHGI of the fully decarbonized building.

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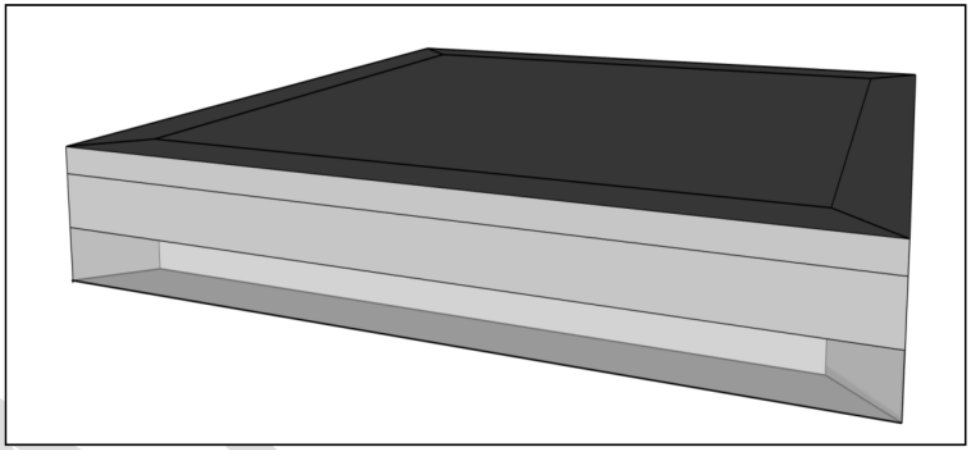
Retail

Base case

- Step 2 envelope
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- 25% lighting savings vs NECB 2015
- Looking at Mall results rather than big box, as mall has higher GHGI.



Base Case	Climate Zone 4	Climate Zone 7a
Step 2	Walls R-10 Roof R-40 WWR 20% Window USI 2.0 Infiltration: No savings beyond code 60% HRV	Walls R-20 Roof R-40 WWR 20% Window USI 1.6 Infiltration: half of code level 80% HRV

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Retail - Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	6.6	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	1.8	N/A	1.8
2	6	5.8	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	1.9	15%	1.8
2	3	2.1	Air-source heat pump w/ 10% NG backup	High eff. gas (95%)	43	1.2%	1.9	65%	1.8
2	1	1.3	Air-source heat pump w/ 10% NG backup	Electric resistance	43	1.2%	2.0	95%	1.8

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Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	7.7	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	2.4	N/A	2.4
2	6	6.9	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	2.5	25%	2.4
2	3	2.4	Air-source heat pump w/ 10% NG backup	High eff. gas (95%)	48	1.4%	2.6	70%	2.4
2	1	1.7	Air-source heat pump w/ 10% NG backup	Electric resistance	48	1.4%	2.7	100%	2.5

Highlights from analysis

- If the envelope were Step 3 (highest step for this building type), annual operational costs would be very similar
- GHGIs depend on space mix/archetype.
    - GHGIs are higher in malls than in big box stores (used malls in the above, difference on base case fully natural gas is approx. 1.7 GHGI; difference becomes negligible in lowest GHG cases)
- DHW is relatively low for this archetype; larger focus on space heating.

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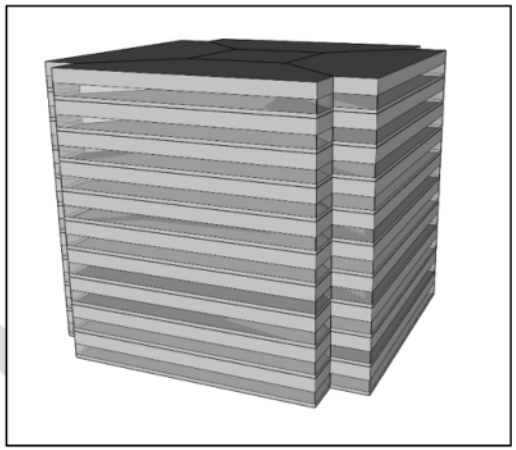
Hotel (to come)

Base case



- Step 2 envelope
- 100% conventional natural gas (to help isolate changes and costs related to carbon requirements)
- *Metrics team to fill out pertinent ECMs in the bullets below*
- Vertical surface area to floor area ratio (VFAR)
- Roof insulation:
- Wall insulation:
- Window-to-wall ratio:
- Solar heat gain co-efficient:
- Cooling:

Climate Zone 4

Step	Sample GHGI threshold	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC ($/m2)	% ICC compared to base case	Annual Utility Savings vs base case ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual $ premium of RNG
2	XXX	Gas, XXX EQUIPMENT	Gas, XXX EQUIPMENT				0	
2	6 (Option a)	Gas, XXX EQUIPMENT	Electric, XXX EQUIPMENT					
2	3 (Option a)	*Electric*	*Gas*					
2	1	Electric	Electric				100?	

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Climate Zone 7a

Step	Sample GHGI threshold	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC ($/m2)	% ICC compared to base case	Annual Utility Savings vs base case ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual $ premium of RNG
2	XXX	Gas, XXX EQUIPMENT	Gas, XXX EQUIPMENT				0	
2	6 (Option a)	Gas, XXX EQUIPMENT	Electric, XXX EQUIPMENT					
2	3 (Option a)	*Electric baseboard*	*Gas*					
2	1	Electric	Electric				100?	

Highlights from analysis

- To come
- There is higher laundry use in these archetypes (10%+ of energy use), so laundry energy source affects GHGI.

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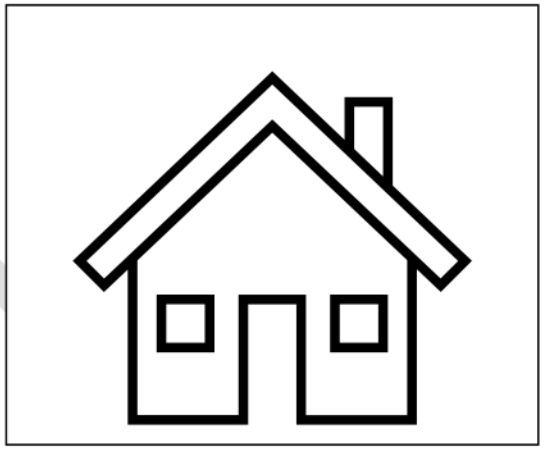
Medium single-family home

Base case



- Step 3 envelope
- Medium SFD
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- Size: 2,550 ft^2
- SAR (total envelope to floor area ratio): 1.91

Base Case	Climate Zone 4	Climate Zone 7a
Step 3	Walls R-22 Roof R-50 Window USI 1.4 SHGC 0.35 ACH 1.5 No HRV No drainwater heat recovery	Walls R-22 Roof R-60 Foundation walls R-17 Window USI 1.4 SHGC 0.35 ACH 1.5 No HRV No drainwater heat recovery

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Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
3	N/A	7.6	Gas furnace	Tankless gas heater 95%	0	0%	4.3	N/A	4.3
3	6 (option a)	5.5	Gas furnace	Heat pump	3	0.1%	4.7	25%	4.3
3	6 (option b)	5.7	Air source heat pump	Gas water heater	10	0.4%	5.0		
3	3	3.4	Air source heat pump	Tankless gas heater 95%	12	0.6%	4.8	65%	4.3
3	1	0.6	Air source heat pump	Heat pump	17	0.8%	4.4	95%	4.3

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Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
3	N/A	18.4	Gas furnace	Gas water heater	0	0	5.6	N/A	5.6
3	Does not meet	14.3	Gas furnace	Heat pump	6	0.2%	5.9	N/A	N/A
3	6	6.5	Cold climate heat pump	Gas water heater	13	0.4%	6.5	70%	5.6
3	3	4.1	Cold climate heat pump	Tankless gas heater 95%	16	0.5%	6.3	90%	5.6
3	1	0.9	Cold climate heat pump	Heat pump	19	0.6%	6.4	97%	5.6

Highlights from analysis

- In cold climates, particularly for buildings at lower steps, the DHW forms a smaller part of the total energy use and conventional natural gas use; the focus on reductions is on the heating system.
- If the envelope were Step 5, annual operational costs would be approximately 15% lower (varies depending on actual design).

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ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Package

Date and Time of Meeting: Thursday September 22, 2021 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Joining Option 1: Webinar link: Click here to join the meeting
Joining Option 2: Dial-in option (audio only):
s.15

Chair: Zachary May, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro
Meeting Materials

- Agenda (below)
- Summary draft of impact analysis of carbon pollution requirements for new construction

Contacts if You Require Assistance

- Hugo Wong, BSSB – 236 478 1406 (call only); hugo.wong@gov.bc.ca

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
1:00 p.m.	Welcome, introductions and opening remarks	Zachary May, ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Approval of agenda
1:10 pm.	Feedback on draft targets for building archetypes	Zachary May, ESCC Chair and others	To discuss: ▪ Description of impact analysis on different building archetypes ▪ Develop key questions and information for stakeholder engagement plan
2:30 p.m.	Break		
2:40 p.m.	Next steps	All	To discuss: ▪ Pending policy decisions ▪ Discuss recommendations on content for regulation versus best practices guide
4 p.m.	Adjournment	All	

Hello,

The Building and Safety Standards Branch (Ministry of Attorney General and Minister Responsible for Housing) is responsible for the BC Building Code which regulates health and safety, fire and structural protection, accessibility, and energy and water efficiency in building construction.

The Branch is developing an Existing Buildings Renewal Strategy that provides a path for today's buildings to become more energy and water efficient, cleaner, and safer for British Columbians during events like earthquakes, wildfires, wildfire smoke, heat waves, and floods.

BSSB will be hosting a series of engagement sessions on increasing resilience and, carbon and energy performance in existing buildings, and would like to extend an invitation to you and your organization to attend the October 6 from 10:00am – 12:00pm PDT engagement session on policies to support water conservation in existing buildings.

Future sessions will be held throughout the fall (see schedule below) to continue discussions and partnerships with affected parties and key influencers, such as your organization.

Topic
Date
Existing Buildings – Wildfire risk
Tuesday October 19th, 2021
Existing Buildings – Energy and carbon, regulations
Wednesday November 3rd, 2021*
Existing Buildings – Overheating and air quality
Thursday November 4th, 2021
Existing buildings – Energy and carbon, supporting measures
Tuesday November 16th, 2021*
Existing Buildings – Integrating mitigation and adaptation
Thursday November 25th, 2021
*Dates subject to change. BSSB will provide sufficient notice of any adjustments

If you have any questions in advance of the session, or written feedback on the engagement topics, please contact Nicole Vukosavljevic by email at Nicole.vukosavljevic@gov.bc.ca.

We look forward to your participation and input.

Thank you,
Nicole

Nicole Vukosavljevic (she/her)
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
UC: 778-974-5044 (preferred) | Cell: 250-883-7419 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

Topic: BSSB -Water Conservation Engagement Session
Time: Oct 6, 2021 10:00 AM Pacific Time (US and Canada)

Join Zoom Meeting
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INTEGRAL

Existing Buildings Renewal Strategy

Workshop Agenda – Water Conservation

Date: Wednesday, October 6th, 2021
Time: 10:00am – 12:00pm

Objectives:

- Clarify the existing program landscape and the Province's role in water conservation efforts in existing buildings.
- Identify the major barriers that stakeholders face in implementing water conservation measures in existing buildings.
- Identify potential actions that the Building and Safety Standards Branch can take to increase uptake of water conservation measures in existing buildings.

AGENDA	TIME
Welcome and Session Orientation	10 mins
Background • Water shortages and associated climate change trends in B.C. • Potential impacts of water shortage and restrictions on buildings • Opportunities and measures to conserve water in existing buildings • Existing policy landscape, initiatives and tools in B.C.	15 mins
Breakout Group #1 • Discussion topic: Participant experience implementing water conservation measures in existing buildings and lessons learned	35 mins
Breakout Group #2 • Discussion topic: The role of the Building and Safety Standards Branch and potential policy actions/resources to improve water conservation in existing buildings	50 mins
Report Back and Next Steps	10 mins
Close	

RE: UDI - Advancing Mass Timber

From: Hutchinson, Jarrett JERI:EX <Jarrett.Hutchinson@gov.bc.ca>
To: Verna Yu <vyu@udi.org>, Rocky Sethi <rockys@adera.com>
Cc: Jeff Fisher <jfisher@udi.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Vasey, Jeff JERI:EX <Jeff.Vasey@gov.bc.ca>
Sent: September 21, 2021 4:21:01 PM PDT
Attachments: image001.jpg, image003.jpg

Hi Verna,
Thanks so much. Rocky: My apologies for the delay in responding to your earlier email.
We had previously registered two of our senior staff to attend this event. But I also appreciate the initiative you took to register Jeff and I as well! At this point, I'm not sure either Jeff or I will be able to attend.
We'll definitely have our team there to listen to the discussion and collectively we'll be more informed.
These events are so good in building up the body of knowledge. Thanks for your efforts.
Regards,

Jarrett Hutchinson | Executive Director
Office of Mass Timber Implementation
250-208-7277

From: Verna Yu <vyu@udi.org>
Sent: September 21, 2021 4:08 PM
To: Vasey, Jeff JERI:EX <Jeff.Vasey@gov.bc.ca>; Hutchinson, Jarrett JERI:EX <Jarrett.Hutchinson@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; 'Rocky Sethi' <rockys@adera.com>
Subject: RE: UDI - Advancing Mass Timber

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon Jeff and Jarrett,

Further to Rocky's note, I have registered you both for the event next week. A recording link of the session will also be sent out post-event.

If your schedules allow and you would like to participate in the panel discussion, please do let me know and I can set up a meeting invitation for your calendars.

Thank you so much!

Kind regards,
Verna

From: Rocky Sethi <rockys@adera.com>
Sent: September 19, 2021 9:24 PM
To: Vasey, Jeff JERI:EX <Jeff.Vasey@gov.bc.ca>; Hutchinson, Jarrett OHCS:EX <Jarrett.Hutchinson@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>
Subject: UDI - Advancing Mass Timber

Gents,

On Sept 28th, 9:15-10;30 AM, UDI is hosting a webinar aimed to update the members of UDI on progress in Mass Timber.

Link to reg page: http://udi.memberzone.com/events/details/udi-webinar-advancing-mass-timber-in-bc-1726

We wanted to ask whether either of you would be available to attend. Not to actively participate, but it might she some light on industry concerns and areas of interest.

If you wanted to shed some light on what OMTI is up to, I am sure we can carve some time out for this.

I have cc′d to UDI staff, and Zach from BSSB, who is on the panel (I am moderating).

Let me/us know! I hope one (or both) of you can make it.

Cheers,

Rocky Sethi | Chief Operating Officer
d 604.637.4301 | t 604.684.8277 | rockys@adera.com

Suite 2200 1055 Dunsmuir Street | Four Bentall Centre, PO Box 49214 | Vancouver BC V7X 1K8
BUILDINGS FOR BETTER LIVES at adera.com

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NOTICE: This message is intended only for the use of the person to whom it is addressed and may contain information that is privileged or confidential. If you have received this message in error, please notify us immediately and delete the message without copying or forwarding it to anyone.

Learn more about our drive to be the **Best Mass Timber Builder in the World** with SmartWood™

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Re: 382294_Outside Caller_[s.22]

From: May, Zachary OHCS:EX
To: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>
Cc: Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>, Horan, Samantha ENV:EX <Samantha.Horan@gov.bc.ca>, O'Grady, Ryan N ENV:EX <Ryan.OGrady@gov.bc.ca>, Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Sent: September 23, 2021 7:06:09 PM PDT

Happy to pick up this one.

Best,

Zachary D. May
Executive Director (acting)
Building and Safety Standards Branch
778-679-9641

On Sep 23, 2021, at 4:38 PM, Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca> wrote:

Thank you Hurrian.

It sounds like Zachary May's team is indeed the best fit to handle this call back.
I have sent the recommendation our DMO, who will refer it over to BSSB.

All the best,
Cheryl

Cheryl Tromp
Executive Administrative Assistant
Jeremy Hewitt, Assistant Deputy Minister
Climate Action Secretariat | Ministry of Environment and Climate Change Strategy

---

From: Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Sent: September 22, 2021 3:41 PM
To: Horan, Samantha ENV:EX <Samantha.Horan@gov.bc.ca>; O'Grady, Ryan N ENV:EX <Ryan.OGrady@gov.bc.ca>
Cc: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: 382294_Outside Caller_[s.22]

Hi,

I think this is a discussion better suited for Zachary May's (cc'd) team over at OHCS. I spoke with[s.22] and he referenced a presentation that Zachary had delivered at UDI.

Specifically, he builds mass timber passive houses and he wanted to know the GHG intensity per meter squared that would align with the step code that is coming in. He is hoping that his buildings would comply but he wanted to make sure it was correct.

Is this something that he can pass to OHCS. If we need to handle it, then I would request that Zachary shares the deck that he had presented.

Hurrian

From: Horan, Samantha ENV:EX <Samantha.Horan@gov.bc.ca>
Sent: September 22, 2021 3:11 PM
To: O'Grady, Ryan N ENV:EX <Ryan.OGrady@gov.bc.ca>; Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>
Cc: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>
Subject: FW: 382294_Outside Caller_s.22

Hi Ryan and Hurrian,

Are one of you able to take this on and call s.22 . Chris has suggested it should be one of you.

Please be aware the template below is due back to me September 29.

Thank you,
Sam

From: Gilmore, Christopher ENV:EX <Christopher.Gilmore@gov.bc.ca>
Sent: September 22, 2021 3:05 PM
To: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>
Cc: Horan, Samantha ENV:EX <Samantha.Horan@gov.bc.ca>
Subject: RE: 382294_Outside Caller_s.22

Given its sectoral targest focus – check with Hurrian or Ryan O'Grady on the buildings side.

From: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>
Sent: September 22, 2021 3:03 PM
To: Gilmore, Christopher ENV:EX <Christopher.Gilmore@gov.bc.ca>
Cc: Horan, Samantha ENV:EX <Samantha.Horan@gov.bc.ca>
Subject: FW: 382294_Outside Caller_s.22

Hi Chris,

As this is in regards to the building sector, would it be for your team?
Or let me know who you think its best to redirect it to.

Thank you,
Cheryl

Cheryl Tromp
Executive Administrative Assistant
Jeremy Hewitt, Assistant Deputy Minister
Climate Action Secretariat | Ministry of Environment and Climate Change Strategy

---

From: Gordon, Maureen ENV:EX <Maureen.Gordon@gov.bc.ca>
Sent: September 22, 2021 10:22 AM
To: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>
Cc: Moran, Jennifer ENV:EX <Jennifer.L.Moran@gov.bc.ca>
Subject: 382294_Outside Caller_s.22

Hi Cheryl,

Please forward to the appropriate staff for call back. Once the table is completed it can be routed back to the DMO.

I've dropped a line down to you in CLIFF.

DMO REQUEST FOR CALL BACK	
CLIFF Reference #	382294

Date of Phone Call	September 22, 2021
Due Date for Response	**September 29, 2021**
Caller Name/Number	s.22
Caller Email Address	
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STAFF RESPONSE	
Division/Branch Responsible	[INSERT ADMO/INSERT BRANCH]
Contact Name/Title	[INSERT NAME/INSERT TITLE]
Contact Number	[INSERT NUMBER]
Date of Response	[INSERT DATE OF CALL BACK]
Call Back Details: [Please include a brief explanation (bullets) of what was discussed, what information was provided to the caller, and their response.]	

Note this table constitutes an official record to be filed in the DMO.

Thank you.

Maureen Gordon
A/Administrative Assistant
Executive Operations
Deputy Minister's Office
Ministry of Environment & Climate Change Strategy
Phone: 778.974.6187
Email: Maureen.Gordon@gov.bc.ca

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FYI | FW: 382294_Outside Caller_[s.22]

From: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 24, 2021 8:59:44 AM PDT

Good morning Zac,

Looks like this has now been sent over by the DMO. Please note Maureen does not require a call log.

Thank you!

Best,

Jessica Alexander | *Office Manager*
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live, work and play

---

From: Gordon, Maureen ENV:EX <Maureen.Gordon@gov.bc.ca>
Sent: Friday, September 24, 2021 8:57 AM
To: Alexander, Jessica OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: FW: 382294_Outside Caller_[s.22]

Hi Jessica,

This outside caller phoned our Deputy Minister's Office a few days ago requesting the following information:

[s.22] would like to speak with someone regarding BC's green house gas intensity targets for the building sector. He said someone recently did a great presentation to their company at UDI and the material may have been up online for a while, but he cannot find it now and believes it was our Ministry."

Our Climate Action Secretariat Division, advised that I forward to you for Zachary May with OHCS to respond directly with caller. (Please see below email from Cheryl Tromp and[s.22] contact information at bottom of email trail.)

I will now close this off from our side indicating response completed and will upload this email train to our records system and I do not require call log below completed by Zachary.

Thank you.

Best,

Maureen Gordon
A/Administrative Assistant
Executive Operations
Deputy Minister's Office
Ministry of Environment & Climate Change Strategy
Phone: 778.974.6187
Email: Maureen.Gordon@gov.bc.ca

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---

From: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>
Sent: September 23, 2021 4:34 PM
To: Gordon, Maureen ENV:EX <Maureen.Gordon@gov.bc.ca>

Subject: FW: 382294_Outside Caller_[s.22]

Hi Maureen,

Please see the recommendation below that this call back is handled by Zachary May in OHCS, as he delivered the original presentation the caller is referring to.

The office manager of BSSB is Jessica Alexander,

Jessica.Alexander@gov.bc.ca.

Thank you,
Cheryl

Cheryl Tromp
Executive Administrative Assistant
Jeremy Hewitt, Assistant Deputy Minister
Climate Action Secretariat | Ministry of Environment and Climate Change Strategy

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Cc: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>
Subject: FW: 382294_Outside Caller_[s.22]

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Cheryl Tromp
Executive Administrative Assistant
Jeremy Hewitt, Assistant Deputy Minister
Climate Action Secretariat | Ministry of Environment and Climate Change Strategy

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Sent: September 22, 2021 10:22 AM
To: Tromp, Cheryl ENV:EX <Cheryl.Tromp@gov.bc.ca>
Cc: Moran, Jennifer ENV:EX <Jennifer.L.Moran@gov.bc.ca>
Subject: 382294_Outside Caller_s.22

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I've dropped a line down to you in CLIFF.

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Division/Branch Responsible	[INSERT ADMO/INSERT BRANCH]
Contact Name/Title	[INSERT NAME/INSERT TITLE]
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Thank you.

Maureen Gordon
A/Administrative Assistant
Executive Operations

Deputy Minister's Office
Ministry of Environment & Climate Change Strategy
Phone: 778.974.6187
Email: Maureen.Gordon@gov.bc.ca

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Reminder: UDI Webinar: Advancing Mass Timber in BC starts in 1 day

From: Zoom <no-reply@zoom.us>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: September 27, 2021 10:13:46 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary May (Government of BC),

This is a reminder that "UDI Webinar: Advancing Mass Timber in BC" will begin in 1 day on:
Date Time: Sep 28, 2021 09:30 AM Vancouver

Join from a PC, Mac, iPad, iPhone or Android device:

Click Here to Join
Note: This link should not be shared with others; it is unique to you.
Add to Calendar Add to Google Calendar Add to Yahoo Calendar

Or join by phone:

s.15

You can cancel your registration at any time.

RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

From:	Rocky Sethi <rockys@adera.com>
To:	Verna Yu <vyu@udi.org>, Andrew Harmsworth <ah@ghl.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>
Cc:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Anne McMullin <AMcMullin@udi.org>
Sent:	September 27, 2021 12:19:48 PM PDT
Attachments:	image003.jpg, image001.png, image005.jpg, image006.jpg, image004.jpg, image007.png, image002.jpg, UDI- Premeeting Agenda - 09.28.2021 Event Minutes v2.pdf

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Happy Monday all!

Just reaching out to everyone to ensure they're comfortable for tomorrow and have provided any presentations to Verna.

As per the attached agenda,

TIME	ACTIVITY	DURATION	LEAD
9:15	Dry Run	15	
9:30	UDI Introduction Thank Sponsors	2	Anne McMullin
9:32	Sponsor Remarks – BC Housing	5	Sheryl Peters
9:37	Introduction & Overview	5	Rocky Sethi
9:42	Panel introduction	5	All
9:47	Presentation 1	8-10	Patrick Enright
9:57	Presentation 2	10-15	Andrew Harmsworth
10:12	Presentation 3	8-10	Zachary May
10:22	Moderated Discussion Q&A w/moderator	8-10	All
10:30	Webinar concludes		Rocky Sethi

UDI will be pushing for questions for the Q&A so hopefully there's a few good ones for the panel. Verna: I would ask that you 'plant' a few questions to prompt this discussion to happen as this is less of a moderated panel, and more of a presentation/Q&A format at this point

My cell is 778.928.2726 if you want to discuss anything in advance, cheers.

Rocky Sethi | Chief Operating Officer
c 778.928.2726 | d 604.637.4301 | t 604.684.8277 | rockys@adera.com
BUILDINGS FOR BETTER LIVES at adera.com

Please consider the environment before printing this email - Adera Cares

---

From: Verna Yu <vyu@udi.org>
Sent: Friday, September 17, 2021 10:34 AM
To: Rocky Sethi <rockys@adera.com>; 'Andrew Harmsworth' <ah@ghl.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; 'Sheryl Peters' <speters@bchousing.org>

Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: UDI Webinar - Advancing Mass Timber - Meeting Minutes

Good morning everyone,

Happy Friday!

I have attached a copy of the updated notes based on our discussion on Tuesday. You will find the purposed scheduling with order of presentation as well as some key points to address for the webinar on Tuesday, September 28.

Rocky/Zack – is it worth it to double check with OMTI and reconfirm if there is anyone from the office who might want to join the panel or listen in to the webinar?

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



"Advancing Mass Timber"

Webinar Pre-Meeting Meeting Minutes

Tuesday, September 14, 2021 | 2:00 pm – 3:00 pm

- Purposed Format
  - 8-10 minutes each – individual overview on topic
  - 8-10 minutes conversation / moderated Q&A

- Confirm order of presentation/topics
  - Sheryl and Rocky to share examples of their projects and highlight the benefits during intro
  - Patrick Enright, Senior Green Building Engineer - City of Vancouver
    - introduce project
    - where we are and the intent
  - Andrew Harmsworth, Principal - GHL Consultants Ltd.
    - Review report and presentation
  - Zachary May, Acting Executive Director, Building & Safety Standards Branch - Province of BC
    - Future work - what is happening with the code and process
    - National system and how best to use our voices

Proposed Schedule:

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10:30	Webinar concludes		Rocky Sethi

September 21, 2021: Please note new meeting date and start time – as per MO's request. Thank you

July 12, 2021:
Attendees List:

* Richard Fyfe, DAG
* Angela Cooke, Associate DM
* Cheryl May, ADM

Weekly Guests – for BCH discussion only (first 10 minutes of each meeting – beginning on July 15, 2021)

* Douglas S. Scott, DM, CAS
* Holly Cairns, Principal, CAS

Microsoft Teams meeting
Join on your computer or mobile app
Click here to join the meeting<https://teams.microsoft.com/l/meetup-
s.15

RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

From:	Verna Yu <vyu@udi.org>
To:	Andrew Harmsworth <ah@ghl.ca>, Rocky Sethi <rockys@adera.com>, Enright, Patrick <Patrick.Enright@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>
Cc:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Anne McMullin <AMcMullin@udi.org>
Sent:	September 27, 2021 1:32:23 PM PDT
Attachments:	image004.jpg, image002.png, image006.jpg, image009.jpg, image005.jpg, image003.jpg, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Andrew,

Sounds great! You will be able to share your screen and control your own slides during the presentation. We will also be doing a tech-check tomorrow morning at 9:15 just before the webinar to ensure that everyone is set-up.

If you cannot find your Zoom panelist link in your calendar, please let me know so I may resend the information over to you.

Kind regards,
Verna

From: Andrew Harmsworth <ah@ghl.ca>
Sent: September 27, 2021 1:26 PM
To: Rocky Sethi <rockys@adera.com>; Verna Yu <vyu@udi.org>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; 'Sheryl Peters' <speters@bchousing.org>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Anne McMullin <AMcMullin@udi.org>
Subject: RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

Still polishing things, but yes, I am ready, Vera, will have it over to you later today.

Are you changing slides, - I would prefer to share my screen and control that myself.

Andrew Harmsworth, M Eng, P Eng, PE, CP, FEC
GHL CONSULTANTS LTD
Building Codes & Fire Science
409 Granville Street, Suite 950, Vancouver, BC V6C 1T2
P 604 689 4449 Ext 107 \ **D** 604-335-7647 \ **E** ah@ghl.ca \ **W** www.ghl.ca

A member company of **Saffire Safety Consultants Inc** \ www.saffire.ca

This email transmission is intended solely for the use of the individual or entity named above and may contain information that is PRIVILEGED AND CONFIDENTIAL. If you are not the intended recipient, please advise us by returning the email message.

From: Rocky Sethi <rockys@adera.com>
Sent: September 27, 2021 12:20 PM
To: Verna Yu <vyu@udi.org>; Andrew Harmsworth <ah@ghl.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; 'Sheryl Peters' <speters@bchousing.org>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Anne McMullin <AMcMullin@udi.org>
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BUILDINGS FOR BETTER LIVES at adera.com

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Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

From:	Enright, Patrick <Patrick.Enright@vancouver.ca>
To:	Verna Yu <vyu@udi.org>, Andrew Harmsworth <ah@ghl.ca>, Rocky Sethi <rockys@adera.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>
Cc:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Anne McMullin <AMcMullin@udi.org>
Sent:	September 27, 2021 5:31:37 PM PDT
Attachments:	image010.png, image012.jpg, image014.jpg, image015.jpg, image013.jpg, image011.jpg, image007.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks everyone,

I will keep it short and sweet to preserve time for Andrew, but will quickly share where this fits in our Climate Emergency Action Plan; profile related City work (including MT zoning variances); highlight the building momentum for mass timber in Vancouver; and emphasize that we will be following-up with a survey to gather feedback on next steps.

Looking forward to it!

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
patrick.enright@vancouver.ca | 604.871.6158

For more information on green buildings, please visit http://vancouver.ca/zeroemissions

I am humbly thankful that I live and work on the territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh) nations.

From: Verna Yu <vyu@udi.org>
Sent: Monday, September 27, 2021 1:32 PM
To: 'Andrew Harmsworth' <ah@ghl.ca>; Rocky Sethi <rockys@adera.com>; Enright, Patrick <Patrick.Enright@vancouver.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; 'Sheryl Peters' <speters@bchousing.org>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Anne McMullin <AMcMullin@udi.org>
Subject: [EXT] RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

City of Vancouver security warning: Do not click on links or open attachments unless you were expecting the email and know the content is safe.

Hi Andrew,

Sounds great! You will be able to share your screen and control your own slides during the presentation. We will also be doing a tech-check tomorrow morning at 9:15 just before the webinar to ensure that everyone is set-up.

If you cannot find your Zoom panelist link in your calendar, please let me know so I may resend the information over to you.

Kind regards,
Verna

From: Andrew Harmsworth <ah@ghl.ca>
Sent: September 27, 2021 1:26 PM
To: Rocky Sethi <rockys@adera.com>; Verna Yu <vyu@udi.org>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; 'Sheryl Peters' <speters@bchousing.org>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Anne McMullin <AMcMullin@udi.org>
Subject: RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

Still polishing things, but yes, I am ready, Vera, will have it over to you later today.

Are you changing slides, - I would prefer to share my screen and control that myself.

Andrew Harmsworth, M Eng, P Eng, PE, CP, FEC
GHL CONSULTANTS LTD
Building Codes & Fire Science
409 Granville Street, Suite 950, Vancouver, BC V6C 1T2
P 604 689 4449 Ext 107 \ **D** 604-335-7647 \ **E** ah@ghl.ca \ **W** www.ghl.ca [ghl.ca]

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From: Rocky Sethi <rockys@adera.com>
Sent: September 27, 2021 12:20 PM
To: Verna Yu <vyu@udi.org>; Andrew Harmsworth <ah@ghl.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; 'Sheryl Peters' <speters@bchousing.org>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Anne McMullin <AMcMullin@udi.org>
Subject: RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

Happy Monday all!

Just reaching out to everyone to ensure they're comfortable for tomorrow and have provided any presentations to Verna.

As per the attached agenda,

TIME	ACTIVITY	DURATION	LEAD
9:15	Dry Run	15	
9:30	UDI Introduction Thank Sponsors	2	Anne McMullin
9:32	Sponsor Remarks – BC Housing	5	Sheryl Peters
9:37	Introduction & Overview	5	Rocky Sethi
9:42	Panel introduction	5	All
9:47	Presentation 1	8-10	Patrick Enright
9:57	Presentation 2	10-15	Andrew Harmsworth
10:12	Presentation 3	8-10	Zachary May
10:22	Moderated Discussion Q&A w/moderator	8-10	All
10:30	Webinar concludes		Rocky Sethi

UDI will be pushing for questions for the Q&A so hopefully there's a few good ones for the panel. Verna: I would ask that you 'plant' a few questions to prompt this discussion to happen as this is less of a moderated panel, and more of a presentation/Q&A format at this point

My cell is 778.928.2726 if you want to discuss anything in advance, cheers.

Rocky Sethi | Chief Operating Officer
c 778.928.2726 | d 604.637.4301 | t 604.684.8277 | rockys@adera.com
BUILDINGS FOR BETTER LIVES at adera.com

Please consider the environment before printing this email - Adera Cares

---

From: Verna Yu <vyu@udi.org>
Sent: Friday, September 17, 2021 10:34 AM
To: Rocky Sethi <rockys@adera.com>; 'Andrew Harmsworth' <ah@ghl.ca>; 'Enright, Patrick' <Patrick.Enright@vancouver.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; 'Sheryl Peters' <speters@bchousing.org>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: UDI Webinar - Advancing Mass Timber - Meeting Minutes

Good morning everyone,

Happy Friday!

I have attached a copy of the updated notes based on our discussion on Tuesday. You will find the purposed scheduling with order of presentation as well as some key points to address for the webinar on Tuesday, September 28.

Rocky/Zack – is it worth it to double check with OMTI and reconfirm if there is anyone from the office who might want to join the panel or listen in to the webinar?

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
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Web: udi.bc.ca [can01.safelinks.protection.outlook.com]



RE: [External Email] - RE: Agenda and materials, Energy Step Code Council meeting

From: Bains, Bea <Bea.Bains@fortisbc.com>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Cc: Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>
Sent: September 27, 2021 8:59:20 PM PDT
Attachments: Metrics One-Pagers v6.1_Fortis.docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Please find attached comments from Fortis. Feel free to reach out if there are any questions.

Thanks Bea

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Wednesday, September 22, 2021 12:45 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; 'Maura Gatensby' <MGatensby@aibc.ca>; Bains, Bea <Bea.Bains@fortisbc.com>; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; ablue@EvokeBuildings.com; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Chris Atchison <chris.atchison@bccassn.com>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; Katy Fairley <katy.fairley@bccassn.com>; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Pridie, Holly MUNI:EX <Holly.Pridie@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; pauline@chbabc.org; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>; Remi Charron <rcharron@bchousing.org>; Jackie Kanyuk <jackie@bcnpha.ca>; ian@bcnpha.ca; Li, Charling <charling.li@vancouver.ca>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>
Subject: [External Email] - RE: Agenda and materials, Energy Step Code Council meeting

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Do not respond, click on links or open attachments unless you recognize the sender.

Hi everyone,

Attached is a revised document of examples that now includes the hotel archetype. Apologies for the typo in the agenda. See you all later this afternoon.

Hugo

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Wednesday, September 22, 2021 12:05 PM

To: 'Maura Gatensby' <MGatensby@aibc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; ablue@EvokeBuildings.com; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Chris Atchison <chris.atchison@bccassn.com>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; Katy Fairley <katy.fairley@bccassn.com>; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Pridie, Holly MUNI:EX <Holly.Pridie@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; pauline@chbabc.org; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>; Remi Charron <rcharron@bchousing.org>; Jackie Kanyuk <jackie@bcnpha.ca>; ian@bcnpha.ca; Li, Charling <charling.li@vancouver.ca>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>
Subject: RE: Agenda and materials, Energy Step Code Council meeting

Hi Maura and others,

Yes, the meeting is this afternoon. That was a typo.

Dale Andersson | Email: dale.andersson@gov.bc.ca |
Building and Safety Standards Branch |

From: Maura Gatensby <MGatensby@aibc.ca>
Sent: Wednesday, September 22, 2021 12:00 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; ablue@EvokeBuildings.com; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Chris Atchison <chris.atchison@bccassn.com>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; Katy Fairley <katy.fairley@bccassn.com>; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Pridie, Holly MUNI:EX <Holly.Pridie@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; pauline@chbabc.org; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>; Remi Charron <rcharron@bchousing.org>; Jackie Kanyuk <jackie@bcnpha.ca>; ian@bcnpha.ca; Li, Charling <charling.li@vancouver.ca>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>
Subject: RE: Agenda and materials, Energy Step Code Council meeting

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Hello

The agenda says Thursday Sept 22. Sept 22 is Wednesday. I assume this is a typo and the meeting is today.

Thanks

Maura

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: September 21, 2021 4:15 PM
To: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; ablue@EvokeBuildings.com; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Chris Atchison <chris.atchison@bccassn.com>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; ruta.fluxgold@canada.ca; sfralin@ahma-bc.org; Maura Gatensby <MGatensby@aibc.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Lilley, Daisy ENV:EX <Daisy.Lilley@gov.bc.ca>; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; warrenp@bccassn.com; Katy Fairley <katy.fairley@bccassn.com>; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; lsampliner@portmoody.ca; muneesh@boma.bc.ca; Maxwell.Sykes@surrey.ca; rthe@wesgroup.ca; Pridie, Holly MUNI:EX <Holly.Pridie@gov.bc.ca>; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; pauline@chbabc.org; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>; Remi Charron <rcharron@bchousing.org>; Jackie Kanyuk <jackie@bcnpha.ca>; ian@bcnpha.ca; Li, Charling <charling.li@vancouver.ca>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>
Subject: Agenda and materials, Energy Step Code Council meeting

Hello everyone,

Please find an agenda and another document with a series of examples illustrating the impacts of a potential stepped carbon pollution standard on buildings. Please note the document is not quite finished. For example, there is no information yet on the hotel archetype. Our intent is to take your input and questions during the meeting, and send you a finalized document shortly after the meeting so you can send it to your members and colleagues. It will also be a useful springboard for the policy and implementation discussion we hope to have later in the meeting.

Thank you to those who reviewed an earlier version of the document and provided comments.

Looking forward to it.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
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Last revised: Sept. 22, 2021

DRAFT

Carbon pollution standards: example GHG intensities and ICC samples

Last revised: Sept. 22, 2021

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DRAFT

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DRAFT

Last revised: Sept. 22, 2021

Preface

The following high-level summaries are designed to isolate and highlight some potential financial and technical implications of a stepped carbon pollution standard for buildings in British Columbia which local governments may opt-in to.

The following pages contain one example each of a multi-unit residential building, office, retail space, hotel, and single-family home in Climate Zones 4 and 7a. In each case, the building design and envelope remains static at Step 2, while different mechanical systems are systematically introduced to meet certain stepped GHG intensity (GHGI) thresholds, which are measured in kilograms of carbon dioxide equivalent per year per square metre of building floor area (kgCO2e/m^2/year). The thresholds are not finalized, but intended as samples.

Each archetype also includes a secondary table, which illustrates the amount of renewable gas (RG) required to achieve the same stepped GHGI targets if all-gas equipment were used. The use of RG to meet the GHGI thresholds would only be available if the RG were purchased in such a way that the building would permanently use low-carbon fuels regardless of change in owner or ratepayer.

This analysis is limited by design, and is not representative of all buildings in all situations.

This analysis, along with further consultation with members of the Energy Step Code Council and other policy direction, will inform future decisions or best practice guidelines on the following:

- Whether GHG and Energy Steps should be indexed together
- Whether the highest levels of energy efficiency are required to cost-effectively achieve the lowest GHG outcomes
- Whether targets require adjustment for different archetypes, climate zones, or other situations.

The data that informs these tables is from the 2021 update to the BC Energy Step Code Metrics Research Report, written by Evoke Buildings and E3 Eco Group. More examples may be found in the Metrics Research Report. Thanks to Alex Blue, Einar Halbig, Donald Fast, and M'Beth Schoenfeld.

Assumptions

- *Electricity emissions factor: 0.011kg CO2e/kWh as listed currently in the BC Building Code*
- *Natural Gas emissions factor: 0.185kg CO2e/kWh as listed currently in the BC Building Code*
- *Renewable gas emissions factor: 0.00105551915kg CO2e/kWh (converted from 0.29kg CO2e/GJ as described in the BC Best Practices Methodology for Quantifying Greenhouse Gas Emissions)*
- *Cost of 100% conventional natural gas: $0.042 $/kWh*
- *Cost of 100% RNG blend: $0.066 $/kWh*
- *Cost of BC Hydro residential electricity: $0.094 $/kWh (Step 1) or $0.141 $/kWh (Step 2)*
- *Cost of BC Hydro commercial electricity: $0.068 $/kWh + 12.4 $/kW*

Other assumptions:

- *Other costing data, such as panel size or service upgrade charges, are not included in this analysis given the unique nature of those costs to each project.*

Commented [KP1]: Please use the latest (2020) B.C. METHODOLOGICAL GUIDANCE FOR QUANTIFYING GREENHOUSE GAS EMISSIONS

Commented [KP2]: Please use the 2020 (latest) B.C. METHODOLOGICAL GUIDANCE FOR QUANTIFYING GREENHOUSE GAS EMISSIONS

Commented [KP3]: Treat the rounding the same as the other emissions factors (i.e to 3 decimal places).

Commented [KP4]: Electrical upgrades are material costs compared to HVAC, and is a gap in the analysis. Consider using a generic upgrade cost for buildings who may need it due to electrification. Consider the midpoint of a range of costs.

DRAFT

Last revised: Sept. 22, 2021

Overall highlights from analysis

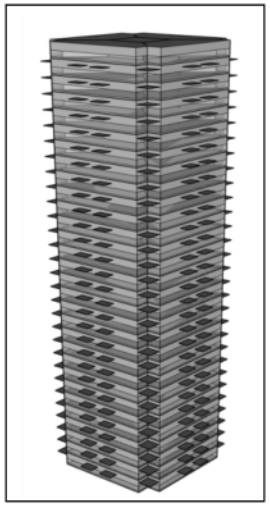
- The analysis prioritizes maintaining the envelope/other characteristics constant over achieving draft target levels. Relatively small variations at the upper target levels are likely to be able to be made up by reducing loads or switching some additional portion of the building energy to lower emissions fuels such as electricity or RNG, and some variation would be expected between buildings based on space mix, density, etc.
- A GHGI of 1 would drive EUI reductions beyond current Step Code targets for all archetypes.
- RNG has a lower emissions factor than electricity in this analysis; therefore lower GHGI totals are possible.
- RNG costs are effectively breakeven with traditional NG costs over the 20-year analysis period, as RNG leads to a much reduced carbon tax.

Commented [KP5]: Added "GHGi" (should be explicit about what "totals" are being discussed in this sentence.

High-rise MURB

Base case

- Step 2 envelope
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- Vertical surface area to floor area ratio (VFAR): 0.6
- Medium density (approx. 55m2 average unit size)
- Cooling equipment: Packaged terminal air conditioner (PTAC) units in suites, or fan coils if heating system is FC



Base Case	Climate Zone 4	Climate Zone 7a
Step 2	Walls R-7 Roof R-40 WWR 40% Window USI 2.0 SHGC 0.3 Infiltration: No savings beyond code 60% HRV	Walls R-10 Roof R-40 WWR 20% Window USI 1.2 SHGC 0.3 Infiltration: half of code level 80% HRV

DRAFT

Last revised: Sept. 22, 2021

High-rise MURB - Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	11.7	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	10.2	N/A	10.2
2	6 (Option a)	7.8	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	10.8	55%	10.2
2	6 (Option b)	6.4	Electric baseboard	Gas	-3	-0.1%	9.9		
2	3	3.2	Air-source heat pump w/ 30% NG backup	Electric resistance	42	1.4%	9.9	80%	10.2
2	1 (Option a)	1.3	Electric baseboard	Electric resistance	-3	-0.1%	10.4	100%	10.2
2	1 (Option b)	1.2	ASHP, no NG backup	Electric resistance	65	2.1%	9.5		

Commented [KP6]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like a high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

Commented [KP7]: Looks like these scenarios don't meet the 6. Consider using 8.

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing compliance as Zach mentioned on the call (a 1.51 to 2.49 result all

Commented [BB8]: Pete has highlighted the many instances in which the modelled does not meet the suggested GHG threshold which suggests the threshold being recommended of 6, 3, and 1 is to high and needs to re-evalauated.

Commented [KP9]: Looks like these scenarios don't meet the 3. Consider using 4.

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the

Commented [KP10]: Looks like these scenarios don't meet the 1. Consider using 2.

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Last revised: Sept. 22, 2021

High-rise MURB - Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	12.6	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	11.0	N/A	11.0
2	6 (Option a)	7.5	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	11.6	60%	11.0
2	6	6.5	Electric baseboard	Gas	-4	-0.1%	13.2		
2	3	3.2	Air-source heat pump w/ 30% NG backup	Electric resistance	49	1.5%	10.9	85%	11.0
2	1 (Option a)	1.4	Electric baseboard	Electric resistance	-4	-0.1%	11.4	100%	11.0
2	1 (Option b)	1.4	ASHP, no NG backup	Electric resistance	74	2.3%	10.7		

Highlights from analysis

- If the envelope were Step 4, annual operational costs would be reduced by up to 25%
- Larger units/lower density yields lower GHGIs
- A wood framed low/mid-rise would have lower ICC at the same performance level, or higher performance at the same cost.

Commented [KP11]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like a high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

Commented [KP12]: Looks like these scenarios don't meet the 6. Consider using 8.

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing compliance as Zach mention on the call (a 1.51 to 2.49 result all qualify/comply with a 2 target). This was confirmed w/

Commented [KP13]: Looks like these scenarios don't meet the 3. Consider using 4.

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Commented [KP14]: Looks like these scenarios don't meet the 1. Consider using 2.

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing compliance as Zach mention on the call (a 1.51 to 2.49 result

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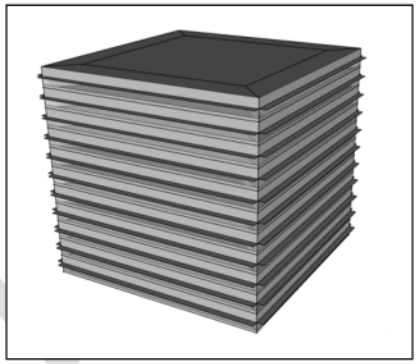
Office

Base case

- Step 2 envelope
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- 25% lighting savings



Base case	Climate Zone 4	Climate Zone 7a
Step 2	Walls R-7 Roof R-40 WWR 50% Window USI 2.0 SHGC 0.3 Infiltration: No savings beyond code 60% HRV	Walls R-20 Roof R-20 WWR 30% Window USI 1.2 SHGC 0.3 Infiltration: half of code level 80% HRV

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Last revised: Sept. 22, 2021

Office - Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	6.0	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	7.7	N/A	7.7
2	6 (option a)	4.2	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	7.8	0%	7.7
2	6 (option b)	4.0	Air-source heat pump w/ 30% NG backup	High eff. gas (95%)	42	1.4%	7.3		
2	3	1.9	Air-source heat pump w/ 30% NG backup	Electric resistance	42	1.4%	7.3	60%	7.7
2	1	0.9	ASHP, no NG backup	Electric resistance	65	2.1%	7.0	95%	7.7

Commented [KP15]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like a high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

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Office - Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	5.9	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	8.6	N/A	8.6
2	6 (option a)	4.1	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	8.6	0%	8.6
2	6 (option b)	3.9	Air-source heat pump w/ 30% NG backup	High eff. gas (95%)	49	1.6%	8.2		
2	3	1.8	Air-source heat pump w/ 30% NG backup	Electric resistance	49	1.6%	8.2	60%	8.5
2	1	0.8	ASHP, no NG backup	Electric resistance	75	2.4%	8.0	95%	8.5

Commented [KP16]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like a high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

Highlights from analysis

- Current highest target would likely not drive a technology change for most projects.
- DHW is fairly low for this archetype; larger focus on space heating.
- If the envelope were Step 4, annual operational costs would be very similar.
- Occupant density affects GHGI for the first two GHG Steps. Adds approximately 1 to the GHGI if density doubles. Occupant density does not affect the GHGI of the fully decarbonized building.

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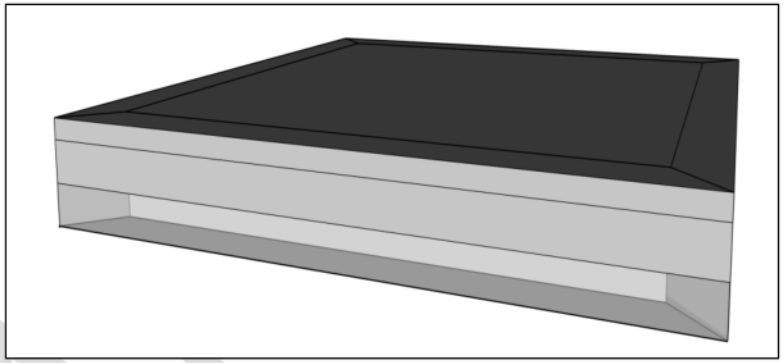
Last revised: Sept. 22, 2021

Retail

Base case

- Step 2 envelope
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- 25% lighting savings vs NECB 2015
- Looking at Mall results rather than big box, as mall has higher GHGI.



Base Case	Climate Zone 4	Climate Zone 7a
Step 2	Walls R-10 Roof R-40 WWR 20% Window USI 2.0 Infiltration: No savings beyond code 60% HRV	Walls R-20 Roof R-40 WWR 20% Window USI 1.6 Infiltration: half of code level 80% HRV

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Last revised: Sept. 22, 2021

Retail - Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	6.6	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	1.8	N/A	1.8
2	6	5.8	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	1.9	15%	1.8
2	3	2.1	Air-source heat pump w/ 10% NG backup	High eff. gas (95%)	43	1.2%	1.9	65%	1.8
2	1	1.3	Air-source heat pump w/ 10% NG backup	Electric resistance	43	1.2%	2.0	95%	1.8

Commented [KP17]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like a high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

Commented [KP18]: Looks like these scenarios don't meet the 1. Consider using 2.

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Re: GHG savings vs. the basecase - the basecase listed above uses high efficiency gas appliances (not minimums or even close to minimums), which really is not a basecase. It's an upgrade case, so the GHG savings from these steps would be larger than what this appears to the mental math would imply.

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Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	7.7	Gas, condensing boiler with fan coils	High eff. gas (95%)	0	0.0%	2.4	N/A	2.4
2	6	6.9	Gas, condensing boiler with fan coils	Electric resistance	0	0.0%	2.5	25%	2.4
2	3	2.4	Air-source heat pump w/ 10% NG backup	High eff. gas (95%)	48	1.4%	2.6	70%	2.4
2	1	1.7	Air-source heat pump w/ 10% NG backup	Electric resistance	48	1.4%	2.7	100%	2.5

Highlights from analysis

- If the envelope were Step 3 (highest step for this building type), annual operational costs would be very similar
- GHGIs depend on space mix/archetype.
    - GHGIs are higher in malls than in big box stores (used malls in the above, difference on base case fully natural gas is approx. 1.7 GHGI; difference becomes negligible in lowest GHG cases)
- DHW is relatively low for this archetype; larger focus on space heating.

Commented [KP19]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like a high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

Commented [KP20]: Looks like these scenarios don't meet the 6. Consider using 7.

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Re: GHG savings vs. the basecase - the basecase listed above uses high efficiency gas appliances (not minimums or even close to minimums), which really is not a basecase. It's an upgrade case, so the GHG savings from these steps would be larger than what this appears to the mental math would imply.

Commented [KP21]: Looks like these scenarios don't meet the 1. Consider using 2.

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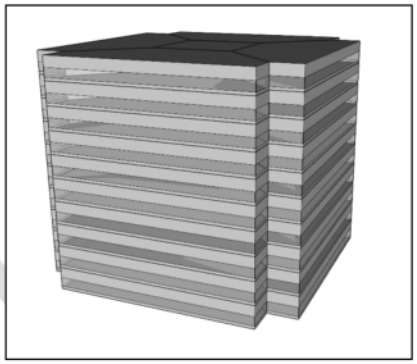
Hotel

Base case

- Step 2 envelope
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- 20% lighting savings
- Pool heating fuel source matches the building heating fuel source
- Systems are 4-pipe fan coils with dedicated outdoor air system (DOAS)



Base case	Climate Zone 4	Climate Zone 7a
Step 2	Walls R-10 Roof R-20 WWR 30% Window USI 2.0 SHGC 0.3 Infiltration: No savings beyond code 60% HRV	Walls R-20 Roof R-40 WWR 30% Window USI 1.2 Infiltration: half of code level 90% HRV

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Last revised: Sept. 22, 2021

Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Laundry Fuel	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	20.5	Condensing boiler	High eff. gas (95%)	NG	0	0.0%	11.8		
2	Does not meet	15.7	Condensing boiler	Electric resistance	NG	0	0.0%	11.7		
2	Does not meet	12.9	Condensing boiler	High eff. gas (95%)	Elec	0	0.0%	12.0	0%	11.8
2	Does not meet	10.9	Air-source heat pump w/ 30% NG backup	High eff. gas (95%)	Elec	42	1.3%	11.1		
2	6	8.1	Condensing boiler	Electric resistance	Elec	0	0.0%	11.9		
2	6	8.0	Air-source heat pump w/ 30% NG backup	Electric resistance	NG	42	1.3%	10.8	75%	11.7
2	3	3.3	Air-source heat pump w/ 30% NG backup	Electric resistance	Elec	42	1.3%	11.0	90%	11.7
2	1	1.6	Air-source heat pump	Electric resistance	Elec	65	2.0%	10.6	100%	11.7

Commented [KP22]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like a high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

Commented [KP23]: Looks like these scenarios don't meet the 6, neither does 3 more scenarios above. Consider using 16, or at least an 11, or a midpoint between the two (13.5, rounded to 14).

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing

Commented [KP24]: Looks like these scenarios don't meet the 3. Consider using 4.

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Commented [KP25]: Looks like these scenarios don't meet the 1. Consider using 2.

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Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Laundry Fuel	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
2	N/A	20.8	Condensing boiler	High eff. gas (95%)	NG	0	0	11.7		
2	Does not meet	13.2	Condensing boiler	Electric resistance	NG	0	0	11.6		
2	Does not meet	16.0	Condensing boiler	High eff. gas (95%)	Elec	0	0	11.9	0%	11.7
2	Does not meet	11.0	Air-source heat pump w/ 30% NG backup	High eff. gas (95%)	Elec	49	1.5	11.1		
2	6	8.4	Condensing boiler	Electric resistance	Elec	0	0	11.8		
2	6	8.1	Air-source heat pump w/ 30% NG backup	Electric resistance	NG	49	1.5	10.8	75%	11.6
2	3	3.4	Air-source heat pump w/ 30% NG backup	Electric resistance	Elec	49	1.5	11.0	90%	11.5
2	1	1.6	Air-source heat pump	Electric resistance	Elec	75	2.3	10.6	100%	11.5

Highlights from analysis

- If the envelope were Step 4, annual operational costs would be approximately 20% lower (varies depending on actual design).
- There is higher laundry use in these archetypes (10%+ of energy use), so laundry energy source affects GHGI.

Commented [KP26]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like a high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

Commented [KP27]: Looks like these scenarios don't meet the 6, neither does 3 more scenarios above. Consider using 16, or at least an 11, or a midpoint between the two (13.5, rounded to 14).

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing

Commented [KP28]: Looks like these scenarios don't meet the 3. Consider using 4.

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing compliance as Zach mention on the call (a 1.51 to 2.49 result

Commented [KP29]: Looks like these scenarios don't meet the 1. Consider using 2.

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing compliance as Zach mention on the call (a 1.51 to 2.49 result

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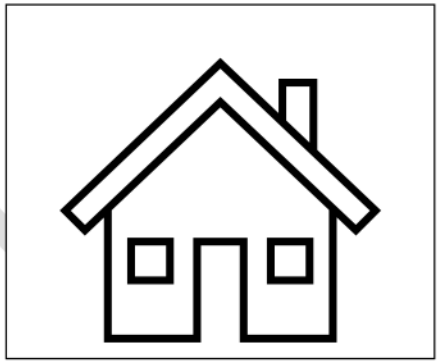
Medium single-family home

Base case

- Step 3 envelope
- Medium SFD
- 100% conventional natural gas (to isolate changes and costs related to carbon requirements)
- Size: 2,550 ft^2
- SAR (total envelope to floor area ratio): 1.91



Base Case	Climate Zone 4	Climate Zone 7a
Step 3	Walls R-22 Roof R-50 Window USI 1.4 SHGC 0.35 ACH 1.5 No HRV No drainwater heat recovery	Walls R-22 Roof R-60 Foundation walls R-17 Window USI 1.4 SHGC 0.35 ACH 1.5 No HRV No drainwater heat recovery

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Last revised: Sept. 22, 2021

Climate Zone 4

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
3	N/A	7.6	Gas furnace	Tankless gas heater 95%	0	0%	4.3	N/A	4.3
3	6 (option a)	5.5	Gas furnace	Heat pump	3	0.1%	4.7	25%	4.3
3	6 (option b)	5.7	Air source heat pump	Gas water heater	10	0.4%	5.0		
3	3	3.4	Air source heat pump	Tankless gas heater 95%	12	0.6%	4.8	65%	4.3
3	1	0.6	Air source heat pump	Heat pump	17	0.8%	4.4	95%	4.3

Commented [KP30]: The basecase is not really a basecase, that is 95% is a very high efficiency value for hot water heating, which is a major load. This is more like an high efficiency HW case. As a result, the GHGi savings from subsequent steps are certainly larger than what this GHGi value would imply.

The basecase should have basecase efficiencies for HW & Space heating.

Commented [KP31]: Looks like these scenarios don't meet the 3. Consider using 4.

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing compliance as Zach mention on the call (a 1.51 to 2.49 result all qualify/comply with a 2 target). This was confirmed w/ other Municipalities on the call.

Re: GHG savings vs. the basecase - the basecase listed above uses high efficiency gas appliances (not minimums or even close to minimums), which really is not a basecase. It's an upgrade case, so the GHG savings from these steps would be larger than what this appears to the mental math would imply.

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Climate Zone 7a

Step	Sample GHGI threshold	Actual modeled GHGI	Space heating equipment fuel source and equipment type	Hot water fuel source and equipment type	Total ICC vs base case ($/m2)	% ICC compared to base case	Annual modelled utility cost ($/m2)	%-blend of RNG required to meet GHG Step with all-gas equipment	Annual modelled utility cost ($/m2)
3	N/A	18.4	Gas furnace	Gas water heater	0	0	5.6	N/A	5.6
3	Does not meet	14.3	Gas furnace	Heat pump	6	0.2%	5.9	N/A	N/A
3	6	6.5	Cold climate heat pump	Gas water heater	13	0.4%	6.5	70%	5.6
3	3	4.1	Cold climate heat pump	Tankless gas heater 95%	16	0.5%	6.3	90%	5.6
3	1	0.9	Cold climate heat pump	Heat pump	19	0.6%	6.4	97%	5.6

Highlights from analysis

- In cold climates, particularly for buildings at lower steps, the DHW forms a smaller part of the total energy use and conventional natural gas use; the focus on reductions is on the heating system.
- If the envelope were Step 5, annual operational costs would be approximately 15% lower (varies depending on actual design).

Commented [KP32]: Looks like these scenarios don't meet the 6, nor does the scenario above. Consider using 15, or at least the midpoint between the two 11 (rounded from 10.5 from the average of 7 and 15).

This is only one scenario too, in reality there will be many different variations on this building type. To avoid unnecessary back &forth and provide some limited flexibility – we suggest in general, round up to the next whole #. Plus, to be more clear/transparent – describe the rounding/compliance approach too, when assessing compliance as Zach mention on the call (a 1.51 to 2.49 result all qualify/comply with a 2 target). This was confirmed w/ other Municipalities on the call.

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Re: GHG savings vs. the basecase - the basecase listed above uses high efficiency gas appliances (not minimums or even close to minimums), which really is not a basecase. It's an upgrade case, so the GHG savings from these steps would be larger than what this appears to the mental math would imply.

DRAFT

RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

From:	Andrew Harmsworth <ah@ghl.ca>
To:	Rocky Sethi <rockys@adera.com>, Verna Yu <vyu@udi.org>, Enright, Patrick <Patrick.Enright@vancouver.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>
Cc:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Anne McMullin <AMcMullin@udi.org>
Sent:	September 27, 2021 9:15:58 PM PDT
Attachments:	image002.png, image004.jpg, image006.jpg, image007.jpg, image005.jpg, image003.jpg, image001.png

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https://ghl.egnyte.com/dl/dLkwAlLWCs
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Rocky Sethi | Chief Operating Officer
c 778.928.2726 | d 604.637.4301 | t 604.684.8277 | rockys@adera.com
BUILDINGS FOR BETTER LIVES at adera.com

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Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
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Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



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Cc:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Anne McMullin <AMcMullin@udi.org>
Sent:	September 27, 2021 10:57:36 PM PDT
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Looks great Andrew.

Verna, how many ppl do we have registered?

Rocky Sethi | Chief Operating Officer
c 778.928.2726 | d 604.637.4301 | t 604.684.8277 | rockys@adera.com
BUILDINGS FOR BETTER LIVES at adera.com

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From:	Enright, Patrick <Patrick.Enright@vancouver.ca>
To:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Andrew Harmsworth <ah@ghl.ca>, Rocky Sethi <rockys@adera.com>, Verna Yu <vyu@udi.org>, Sheryl Peters <speters@bchousing.org>
Cc:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Anne McMullin <AMcMullin@udi.org>
Sent:	September 28, 2021 8:28:13 AM PDT
Attachments:	image003.jpg, image007.png, image009.jpg, image011.jpg, image012.jpg, image010.jpg, image008.jpg, image005.jpg, Exploring Additional Mass Timber Code Changes - UDI - 2021-09-28.pdf

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Hi everyone,

For reference, here are my slides. I'm happy to run them as there are a couple animations in the PPT version.

Talk soon!

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
patrick.enright@vancouver.ca | 604.871.6158

For more information on green buildings, please visit http://vancouver.ca/zeroemissions

I am humbly thankful that I live and work on the territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh) nations.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, September 28, 2021 12:05 AM
To: Andrew Harmsworth <ah@ghl.ca>; Rocky Sethi <rockys@adera.com>; Verna Yu <vyu@udi.org>; Enright, Patrick <Patrick.Enright@vancouver.ca>; 'Sheryl Peters' <speters@bchousing.org>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Anne McMullin <AMcMullin@udi.org>
Subject: [EXT] RE: UDI Webinar - Advancing Mass Timber - Meeting Minutes

City of Vancouver security warning: Do not click on links or open attachments unless you were expecting the email and know the content is safe.

I have a few slides for my brief section. See you all at 9:15.

Best,

Zachary D. May, MBA
Executive Director (Acting)
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 TOP WORK UNIT AWARD

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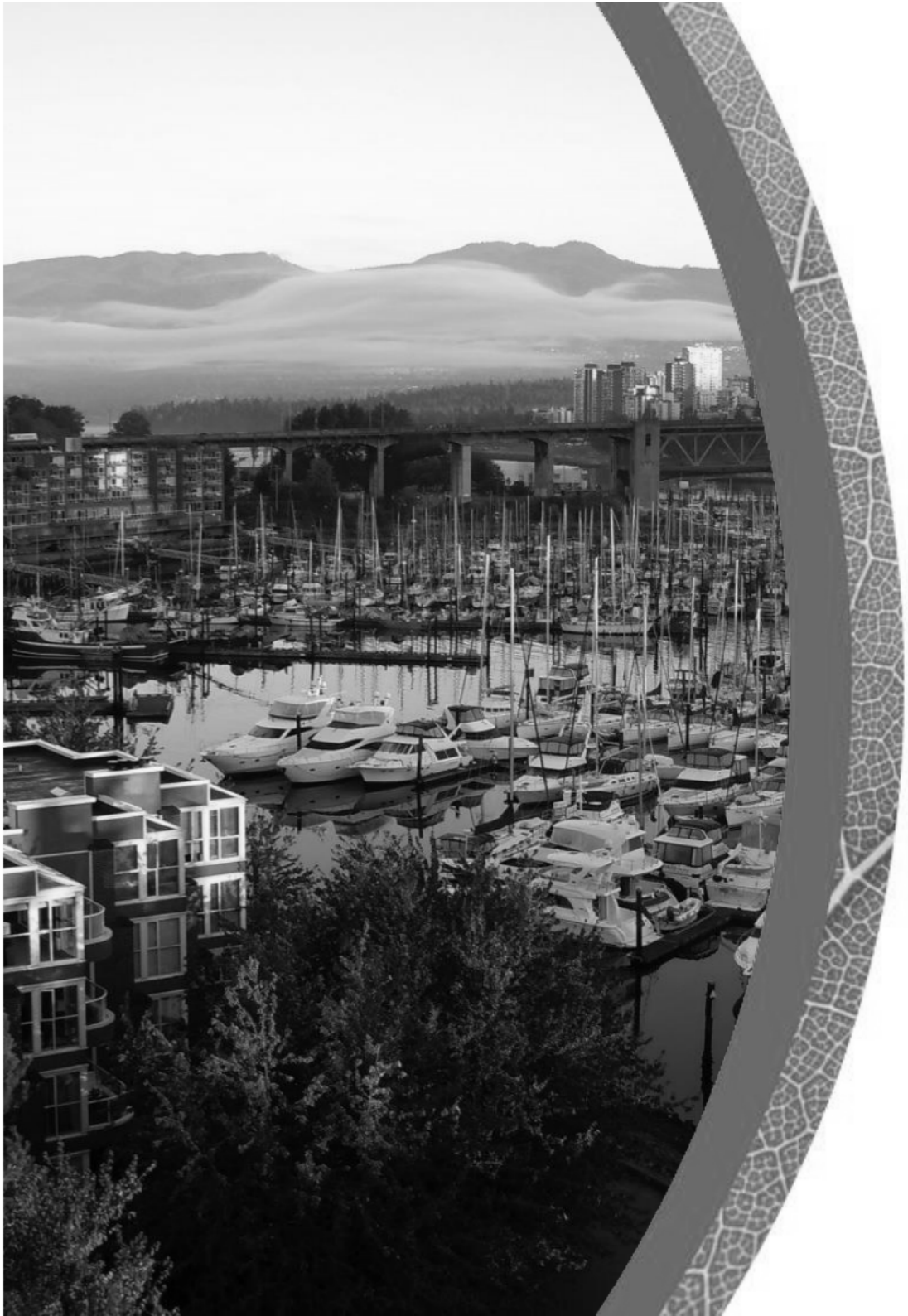


Exploring Additional Mass Timber Code Changes

UDI Vancouver
Sept. 28, 2021
Patrick Enright,
Sr. Green Building Engineer
City of Vancouver

CITY OF VANCOUVER

AGENDA

1. Direction and Progress
2. Building Momentum
3. Next Steps



1. Direction and Progress

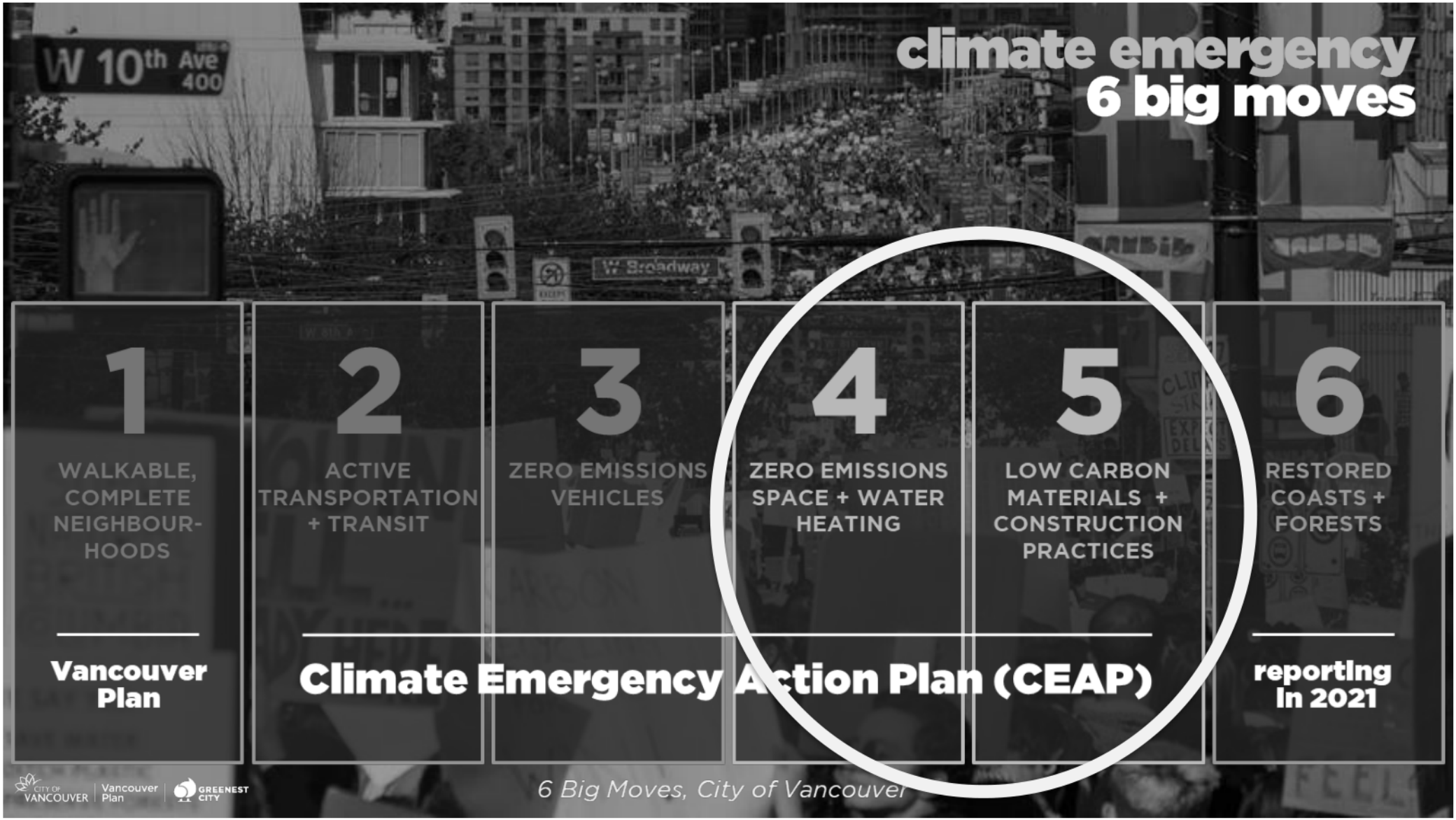
Direction and Progress

CITY OF VANCOUVER

Nov 2019:

- "Council direct Staff to report back with recommendations … including:
  - ✓ amendments to the Building By-law to permit mass timber construction up to 12 storeys, modelled on the proposed 2020 National Building Code, by Q1 2020;
  - ✓ amendments to planning by-laws, policies, and guidelines, such as minor height relaxations or simplifications of building form, to accommodate cost-effective wood building designs, by Q1 2020; and
  - → Further opportunities to amend City by-laws, policies, and guidelines to remove barriers and encourage mass timber development in appropriate locations, by Q4 2020."

Direction and Progress





2. Building Momentum

Building Momentum

CITY OF VANCOUVER



Credit: Intelligent City + LWPAC


Credit: GBL


Credit: ZGF




Credit: DIALOG



3. Next Steps

Next Steps

- Survey opportunities in code
  - GHL report
- **Survey industry for priorities (now)**
  - What should be top priority?
  - What would get the most use?
  - What would best advance mass timber?
- Explore changes
  - Need consensus within City and industry
  - May decide to wait, advocate
- Report to Council (Q2 2022)


Thank you!
Patrick.Enright@vancouver.ca

RE: [External] RE: BP Guide Next Steps

From:	Maya Chorobik <mchorobik@communityenergy.bc.ca>
To:	Wark, Robyn <Robyn.Wark@bchydro.com>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc:	Berkhout, Tom <Tom.Berkhout@bchydro.com>, Robyn Webb <rwebb@communityenergy.bc.ca>
Sent:	October 1, 2021 12:10:18 PM PDT
Attachments:	image008.jpg, image010.jpg, image012.jpg, image013.jpg, image011.jpg, image009.jpg, image001.gif

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks for this Robyn.

I'm looping in Robyn Webb since I'm away next week, so please send her the summary list of issues and any other correspondence.

We are planning a Peer Network working group meeting on the 13th or 14th where we will go over the proposed metrics and the priority list of issues to be addressed in the BP Bulletin. When do you think the updated metrics summary sheets will be shared?

What do you see as ideal timing for the Part 9 and Part 3 working group meetings? The week of the 25th should give us enough time to work through the issues with local governments and get you something to refine and send to the industry WG members.

Tiffany, I'm looking forward to working with you and the team to get this over the finish line!

Zac, thanks for all your work so far. s.22

Maya Chorobik, Director of Climate Leadership
Office: 604-628-7076 ext. 709 | Mobile: 778-881-6557

Community Energy Association

Connecting Communities, Energy & Sustainability

From: Wark, Robyn [mailto:Robyn.Wark@bchydro.com]
Sent: September 29, 2021 5:26 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Maya Chorobik <mchorobik@communityenergy.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Berkhout, Tom <Tom.Berkhout@bchydro.com>
Subject: RE: [External] RE: BP Guide Next Steps

Hi all

Thanks for the meeting today. s.22

I thought it would be helpful to update our previous task list for the ESCC. Tiffany – feel free to reach out to me and Bob (as the co-vice chairs) if you need anything else around this.

1. BSSB will send this group the summary list of issues that the BP Bulletin may look to cover, and the BSSB Best Practice Bulletin that was initially released with the Step Code in 2017.
2. Maya will review the summary list and work with LGs on their recommended Best Practices for addressing them. She will share that with BSSB, so that there can be a straw dog for the working group meetings
3. BSSB will set up small working groups in Oct-Nov to work thru P9 and P3 issues.
    a. Part 9 attendees could be BSSB, Maya + 3LGs (regional representation – eg Megan, Max, Rich?), 3-4 builders (ie Ron Rapp, Joe Hart, Bob Deeks, Kelly), plus an EA? Suggest 2 meetings.
    b. Part 3 attendees could be BSSB, Maya + 3LGs (w P3 experience), UDI (Jeff), EGBC (Harshan), AIBC (Moira). 1 meeting may be possible
4. We will hold an ESCC meeting in late-Nov to review / finalize the Carbon Performance Standard and draft BP Bulletin
5. The BP Bulletin will be released in Dec with the regulation. Note: The intent is that the reg would come into effect as soon as it is adopted, thus any LG could reference it in bylaw immediately.
6. The Capacity-Building and Comms Subcttee should oversee additional short-term updates/modules to Guides and training (eg LG, Building Officials, Builder training) to support GHGi
7. We will try and hold an ESCC meeting in early-mid Dec to review the 20% update to the BCBC
8. BSSB will announce the 20% update to BCBC by March 2022 (to come into effect Dec 2022).
9. Spring-Dec 2022, the Capacity-Building and Comms Subcttee will undertake a widescale update on Capacity Building materials for the new 20% BCBC and the GHGi (eg new updated LG BP Guides, Builder training, Building Official Handbook etc)

All the best for Truth and Reconciliation Day tmrrw.

Cheers … Robyn

From: Wark, Robyn <Robyn.Wark@bchydro.com>
Sent: Wednesday, September 22, 2021 5:12 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Maya Chorobik <mchorobik@communityenergy.bc.ca>; Berkhout, Tom <Tom.Berkhout@bchydro.com>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: BP Guide Next Steps

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac

Great meeting today. As discussed following the meeting, here are the proposed next steps for producing the BP Bulletin and follow-up implementation support for the reg. Pls let me know if I have captured these steps right!

10. Zac and team will draft up a Table of Contents for the BSSB BP Bulletin that will be released with the Carbon Pollution Standard to BCBC in Dec.
11. We will set up a meeting for next week with BSSB and Maya to review the draft ToR for the BP Bulletin – below are times that work for Tom and I. **Zac and Maya – pls let us know times that would work for you**.
    a. Weds – any time after 12pm
    b. Fri – any time after 10am
12. (Note: BSSB will forward the findings from today's meeting, and results from the additional modelling discussed today, ASAP to Maya's team for consideration in the Guide.)
13. Maya will work with the LG Peer Network to draft up a straw dog of the BP Bulletin (ideally including some conversations with Jeff Fisher, Ron Rapp and sml community builders to incorporate their concerns ahead of full ESCC review (eg the request for a measure-only step))
14. This draft will be submitted to BSSB, for forwarding to the ESCC in Nov (?) for comments and finalization.

15. The BP Bulletin would be released in Dec with the regulation. Note: The intent is that the reg would come into effect as soon as it is adopted, thus any LG could reference it in bylaw immediately.
16. The Capacity-Building and Comms Subcttee should oversee additional short-term updates/modules to Guides and training (eg LG, Building Officials, Builder training) to support GHGi
17. BSSB will announce the 20% update to BCBC by March 2022 (to come into effect Dec 2022).
18. Spring-Summer 2022, the Capacity-Building and Comms Subcttee will undertake a widescale update on Capacity Building materials for the new 20% BCBC and the GHGi (eg new updated LG BP Guides, Builder training, Building Official Handbook etc)

Cheers … Robyn

Robyn Wark, MRM MCIP | Manager, Advanced Demand Side Management

BC Hydro
333 Dunsmuir St, 5th floor
Vancouver, BC V6B 5R3

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bchydro.com

Smart about power in all we do.

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DR consultations Nov 3 and Dec 1

From: Barlee, Veronica OHCS:EX
To: Jeff Fisher (UDI) <jfisher@udi.org>
Cc: Baker, Joscelyn <jbaker@polyhomes.com>
Sent: October 1, 2021 2:47:02 PM PDT

Hello Jeff,

As one of the measures to address the strata insurance issue, Housing Policy branch, Office of Housing and Construction Standards, will be consulting on depreciation reports including timing, qualifications and content. I am the lead policy advisor with respect to depreciation reports.

Can you please confirm a representative for UDI? It has certainly been a pleasure to work with Joscelyn Baker on the topic of contributions to the strata corporation's Contingency Reserve Fund.

The depreciation report consultations will be Wed Nov 3 from 1:30 to 3:30 and Wed Dec 1 from 1:30 to 3:30 by Zoom.

If you have any questions, suggestions or concerns please don't hesitate to contact me or Doug Page, Director of Policy and Legislation at doug.page@gov.bc.ca

kind regards,
Veronica Barlee, MBA
Senior Policy Advisor
See the strata housing website or search for "BC strata housing"

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister responsible for Housing
Cell: 778.679.9655 Email: Veronica.Barlee@gov.bc.ca

Offering acknowledgement in respect of the traditional territory of the WSÁNEĆ (Saanich), Lkwungen (Songhees), Wyomilth (Esquimalt) peoples of the Coast Salish Nation, traditional keepers of this land on which I live and dream.

RE: Green Rainwater Infrastructure Pathways Study Workshop - seeking BC Building Code representative

From: Chase, Andy OHCS:EX
To: Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>
Sent: October 4, 2021 10:55:09 AM PDT

Thanks Don. I'll discuss this with Juni this week and get back to you.

Andy

From: Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>
Sent: Monday, October 4, 2021 10:43 AM
To: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Subject: FW: Green Rainwater Infrastructure Pathways Study Workshop - seeking BC Building Code representative

Hi Andy,

I met Chris Radziminski from the City of Vancouver when we co-presented at a UDI workshop. Our contact was brief but he impressed me as being a very sharp dude. Fast forward to today – the City of Vancouver is starting an interesting project and Chris remembered my name. Hence, the email below.

In my opinion, the Branch should make somebody available to participate. Where storm water management systems are located off-site, we (and the Code) don't really have much to say. But, when storm water management systems are located on-site, the lines between the Code and other rules/practices get, for most people, *super* fuzzy. s.13
s.13

Item 4.2 on the LoAs is a case in point. Juni will be aware of a strong push to amend the current wording: "Site and foundation *drainage systems*". s.13
s.13

I'd love to participate, but the project has long timelines and won't wrap for about a year. For that reason, I suggest that someone else be assigned.

Please advise, so that I may respond to Jean Roe, or please respond to her directly.

Thanks,

Don

From: Jean Roe <jean@thinkmodus.ca>
Sent: Friday, October 1, 2021 7:00 AM
To: Pedde, Don OHCS:EX <Don.Pedde@gov.bc.ca>
Cc: Bryce Wilson <bwilson@lotuswater.com>; Tycho, Gord <Gord.Tycho@vancouver.ca>
Subject: Green Rainwater Infrastructure Pathways Study Workshop - seeking BC Building Code representative

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Don,

On behalf of the City of Vancouver and its project consultant team, I am coordinating an online Green Rainwater Infrastructure (GRI) Pathways Study Workshop #1 on **October 29, 2021**. We are hoping to include BC Building Code representatives. We received your contact through Chris Radziminski. He suggested you may be able to identify an appropriate representative.

Do you have recommendations on who we may invite to this workshop? See more information attached.

Thanks kindly,

Jean Roe (she/her/hers) | MCRP, BA
Planner

T 604.736.7755 ext.106 | **C** 403.837.8735 | @thinkmodus | thinkmodus.ca
#400 - 509 Richards Street, Vancouver, BC V6B 2Z6
Subscribe to our newsletter for project news, research, and invites to MODUS social gatherings.

Hello Metrics Research Steering Committee members,

CANCELLATION: With apologies, we need to cancel the Thursday meeting. It will be rescheduled as soon as we are able to do so. Please watch for a new invite.

Thank you and regards,
Dale

Microsoft Teams meeting
Join on your computer or mobile app
s.15

RE: Engagement Opportunity - Existing Buildings - Flood Resilience

From: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>

To: Wilma Leung <wileung@bchousing.org>, Erich Klein <eklein@baptisthousing.org>, tarmstrong@chf.bc.ca, Jason.Hingley@metrovancouver.org, Jill Atkey <jill@bcnpha.ca>, tquinton@teamworkpm.com, greg@inspirepm.com, info@iclr.org, Glenn McGillivray <gmcgillivray@iclr.org>, andrea.law@vancouver.ca, kflick@vernon.ca, Mike Taylor <MTaylor@crd.bc.ca>, jennifer.peters@campbellriver.ca, amber.zirnhelt@campbellriver.ca, kvanvliet@kelowna.ca, rob.lawrance@nanaimo.ca, wcraig@richmond.ca, bud.fraser@ubc.ca, grant.miller@ubc.ca, ahudson@victoria.ca, ameyer <ameyer@victoria.ca>, info@rdos.bc.ca, lmiller@rdos.bc.ca, jvelaniskis@squamish.ca, arodgers <arodgers@tofino.ca>, dsheets <dsheets@grandforks.ca>, RDube <RDube@surrey.ca>, Heidi Yang <hyang@egbc.ca>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, stephanie@refbc.com, Tom-Pierre Frappé-Sénéclauze <tompierrefs@pembina.org>, Coral.Buitenhuis@technicalsafetybc.ca, pgravett@heritagebc.ca, bfeltmate@uwaterloo.ca, joanna.eyquem@uwaterloo.ca, slitke@fraserbasin.bc.ca, dhyde@bcrea.bc.ca, nmiller@bcrea.bc.ca, dave.crossley@pibc.bc.ca, mlau@insurancecouncilofbc.com, asutherland@ibc.ca, Moy, Greg <GMoy@ibc.ca>, mwalker@morguard.com, DRamslie@concertproperties.com, president@visoa.bc.ca, jamie.gray@quadreal.com, bchamplin@boabc.org, chris.atchison@bccassn.com, info@stewardshipcentrebc.ca, clove@rdh.com, davidh@landlordbc.ca, tony@choa.bc.ca, dstathonikos@boma.bc.ca, muneesh@boma.bc.ca, Jeff Fisher <jfisher@udi.org>, Anne McMullin <AMcMullin@udi.org>, Jared Wright <jwright@ubcm.ca>, gmacisaac <gmacisaac@ubcm.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, Lisa Westerhoff <lwesterhoff@integralgroup.com>, Robin Hawker <robin.hawker@integralgroup.com>, Madi Kennedy <madi.kennedy@integralgroup.com>, Saul.Schwebs@vancouver.ca, Karin Ots <karin.ots@aviva.com>, Tara Laidman <tara_laidman@cooperators.ca>, Ian Theaker <iant@pembina.org>, Erik.Blair <Erik.Blair@metrovancouver.org>, jessica <jessica@thriveconsulting.me>, cleo.corbett@campbellriver.ca, sonja.denobrega@aviva.com, Jason Locke <jason.locke@campbellriver.ca>

Cc: Berry, Julia ENV:EX <Julia.Berry@gov.bc.ca>, Hahn, Mitchell FLNR:EX <Mitchell.Hahn@gov.bc.ca>, Tudhope, Dave R MUNI:EX <Dave.Tudhope@gov.bc.ca>, Hold - 230905 - Sheth, Namrata CITZ:EX <Namrata.Sheth@gov.bc.ca>, Barlee, Veronica HOUS:EX <Veronica.Barlee@gov.bc.ca>, Walter, Monica CITZ:EX <Monica.Walter@gov.bc.ca>, Liao, Tina CITZ:EX <Tina.Liao@gov.bc.ca>, Muir, Mitchel CITZ:EX <Mitchel.Muir@gov.bc.ca>, Wilkins, Russell J CITZ:EX <Russell.Wilkins@gov.bc.ca>, Lim, Edwin CITZ:EX <Edwin.Lim@gov.bc.ca>, Cheryl Evans <c8evans@uwaterloo.ca>, Ainaz Bozorgzadeh <Ainaz.Bozorgzadeh@technicalsafetybc.ca>, Betsy Agar <betsya@pembina.org>, Gill, Ron <RGILL@surrey.ca>, Alzate, Vanesa CITZ:EX <Vanesa.Alzate@gov.bc.ca>, Rod Hill <rhill@bchousing.org>, Arash Azadeh <aazadeh@bchousing.org>, Sheryl Peters <speters@bchousing.org>, Steven Chan <stechan@bchousing.org>, Michael Rodgers <mrodgers@chf.bc.ca>, Cassandra McColman <cmccolman@udi.org>, nconnolly <nconnolly@richmond.ca>, Li, Jake <jake.li@ubc.ca>, ZMahdiar <ZMahdiar@richmond.ca>, Nikolic,Diana <DNikolic@richmond.ca>, Shahab Soltani <ssoltani@bchousing.org>, Keith Porter <kporter@iclr.org>, John Grubb <usc@shaw.ca>, Magdalena Szpala <mszpala@bchousing.org>, Sarah Rutherford <sruther@bchousing.org>, Nicole Stinson (Marques) <nstinson@bchousing.org>, Dana Vadisirisack <dvadisir@bchousing.org>, Aaron Rodgers <aaron@tofino.ca>, Katherine Chan <kachan@bchousing.org>, Brett Thibault <bthibault@insurancecouncilofbc.com>, Mark Sakai <msakai@bcrea.bc.ca>, Maya Milardovic <maya_milardovic@cooperators.ca>, Christa Tolledi <Christa_Tolledi@cooperators.ca>, Erin Harding <erin_harding@cooperators.ca>, Bill MacKinnon <bmackinnon@bchousing.org>, Remi Charron <rcharron@bchousing.org>, Jho <Jho@richmond.ca>, James Hui <jhui@bchousing.org>, Jessica Woolliams <jwoolliams@bchousing.org>, Mark Petry <mpetry@rdos.bc.ca>, David Bruce <dbruce@grandforks.ca>, Kelly Loch <kelly@stewardshipcentrebc.ca>, Richard Mathews (BO) <s.22 >, Tyler Wightman <tyler.wightman@boabc.org>, Dave Aharonian <daharonian@bchousing.org>, Stephen Hui <stephen@refbc.com>, Leford Lafayette <llafayette@grandforks.ca>, DG <DG@stewardshipcentrebc.ca>, Graham Watt <gwatt@grandforks.ca>, Meghan Norman <Meghan.Norman@campbellriver.ca>, Owen Philip <ophilip@bchousing.org>, Hoffard,Grant <GHoffard@richmond.ca>, Rod MacLean <rmaclean@kelowna.ca>, Steele, Paul

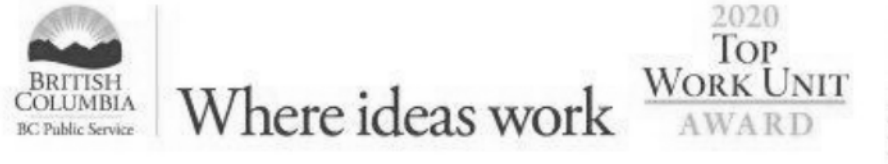
<PSteele@surrey.ca>, Allan Wasel <allan@hollyburn.com>
Sent: October 4, 2021 5:56:46 PM PDT
Attachments: image001.jpg, Resilience Workshop_Flooding_External.pdf
Good evening,

Thank you to those who were able to participate in the flood resilience engagement session that was held on September 28th. A PDF version of the presentation is attached for your reference.

If you were unable to attend or have additional written feedback, we welcome any comments by October 12th.

Thank you,
Nicole

Nicole Vukosavljevic (she/her)
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
UC: 778-974-5044 (preferred) | Cell: 250-883-7419 | Email: nicole.vukosavljevic@gov.bc.ca



I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

-----Original Appointment-----
From: Vukosavljevic, Nicole OHCS:EX
Sent: Friday, September 10, 2021 10:30 AM
To: Vukosavljevic, Nicole OHCS:EX; wileung@bchousing.org; Erich Klein; tarmstrong@chf.bc.ca; Jason.Hingley@metrovancouver.org; jill@bcnpha.ca; tquinton@teamworkpm.com; greg@inspirepm.com; info@iclr.org; gmcgillivray@iclr.org; andrea.law@vancouver.ca; kflick@vernon.ca; mtaylor@crd.bc.ca; jennifer.peters@campbellriver.ca; amber.zirnhelt@campbellriver.ca; kvanvliet@kelowna.ca; rob.lawrance@nanaimo.ca; wcraig@richmond.ca; bud.fraser@ubc.ca; grant.miller@ubc.ca; ahudson@victoria.ca; ameyer@victoria.ca; info@rdos.bc.ca; lmiller@rdos.bc.ca; jvelaniskis@squamish.ca; arodgers@tofino.ca; dsheets@grandforks.ca; Rdube@surrey.ca; hyang@egbc.ca; hradhakrishnan@egbc.ca; stephanie@refbc.com; Tom-Pierre Frappé-Sénéclauze; Coral.Buitenhuis@technicalsafetybc.ca; pgravett@heritagebc.ca; bfeltmate@uwaterloo.ca; joanna.eyquem@uwaterloo.ca; slitke@fraserbasin.bc.ca; dhyde@bcrea.bc.ca; nmiller@bcrea.bc.ca; dave.crossley@pibc.bc.ca; mlau@insurancecouncilofbc.com; asutherland@ibc.ca; GMoy@ibc.ca; mwalker@morguard.com; DRamslie@concertproperties.com; president@visoa.bc.ca; jamie.gray@quadreal.com; bchamplin@boabc.org; chris.atchison@bccassn.com; info@stewardshipcentrebc.ca; clove@rdh.com; davidh@landlordbc.ca; tony@choa.bc.ca; dstathonikos@boma.bc.ca; muneesh@boma.bc.ca; jfisher@udi.org; AMcMullin@udi.org; jwright@ubcm.ca; gmacisaac@ubcm.ca; Warkentin, Tiffany OHCS:EX; Wong, Hugo OHCS:EX; Olsen, Tracy OHCS:EX; Dang, Tommy OHCS:EX; Lisa Westerhoff; Robin Hawker; Madi Kennedy; Saul.Schwebs@vancouver.ca; Karin Ots; Tara Laidman; Ian Theaker; Erik Blair; jessica@thriveconsulting.me; cleo.corbett@campbellriver.ca; sonja.denobrega@aviva.com; jason.locke@campbellriver.ca
Cc: Berry, Julia ENV:EX; Hahn, Mitchell FLNR:EX; Tudhope, Dave R MUNI:EX; Sheth, Namrata CITZ:EX; Barlee, Veronica OHCS:EX; Walter, Monica CITZ:EX; Liao, Tina CITZ:EX; Muir, Mitchel CITZ:EX; Wilkins, Russell J CITZ:EX; Lim, Edwin CITZ:EX; Cheryl Evans; Ainaz Bozorgzadeh; Betsy Agar; Gill, Ron; Alzate, Vanesa CITZ:EX; Rod Hill; Arash Azadeh; Sheryl Peters; Steven Chan; Michael Rodgers; Cassandra McColman; nconnolly; Li, Jake; Mahdiar,Zohreh; Nikolic,Diana; Shahab Soltani; Keith Porter; John Grubb; Magdalena Szpala; Sarah Rutherford; Nicole Stinson (Marques); Dana Vadisirisack; Aaron Rodgers; Katherine Chan; Brett Thibault; Mark Sakai; Maya Milardovic; Christa Tolledi; Erin Harding; Bill MacKinnon; May, Zachary OHCS:EX; Remi Charron; Ho,Jason; James Hui; Jessica Woolliams; Mark Petry; David Bruce; Kelly Loch; s.22 ; Tyler Wightman; Dave Aharonian; Stephen Hui; Leford Lafayette; DG Blair; Graham Watt; Meghan Norman; Owen Philip; Hoffard,Grant; Rod MacLean; Steele, Paul; Allan Wasel
Subject: Engagement Opportunity - Existing Buildings - Flood Resilience
When: Tuesday, September 28, 2021 2:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Zoom

Hello,

The Building and Safety Standards Branch (Ministry of Attorney General and Minister Responsible for Housing) is responsible for the BC Building Code which regulates health and safety, fire and structural protection, accessibility, and energy and water efficiency in building construction.

The Branch is developing an Existing Buildings Renewal Strategy that provides a path for today's buildings to become more energy and water efficient, cleaner, and safer for British Columbians during events like earthquakes, wildfires, wildfire smoke, heat waves, and floods.

BSSB will be hosting a series of engagement sessions on increasing resilience and, carbon and energy performance in existing buildings, and would like to extend an invitation to you and your organization to attend the first engagement session on **Sept 28 from 2:00 – 4:00pm PDT on policies to support increasing flood risk mitigation in existing buildings**.

Future sessions will be held throughout the fall (see schedule below) to continue discussions and partnerships with affected parties and key influencers, such as your organization.

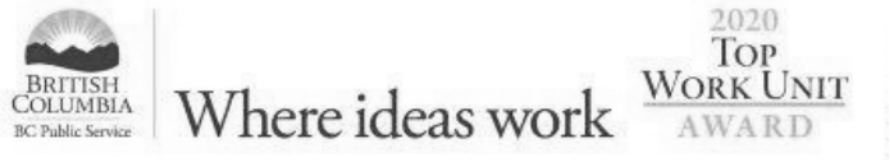
Topic	Date
Existing buildings - Water conservation	Wednesday October 6th, 2021
Existing Buildings – Wildfire risk	Tuesday October 19th, 2021
Existing Buildings – Energy and carbon, regulations	Wednesday November 3rd, 2021
Existing Buildings – Overheating and air quality	Thursday November 4th, 2021
Existing buildings – Energy and carbon, supporting measures	Tuesday November 16th, 2021
Existing Buildings – Integrating mitigation and adaptation	Thursday November 25th, 2021

If you have any questions in advance of the session, or written feedback on the engagement topics, please contact Nicole Vukosavljevic by email at Nicole.vukosavljevic@gov.bc.ca.

We look forward to your participation and input.

Thank you,
Nicole

Nicole Vukosavljevic (she/her)
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
UC: 778-974-5044 (preferred) | Cell: 250-883-7419 | Email: nicole.vukosavljevic@gov.bc.ca



I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

Join Zoom Meeting
s.15

Page 235 of 394

Withheld pursuant to/removed as

s.15

Existing Buildings Renewal Strategy
Flood Risk

September 28th, 2021


Image source: https://sunshinecoastcanada.com/explore/south-coast/sechelt/

INTEGRAL BRITISH COLUMBIA

Objectives of Today's Session

- Review flood hazard and impacts to **existing buildings** in B.C.
- Identify opportunities and barriers to increase the resilience of **existing buildings** to flood events
- Discuss Provincial support opportunities to increase **existing building** resilience



Image source: https://www.scienceworld.ca/light-up-science-world/

Agenda

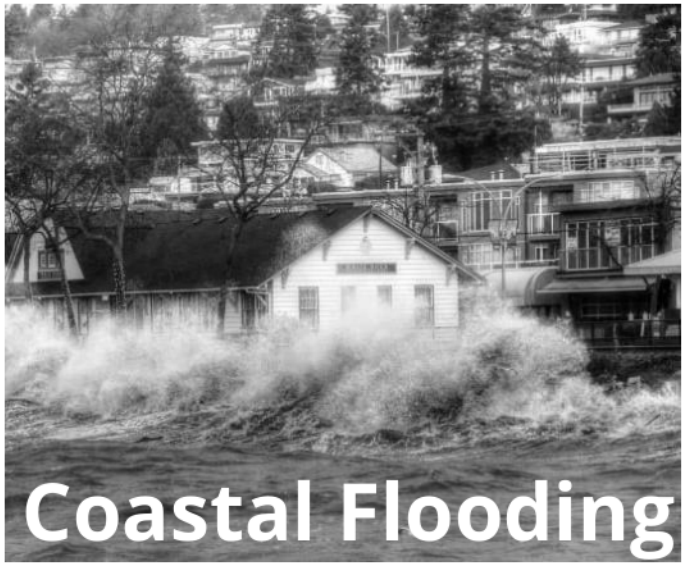
Time	Agenda
2:00pm	Welcome and orientation
2:10pm	Background
2:25pm	Breakout Session #1
3:00pm	Breakout Session #2
3:50pm	Report Back and Next Step
4:00pm	Close

Background

B.C.'s Flood Risk





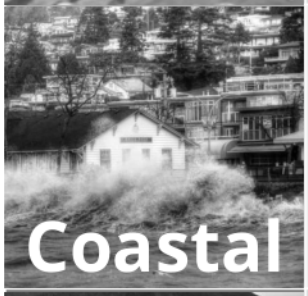


Summary of Risk Assessment Rankings

RISK EVENT	PRESENT-DAY LIKELIHOOD	2050 LIKELIHOOD	CONSEQUENCE	RISK SCORE AND RATING
Moderate flooding	2	3	2.9	**8.6** Medium
Severe riverine flooding	1	2	4.3	**8.5** Medium
Severe coastal storm surge	1	2	4.1	**8.3** Medium

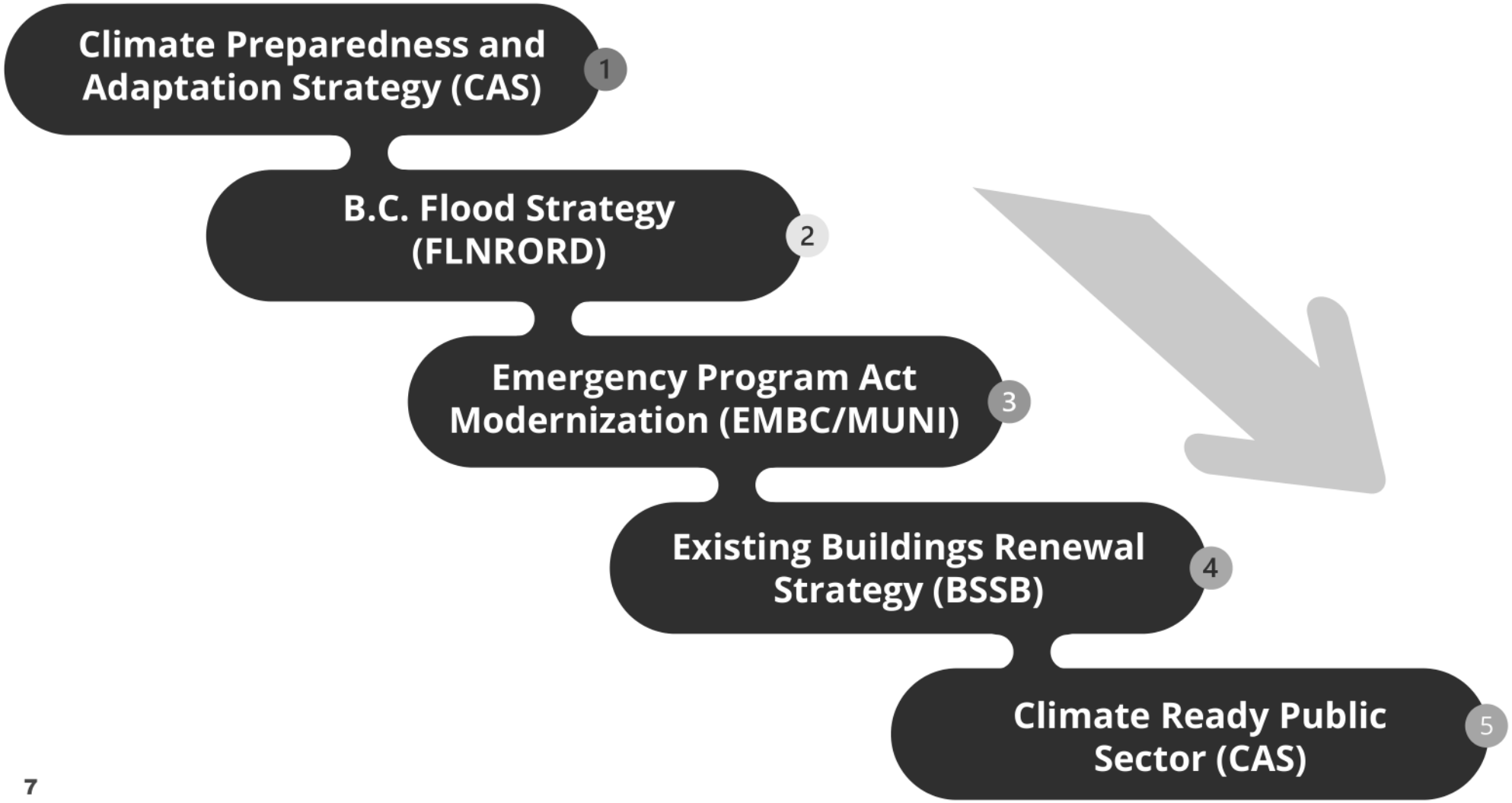
Source: Preliminary Strategic Climate Risk Assessment for British Columbia, July 2019

B.C.'s Flood Risk

Flood Type	Description	General Causes	Climate Change Impacts
	Occurs when extreme rainfall creates local flooding away from water bodies	• Heavy rainfall exceeds the capacity of natural or built landscapes to dissipate stormwater	• **More intense rainfall events** • **Warmer temperatures & drought causing species change** (affecting permeable surfaces)
	Occurs when seawater inundates lands in coastal zones	• Storm surge, wind and wave action • Tsunamis • High tides	• **Rising sea levels** exacerbate impacts from high tides, storm surge, and wind/waves • **Erosion and changing shoreline habitats** (affecting shoreline protection)
	When water levels in a river, lake, or stream overflow beyond its banks	• Intense rainfall, atmospheric rivers • Rapid snowmelt / freshet • Ice jams • Structural failure of dams • Debris floods in steep terrain	• **More intense rainfall events** • **Warmer winter/spring conditions**, causing more rain-on-snow events and rapid freshet • **Sea level rise** compounding higher river flows in coastal areas • **Erosion and chancing riparian habitats** (affecting shoreline protection)

Climate change expected to make flooding more severe and frequent

Policy Landscape in B.C.



Impact of Flooding on Buildings

DEPTH (m)	BUILDING IMPACTS
< 0.1	• Most buildings are expected to be dry • Underground parking, infrastructures and basements may be flooded
0.1 – 0.3	• Water may enter buildings at grade – most buildings will be dry • Walking in moving water or driving is potentially dangerous • Underground infrastructure and basements may be flooded
0.3 – 0.5	• Water may enter ground flood of buildings • Walking in moving or still water is dangerous • Underground infrastructure and basements may be flooded
0.5 – 1.0	• Basements flooded • Electricity failed • Vehicles are commonly carried off roadways
1.0 – 2.0	• Ground floor flooded • Residents and workers evacuate
> 2.0	• First floor and often higher levels covered by water • Residents and workers evacuate

Flood Mitigation in Existing Buildings

Relocation

Wet-Proofing



Elevation

Dry-Proofing

B.C.'s Building Regulatory Landscape

Provincial Responsibility

- *Building* Act: authority to establish building regulations
- *BC Building Code (BCBC)*: designed for new construction but applies to alteration, addition, and reconstruction
- Lack of clarity and direction on the extent to which the BCBC applies to existing building upgrades

Local Government Responsibility

- *Community Charter & Local Government Act*: enables the administration and enforcement of the BCBC
- Local governments determine how the BCBC is administered
- Building permit process
- Local building requirements for the mitigation of flood hazard

Existing Local Government Tools

TOOL	EXISTING BUILDINGS
Building Permit	Safety upgrades as condition of renovation
Flood Plain Bylaw	Additions, renovations, extensions required to be above flood construction level or flood proofed
Development Permit Area for Hazardous Conditions	Engineering report required for additions, renovations and extensions
Zoning	Vertical and horizontal setbacks for additions or extensions to buildings
Covenants	Usually as a condition of subdivision – conditions vary

Challenges

- Assume existing dikes will protect existing buildings
- Need up-to-date risk information and mapping
- High cost of upgrades to existing buildings
- Uncertainty about application to existing buildings

Example Approaches to ExB

INCREASED TECHNICAL GUIDANCE

- Update Provincial Flood Hazard Area Land Use Management Guidelines
  - Revise current sample floodplain bylaw
  - Add model or example guidelines for flood hazard DPA

PUBLIC EDUCATION

- Develop publication modelled after the FireSmart Begins at Home Manual

BUILDING PERMIT UPGRADE REQUIREMENTS

- In floodplains without a dike, require voluntary building permit applications for renovations or extensions to include plans to elevate electrical and heating systems above flood construction levels

BC BUILDING CODE REQUIREMENTS IN FLOODPLAIN

- Develop Provincial building regulation for the floodproofing of existing buildings

Next Steps

Topic	Date
Water Conservation	**Wednesday, October 6th, 2021**
Wildfire Risk	Tuesday, October 19th, 2021
Energy & Carbon 1	Wednesday, November 3rd, 2021*
Overheating and Air Quality	Thursday, November 4th, 2021
Energy & Carbon 2	Tuesday, November 16th, 2021*
Integrating Climate Responses	Thursday, November 25th, 2021

*In collaboration with the Ministry of Energy, Mines and Low-Carbon Innovation.
Date of engagement may be adjusted based on release of CleanBC Roadmap

Further Opportunities for Feedback

Additional opportunities to provide feedback:

- The Province will accept related feedback until **October 12, 2021**
- Written comments can be sent **by email** to **Nicole.Vukosavljevic@gov.bc.ca**



Thank you

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Agenda

1. Welcome and Chair's Remarks
2. Hon. David Eby, Attorney General, Minister Responsible for Housing

2.1. Update on Provincial Initiatives

- Update on the Minister's UBCM presentation and any further discussion following the UDI presentation to Caucus
- What can UDI expect to see in this fall session?
- Are there other initiatives contemplated for the medium-term where UDI can provide support?

2.2. Attracting Development to growing resource communities

- Discussion and UDI support

2.3. Municipal Updates

- Victoria - Rental regulation
- Vancouver – False Creek Flats, Streamlining Rental Policies and Broadway Area Plan

2.4. Next Steps

- How can we continue to work together?

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi all,

Please hold this time for the next ESC Part 3 & non-residential Part 9 Subcommittee meeting. Agenda and meeting info forthcoming.

Thanks!
-Toby, Norm, & Scott

_____
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-BCHydroDisclaimerID5.2.8.1541

RE: UDI feedback on summary sheets

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: October 20, 2021 5:59:45 PM PDT

Hi Scott,

I had another call with Jeff Fisher two days ago. He's gotten feedback from two members of his building code committee. A summary is below:

- Some interest in having different baseline information than Step 2. (for example, Step 3 or 4) as some municipalities in the Lower Mainland require higher Steps. An alternative would be to have Excel files out there if people want to do the calculations themselves. *(HW: This says to me we need to make it very clear the intent of the summary sheets is to show the worst case, and that people need to do some of their own analysis)*
- Would prefer centralized heating rather than baseboard or PTAC, because ICC doesn't include space costs. Having centralized HVAC and no personal DHW tank decreases usable floor area, which could be sold to a buyer. A developer would choose centralized systems even if the first cost is higher to sell that space.
- Two UDI members were confused by description of one ECM (infiltration?) as "no savings beyond code." Suggest describing the air change or target directly.
- For high-rise MURBs, the typical building is 50-60 WWR, not 40. 40 makes sense for a mid-rise wood MURB. Most high-rise MURBs are also doing better than R-7 walls.
- Questions about EV charging, and whether those are attributable to the building or the suite. State the assumption. In mid-rise, that makes a big difference.
- Reminder that mid-rise MURBs were the trickiest archetype in Step Code development - sometimes Step 2 was harder to achieve than Step 3, or the performance gap was minimal. Consider including a mid-rise wood-frame MURB archetype.
- Confused by having RNG in the same table (he and his members read it as one continuous row, rather than as a separate table). He also didn't know that the blends described were not actually available for purchase, but rather theoretical blends. He recommended separating out RNG into a separate table. I will probably just make the page larger (to 11x17 instead of 8x11) and use colours/lines/text to make it clear the equipment changes as you go down the rows don't apply to the RNG side of the table).
- If cooling mandate comes, district energy stops being cost effective as it can't offer cooling. ASHP would be the norm.
- Risk that LGs will use this analysis to prove GHG requirements are cost effective, instead of treating this with a grain of salt. They did that with the previous Step Code analysis. Please ensure they don't run with it and treat it as gospel.
- Jonathan Meads at Qualico is willing to chat about these, as he reviewed them. Work number: 604 579 0304; Cell: 604 841 8350.

Hope this helps.

H

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: Monday, October 18, 2021 12:06 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: UDI feedback on summary sheets

Great. Thanks Hugo.

See comments below if red.

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, October 15, 2021 6:20 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: UDI feedback on summary sheets

Hi Scott,

I had a call with Jeff Fisher just now on his feedback for the summary sheets. He'll call his building code committee this weekend or on Monday and get their feedback soon. But Jeff's personal feedback, in essence:

- He's fine if you only include Climate Zone 4 and 5 (but understands why we may need to include more) SW: ok. Lets focus on CZ 4 and 5 for high rise MURBs. CZs 4, 5 with a bookend of 7a for all other architypes.
- Ensure the subsequent tables for Steps 3 and 4 include a cost comparison to our Step 2 base case (which I think it does) SW: the first iteration of the sheets showed a comparison based on Step 2, but this was not something that was discussed with Alex when we last met when referring to additional steps. This is something that we will need to make explicit with the revisions to the sheets.
- Talk to CHBA on Part 9 to get similar feedback because Jeff deals with Part 3 mostly. SW: I suggest that you reach out to a representative of CHBA to bounce our approach off of them. Ie GHGis based on house size similar to approach taken for MEUI as opposed to GHG caps. We could include some data from Alex to kick start the conversation.
- Ask BC Housing if cooling is mandatory in their projects, and during a hypothetical verbal presentation in this report, hint at whether the national codes will eventually require cooling (obviously, only if that's true). SW: we don't know at this point. Really justify in the report why we have cooling included in all types (because some might want a base case with no cooling. Jeff agrees a base case with cooling is the right approach). This way, if UDI members know that low/mid-income housing has cooling, there is less of an argument to not have cooling in a high-end condo. SW: ok Include in the justification that going ASHP makes more sense with an escalating carbon tax (and was the lowest cost option over time given that assumption) SW: this was a question asked a few times during the SCC meeting. Alex will need to provide a quick summary to appropriately address.
- Be clear whether our base case is just a big box, or whether there are lots of articulations (wedding cake), as that affects the cost projections. The graphic we include might just show it (but then caption or explain that that is the actual way the hypothetical building looks). Many municipalities only allow buildings with articulations. That will hint that the cost projects might not be super applicable to them personally. SW: understood. The graphics show the form. Also, the stated VFAR gives and indication of the form used in the calculations. We can include a few sentences on this.
- Jeff likes the questionnaire. He suggests more written guidance (in prose), for example, regarding the red figures explaining that if a building misses a particular GHGI by a bit, suggest changing parts of the ECM package to make it work. SW: I agree. We will need to talk to Alex about this and what it will take to actually meet the proposed metrics. This will also help to inform what we eventually decide with the actual metrics themselves and whether or not we need to deviate from the proposes 6/3/1. Include in prose any explanations if we skip some archetypes and climate zones so stakeholders know they haven't been forgotten (e.g. for laneway homes in CZ8, say it'll be dealt with next year or at the ESC table or similar). SW: sounds good.

From a policy standpoint, Jeff would support phasing in the GHG requirements in CZ 4 and 5 first, with the north later, and a whole separate discussion on the Fort Nelson grid. We'll reflect on that and I can chat with Tiffany about it. SW: keeping our eye on the prize – this is an opt in standard, so if we cannot adequately address the colder climates and the Fort Nelson grid, this is something we can address later (ie in 2022 and beyond).

Hope that's helpful. I can chat on Monday if you need more clarity.

Hugo

Hugo Wong (he/him)
Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Accessibility Requirements

From:	Laboucane, Shannon OHCS:EX <Shannon.Laboucane@gov.bc.ca>
To:	jfisher@udi.org
Cc:	lshieldsanderson@udi.org, vyu@udi.org, cmccolman@udi.org, anicholls@udi.org, Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent:	November 4, 2021 3:35:35 PM PDT
Attachments:	image002.jpg, image004.jpg, image006.jpg, image005.jpg, image003.jpg, image001.png

Hello Jeff,

Thank you for your email regarding accessibility and the BC Building Code. Dale Andersson sent me your email for response.

The current BC Building Code accessibility engagement will run until December 9, 2021. After which time, the Building and Safety Standards Branch will publish a What We Heard report to our website. If UDI is interested to meet following publication and review of the report, please do feel free to reach out to me.

As noted, the Branch will conduct a second engagement to solicit feedback on proposed code changes prior to adoption. We anticipate being able to share these mid-2023.

We will be sure to keep you informed as the engagements proceed to ensure you have an opportunity to review and comment on proposed code changes.

Thank you again for your email.

Kind regards,

Shannon Laboucane | Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-974-3912 | Email Link: Shannon.Laboucane@gov.bc.ca

Offering acknowledgement in respect of the Lekwungen speaking people, traditional keepers of this land on which I live, work, and play.

2020 **Top Work Unit** Winner

From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: Tuesday, November 2, 2021 7:21 PM
To: Laboucane, Shannon OHCS:EX <Shannon.Laboucane@gov.bc.ca>; Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Subject: Fwd: Accessibility Requirements

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From: Jeff Fisher <jfisher@udi.org>
Sent: Tuesday, November 2, 2021 11:35:05 AM
To: 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Verna Yu <vyu@udi.org>; Cassandra McColman <cmccolman@udi.org>; Andrea Nicholls <anicholls@udi.org>
Subject: Accessibility Requirements

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Dale, hope all is well!

UDI has been asked to conduct a webinar on accessibility – including potential future requirements from the Province. I understand that the Branch is doing a public engagement process until December 9, but it appears to be at a preliminary stage with few specific measures being put forward.

We have a UDI Building Code Committee. Would the Branch be interested in discussing accessibility in new construction as part of your current engagement process?

We would also be interested in providing feedback to the Ministry when specific measures are being considered in a future consultation stage. In fact, that would likely be the ideal time to do a webinar or breakfast seminar with UDI members. Do you know when this stage will occur, and would the Branch be interested in participating in a webinar or seminar at that time?

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

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Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



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To:	jfisher@udi.org
Cc:	lshieldsanderson@udi.org, vyu@udi.org, cmccolman@udi.org, anicholls@udi.org, Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
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Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
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ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Notes

Date and Time of Meeting: Wednesday Sept 22, 2021 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Chair: Zachary May, Building and Safety Standards Branch, Attorney General and Minister Responsible for Housing
Co-Vice Chairs: Bob Deeks, CHBA BC/RDC Fine Homes and Robyn Wark, BC Hydro
Virtual Microsoft Teams meeting

Participants

1. Bea Bains, FortisBC
2. Patrick Caraher, AHMA
3. Diana Dilworth, HAVAN
4. Maya Chorobik, CEA and LGPN Co-chair
5. Norm Connolly, Richmond/PIBC, and P3 Subco Co-chair
6. Ian Cullis, BCNPHA
7. Catherine Ernst, BOABC
8. Patrick Enright, City of Vancouver
9. Jeff Fisher, UDI
10. Maura Gatensby, AIBC
11. Nicholas Heap, City of Richmond and outgoing P9 Subco co-chair
12. Toby Lau, BC Hydro and P3 Subco Co-chair
13. Wilma Leung, BC Housing
14. Megan Lohmann, CEA and UBCM rep
15. John Madden, UBC
16. Richard Mathews, Squamish and Part 9 Subco co-chair
17. Mary McWilliam, BCIT & CBC Subcommittee Co-chair
18. Katherine Muncaster for Nat Gosman, EMLI
19. Roberto Pecora, ZEBx
20. Harshan Radhakrishnan, EGBC
21. Pauline Rupp for Joe Hart, CHBA
22. Laura Sampliner, Port Moody and LGPN Co-chair
23. Muneesh Sharma, BOMA
24. Maxwell Sykes, City of Surrey/UBCM Rep
25. Guido Wimmers, UNBC
26. BSSB: Tiffany Warkentin, A/Director, Strategic Policy and incoming ESCC chair; Dale Andersson, CBC Subcommittee Co-chair; Scott Williams, Senior Energy Codes Administrator, Hugo Wong, Policy Analyst
27. **Guests**: Tom Berkhout, BC Hydro; Alex Blue, Evoke Buildings; Alexandre Bigonesse, NRCan; Remi Charron, BC Housing; Patrick Enright and Charling Li, City of Vancouver; Pete Koepfgen, FortisBC; Adrian Mohareb, CAS; Lily Shields-Anderson, UDI; Ralph Wells, UBC
28. **Regrets**: Katy Fairley, BCCA; Jason Jung, ASTTBC; Lisa Mak, BC Hydro; Ron Rapp, HAVAN and Part 9 Subco co-chair; Kelly Reid, HKR Builders/CHBA BC; Holly Wacker, Ministry of Municipal Affairs; Tyler Wightman, BOABC

Welcome, Introductions, and Opening Remarks (Zachary May)

- Analysis of GHG regulations for local government opt-in are taking longer than anticipated due to technical challenges. Therefore, the consultation process will be longer.
- The purpose of today is to ensure the summary sheets have the right details, raise the right policy questions, and are distributed to the right people to get adequate feedback. Policy questions include:
    - Whether GHG and Energy Steps should be linked together
    - Whether the highest energy efficiency targets are required to cost-effectively meet GHG outcomes
    - Whether targets listed require adjustment

Feedback on draft targets for building archetypes (Zachary May and group)

- GHGIs of 6, 3, and 1 were included as points of discussion. With impact analysis, those numbers could be adjusted depending on stakeholder feedback.
- Electricity emissions factor was a topic of great interest and feedback. A clear, stable factor for the next five years is required. Recent volatility in the GGIRCA figures is anomalous, and government announcements indicate electricity will decarbonize quickly in the short term. Zac suggests using the status quo on emissions factor in the CoV Energy Modelling Guidelines, which he believes is our best hope for long-term stability until the future emissions factor for electricity becomes more certain. Although many options were tested, we believe this to be the best proposal.
- Discussion:
    - Can the utility guarantee an emissions factor over time? Outside of BSSB control. Similar to climate data that is always out of date, there will always be a gap between up-to-date data and historical data, but that is a pressure we are trying to manage.
    - UDI and CoV agrees with using the CoV guidelines. CoV indicated openness to changing their gas emissions factor to the PSO best practices figure to align with our approach.
    - Some concern over potential fluctuations in RNG emissions due to different sources, which could vary from the PSO best practices document. CAS oversees RNG, and FortisBC is working on that.
    - RNG program opens again in mid-October with no plans to close the program.
    - Agreement to use the natural gas emissions factor in the BC Best Practices Methodology, similar to RNG, which is slightly lower than the current figure in the Code.
    - CAS would prefer a different approach to the electricity emissions factor.
    - Understanding that if the EEF is changed, the targets would be updated accordingly.

Summary sheets discussion (Zachary May, Scott Williams, Alex Blue)

- Consultants prepared summary sheets from data gleaned from the Metrics Research Report update. The intent was to illustrate different emissions reduction and cost outcomes if the envelope remained constant at Step 2, but equipment changes were made.
- Technology choices were informed by the contractor's professional expertise regarding practicality and cost to limit the potential combinations.
- We are seeking to include the right amount of information without overwhelming.
- Discussion:
    - If ASHP used for heating, and heating loads reduced, likely wouldn't see massive increase in incremental capital cost.
    - Top Step might still make electric resistance possible, with reduced heating loads as Step increases, but DHW energy load stays constant across Steps.

- Please identify and document why heat pump water heaters were not included. HP for DHW is becoming more popular, but we need to draw the line in the sand with options to analyze to keep things simple.
- On why RNG costs seem to remain constant, while RNG is more expensive than conventional natural gas, the difference is offset from an increasing carbon tax. When averaged over 20 years, it's neutral. Some feedback that changes in government direction (e.g. choice to not increase the carbon tax may affect the accuracy of those cost projections.)
- Modelled utility costs for non-profit housing sector tend to be 50% higher due to increased occupant density.
    - Will include disclaimer that these are meant to compare modelled energy costs based on code assumptions, and there will likely be a discrepancy between modelled and actual results.
- More information requested regarding additional climate zones and steps within the Step Code. Many Part 3 buildings are located in CZ 5 and 6. In Metro Van, these buildings will have to hit high Energy and GHG Steps. Suggest including more of those permutations, especially commercial, in CZ 5 and 6. UDI was interested to note that the analysis suggested that increasing the Step doesn't always increase cost.
- Red GHGI numbers indicate that it exceeds the proposed 6, 3, or 1 target, but that a minor change to energy conservation measures or load reduction might make the building hit the target. For the purposes of this analysis, the ECMs were kept as constant as possible.
- The targets aren't necessarily wrong if some buildings exceed it a bit; however, when buildings hit at GHGI of 1.3 or 1.2, it gets harder to reduce further as major emissions reductions decisions have already been made. Even a Step 4 buildings on 100% electricity might reach 1.1 in which case GHG metrics may need to be revisited. Could tweak the DHW savings to get it over the finish line to meet targets. Higher or lower densities affect DHW.
- Understand why connection fees were excluded from analysis due to variations per project. Tier 2 rates are also a challenge. Should be addressed during implementations. Developers could be wary of high GHG Steps without these issues being addressed at BC Hydro.
- We can indicate that time-limited incentives are also not a part of this analysis.
- Cooling has been included in Part 3 models.
- For MURBs, the drop in utility cost in this analysis because of the change in system types. For the natural gas case in MURBs, we're using fan coils in the suites. In our case suite fans represent an additional EUI of about 8. When we move to baseboard, we're removing those. This isn't integral to a fuel switch – you can move from FCs to VRFs, for example, which would have similar fan power. In that case, you would actually still see a drop in utility cost, as you'd be moving to a higher efficiency heating source.
- For Part 9, question on why heat pump water heater was only $700. Answer: the costing database showed $600 for the tankless DHW, then $1374 for HP DHW.



  - ACH was different at Step 3 due to a change in ECM package to reduce ICC.
  - Occupant behaviour is a bigger influence on energy demand at higher Steps due to reduced base loads.
  - Request for electric baseboard heat to be included in the analysis.
  - Question on whether we could include a townhouse or rowhouse as well as additional climate zones and Steps
  - Question from CHBA on smaller and larger homes, and effect of a cap on large houses and a minimum sq. ft for small houses
  - Adjustment for small homes suggested given disproportionate DHW loads.
- Some adjustments to hotel targets may be necessary as they have trouble meeting 6, 3, and 1. **Consensus reached that the 6, 3, and 1 targets are appropriate for Part 3 buildings and medium-sized Part 9 homes. Whole numbers are more acceptable by the group. Consensus on largest and smallest Part 9 buildings not yet reached. Further analysis on caps or other adjustments TBD.**
- Understanding that GHGI should not penalize density
- A best practices guide should explain implications of choosing progressively higher energy and GHG Steps, or projects that may just barely miss a GHGI target.
- Reminder that there will be a measure-only GHG Step, and that buildings must be 20% more energy efficient than 2018 Code before requiring any GHG Steps besides measure-only (Step 3 for Part 9, Step 2 for Part 3).
- For buildings connected to district energy, BSSB is seeking to identify a methodology for choosing an emissions factor, and leave the rest to local governments. So long as it's consistent.
- While the intent is to have the opt-in carbon pollution standard effective on signature as soon as December 2021, it is not actually required until a local government adopts it. Local governments already requiring low-carbon energy systems will likely act immediately; others will look at the best practices guide and go slower.
- More case studies from different local governments on how mixing and matching different Energy and GHG Steps would be helpful for a local government best practices guide, and what design and local government review teams can expect.
- Targets may require adjustment for the Fort Nelson grid (current analysis on Climate Zones 7b and above, which are on that grid, have not been done yet).
- FortisBC is seeking BCUC approval to create a permanent tariff for RNG to guarantee emissions for the life of the buildings, which hopefully will address local government concerns.
- Local government best practices guide to be done in two phases: a simpler form to be released in time with the regulation, and a more refined version done in collaboration with partners.
  - Steering committee associated with the LGPN could offer useful feedback
- It's Zac's last meeting for the year. Zac encourages everyone to pick up the phone or set up meetings to leverage our strong working relationships. Please contact Tiffany Warkentin, the acting ESCC chair (Tiffany.Warkentin@gov.bc.ca or 236 478-2666), as well as Scott, Hugo, or Dale. Appreciative of the collaborative and productive nature of the group.

- Plan for at least one more meeting in late November for further feedback on more refined summary sheets and implementation approaches.

Actions

- BSSB is interested in CHBA input to determine whether sheets reflect issues seen in Part 9 and are relevant to that audience.
- Will investigate including Climate Zones 5 and 6 for Part 9, and electric resistance for space heating in Part 9. Will include disclaimer that annual energy use is modelled, not actual.
- Decision to include NPV in addition to other financial implications, as well as increases in dollar amounts (not just percentage increases) for Part 9. Will change Part 9 analysis to 2.5 ACH instead of 1.5.
- BSSB to investigate rounding principles in the Code on whether a GHG value rounded to the nearest whole number would be sufficient (i.e. a house with GHGI of 1.4 = GHG of 1).

Adjournment at 4 p.m.

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Vancouver, British Columbia V6E 3S7 Canada
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www.udi.bc.ca

DATE: November 8, 2021
FROM: Anne McMullin, President/CEO Urban Development Institute – Pacific Region (UDI)
TO: The Hon. David Eby, Q.C., Attorney General and Minister of Housing
Re: Housing Affordability and the Government's *CleanBC: Roadmap to 2030*

Summary

On October 25, the Government released its plan to achieve the 2030 greenhouse gas emission reduction targets – the *CleanBC: Roadmap to 2030*. There are several actions that may potentially impact the delivery and affordability of housing. However, there are approaches that can mitigate or offset the impacts, specifically related to:

- Linking land-use and infrastructure development;
- Establishing requirements for GHG reduction pilot programs;
- The role of the BCUC and BC Hydro;
- Increasing accessibility and affordability of heat pumps;
- Prioritization of regulatory changes;
- Broader Public Sector Leadership to build capacity;
- Expansion of research, education and training programs;
- Prefabrication; and
- Changes to the District Energy model.

We believe that considering these challenges and opportunities will support the delivery of more high-efficiency homes while balancing the need for affordability.

Background/Discussion

The primary concern amongst builders with the changes being proposed in the new *CleanBC* plan is that the *BC Energy Step Code* (*ESC*) regulatory roadmap that was established several years ago is changing under the new *Roadmap to 2030*. Our members had a clear understanding of what was going to be expected of them from both the provincial and local governments over the next decade until buildings achieved the final *ESC* Step (Step 4 for Part 3 residential structures) to become net-zero in operations. The timeframe province-wide to achieve Step 4 was 2032, but several local governments have shortened them. Extensive training and education programs have been established as well as incentives to help builders adjust to the *ESC*.

Now a new requirement is being established – greenhouse gas (GHG) emissions also have to be reduced to net-zero. The timeframes are also much shorter. When the *ESC* was established, the Provincial timeframe was 15 years before the net-zero energy target had to be achieved. With GHGs, the timeframe is the end of decade, so the timeframes at the municipal level will be even shorter than for the *ESC*.

In addition, under the current regulatory regime, local governments were willing to offer incentives to builders to reduce GHGs by lowering their mandated *ESC* step if Low Carbon Energy Systems (LCES)

were installed in projects. This flexibility lowered implementation costs for some new buildings. Several municipalities have indicated that they will eliminate this incentive and require the highest Step of the *ESC*, in addition to the GHG reduction requirements.

It is the mandating of Step 4 that will likely drive building cost increases the most – especially if local governments maintain urban design requirements that make high performance buildings more difficult to construct – such as mandating smaller floor plates, high articulation and the stepping back of buildings at higher heights (i.e. wedding cake designs).

These changes are also occurring at a time when there are other significant changes being made to building regulations:

- new accessibility requirements;
- rainwater/stormwater measures (e.g. green roofs);
- resiliency policies;
- seismic improvements;
- noise/vibration mitigation;
- embodied carbon; and
- a new *BCBC* in 2022 and others.

UDI is concerned about industry capacity issues – especially given the skilled worker shortage, commodity costs and supply chain issues. In addition, the above requirements will add costs to projects at the same time construction costs and land costs are rapidly rising; as are municipal and regional fees and charges. We recognize that this poses a challenge for housing affordability objectives, and we discuss several potential mitigation measures below.

Link Land-Use & Infrastructure

It is abundantly clear from the *CleanBC Roadmap* that linking land-use planning with infrastructure investments - particularly transit - has substantial environmental benefits. As noted in the *Roadmap to 2030*:

> "*Along with directly controlling emissions from their own facilities, operations and vehicle fleets, municipalities and regional districts have the capacity to influence* ***about 50% of our GHG emissions through decisions on land use****, transportation and infrastructure that affect where people live and work, how they get around, and how their communities grow and change with time"* [by comparison, "*Buildings … account for about 10% of the province's GHG emissions …*"].

UDI was disappointed that there were few actions to ensure that the links between land-use and infrastructure decisions would occur, because allowing density near transit will also assist the Ministry of Housing in its efforts to improve housing affordability. As discussed at previous meetings, UDI recommends that the Province consider instituting targets for the delivery of housing near transit investments – whether this be done through TransLink's *Transit Supportive Agreements*, Metro 2050, or the Provincially-mandated Housing Needs Assessments.

Establish Requirements for Local Government GHG Pilots

Given the short timeframes to establish net-zero GHG emissions in new construction, UDI would have preferred that the Government focus on establishing its regulatory approach to achieve this with stakeholders and utilities rather than also have to establish a regulatory approach for local governments to mandate low carbon construction.

However, in the *CleanBC Roadmap*, the Government notes that for carbon pollution standards, it wants local communities to "… *serve as pilots for future province-wide requirements*." Likely most of these voluntary jurisdictions will be located in Metro Vancouver and the Capital Regional District. The Province could establish requirements for local government regulations such as the use of incentives if they choose to adopt the highest *ESC* Step and low GHG emission targets for new construction.

Municipal incentives do not have to be financial. Time and costs could be saved by reducing/waiving urban design requirements. The Ministry of Housing is funding a metrics report that will identify the most cost effective ways to achieve Step 4/low GHG buildings. We need to ensure that these strategies will not be restricted by municipal urban design policies.

Time could be saved and risks reduced by waiving public hearings as would be allowed under *Bill 26, the Municipal Affairs Statutes Amendment Act (No. 2), 2021* (although some form of enhanced consultation with the public would be needed as is done in the City of North Vancouver through their Development Approvals Pilot Program). However, the incentive with most impact for Part 3 builders would be increased density. In fact, for most Part 3 projects, they would prefer increased density for their projects than the financial incentives that are usually offered. This approach would also assist the Government in its efforts to improve land use planning to lower GHGs noted above and should supplement existing incentives from senior levels of government and utilities as seen in the *ESC*.

The BCUC & BC Hydro

With regard to building electrification, UDI and other stakeholders have been waiting for several years for BC Hydro to address the inconsistent costs and extended timeframes of connecting projects to the grid. For example, projects whose load will exceed the threshold for the electrical infrastructure in the area, there is a requirement to not only fund the upgrades for the project but for future projects in the areas as well. This is usually a surprising and substantial cost for builders.

UDI and other stakeholders have also recognized that the Tier 2 rates, which may have been important for energy conservation, have become obstacles to the goals of *CleanBC* to rapidly expand EV adoption and fully electrify buildings.

Given the shorter timeframes discussed in the *CleanBC Roadmap*, we recommend that clear direction be given to the BC Hydro and the BCUC to take actions as soon as possible that will make it easier and more cost effective for builders to achieve the targets in the new *CleanBC Roadmap*.

There are several options that could resolve the BC Hydro connection issues our members are facing. The costs of upgrading BC Hydro infrastructure could be funded through electricity rates, as BC Hydro revenues will be expanding with fully electric buildings and the utility eventually providing fuel (electricity) to every light-duty vehicle in the British Columbia. Senior Government funding is another option. If builders are going to continue to fund the upgrades, changes are still needed so the costs are predictable and consistent. This can be done by borrowing the approaches local governments use to fund their infrastructure for roads, water and sewers – Development Cost Charges (DCCs) and Latecomer Agreements (LAs).

Both DCCs and LAs are very familiar to builders. With DCCs, the infrastructure improvement costs are calculated across a municipality or for an area. The costs that are related to growth are then shared by builders through DCCs. This approach would require BC Hydro to become far more active in municipal area plans, which we believe is necessary anyway. With Latecomer Agreements, a builder pays for the electricity upgrades, but then Latecomer Charges are applied to projects that use this infrastructure over

a 15 year period, and the revenue from these Charges are passed onto the builder (minus administrative costs) who provided the upgrades.

In addition, there may be opportunities in some parts of the province (eg. the Okanagan) to utilize photovoltaics to achieve net-zero carbon. This would require incentives such as improving the feed-in tariff for BC Hydro, which we understand has recently been reduced. Related to photovoltaics, is the potential deployment of building batteries, such as the Tesla Powerwall. Building Batteries would allow consumers to draw energy from the BC Hydro power grid during off peak times, for use in peak periods of electricity use to reduce the scale of the infrastructure that is required. This would likely require both incentives and smart meters to implement.

Heat Pumps

The *CleanBC Roadmap* includes references for the need to use heat pumps to achieve the Governments climate objectives for both new and existing buildings. In fact, there is a commitment to mandating "… *the highest-efficiency standards for new space and water heating equipment by 2030, and earlier where feasible.*" Given the commitment to heat pumps, which are very expensive, the Government may want to explore approaches to reduce their costs – bulk purchasing and/or encouraging the manufacturing of heat pumps in British Columbia.

Prioritizing Building Regulatory Changes

The new changes to lower GHG emissions for building operations is a significant change and the timeframes are relatively short relative to what was expected of the *ESC*. This should then be the focus of governments and the building sector in the near-term – in addition to implementing the new *BCBC* and the *ESC*. Other initiatives impacting new construction should be minimized or deferred as much as possible as there is a limit to industry capacity.

This should include local governments. The Ministry may need to review its *Building Act* powers, to ensure that municipalities remain focused, and do not intrude on what should be regulated under the *BCBC*. This would ensure that we have a more consistent regulatory environment.

We are especially concerned about any new municipal regulations relating to embodied carbon. The Province wisely is reviewing the issue, but limiting any new requirements to the public sector until at least 2030. Any new regulations need to wait until we fully understand the implications – both in terms of costs and processing times. There are thousands of components in each building and hundreds of workers, which makes tracking and proving the amount of embodied carbon in a project very difficult, while likely slowing down development approval processes and overtaxing industry capacity.

Broader Public Sector (BPS) Leadership

When LEED was introduced to Metro Vancouver, the BPS built the LEED projects first. Design consultants and construction companies became familiar with the standard. Education and training programs could be developed about actual projects. UDI was able to hold seminars on best practices for LEED projects as well as the pitfalls to avoid. We are pleased that under the new *CleanBC Roadmap*, the Government is committed to "*Requiring all new public sector buildings to align with our climate goals beginning with performance standards (2023) and moving to zero-carbon new buildings (2027).*"

We ask these projects also comply with the highest step of the *ESC*, and that BC Housing projects are also built to these high standards. Residential builders would benefit from learning from BC Housing's experience in building high performance buildings. Local government projects should also meet these high standards – especially those engaged in the GHG pilots. Ideally, municipal

requirements imposed on new construction from the pilots should not occur before BPS projects have to achieve them.

Research and Training/Education Programs

As noted above, training and education programs have been essential in the implementation of LEED and the *Energy Step Code*. We strongly recommend that this continue as we implement low carbon construction. In general training and education programs have to increase to address the ongoing skilled worker shortage the sector is facing, and be subsidized to encourage broader participation. We need more trades, design consultants, building officials and others that are familiar with high performance sustainable buildings.

BC Housing has a research program that could be utilized to identify the most cost effective ways to meet the *ESC* and GHG targets that the Province and local governments are seeking. This would assist the BC Housing with their own projects and help builders in general – especially if this research were incorporated into training and education programs.

Prefabrication

One specific area that requires more research, education and pilot projects is prefabrication. This has the potential to speed up the construction process for many projects – especially Purpose Built Rental (PBR) buildings. It would also assist the Province in its efforts to promote mass timber in new construction to reduce embodied carbon and assist B.C.'s forestry communities by expanding the use wood products, and encouraging the manufacturing of prefabricated materials in the Province. BC Housing could be asked to pilot and research prefabrication in new construction. Again, this could lead to more training and education programs.

District Energy

It is not clear how builders are going to achieve net-zero carbon emissions when they are mandated to connect to District Energy (DE) systems that are not zero-carbon. There is also a concern that if these systems are converted to zero-carbon systems, the utility rates and connection fees will increase. The rates and fees may also climb as buildings become more energy efficient. DE systems rely on large energy loads to fund the extensive infrastructure – heating plants and pipes in the ground. These energy loads are dropping as the *Energy Step Code* is implemented. Our members have already seen connection fees climb to $150,000 per building, and many residents are not seeing the energy savings from purchasing or renting high-performance homes.

This may become more problematic if cooling is mandated, as few DE systems provide cooling. Heat pumps would be more cost effective for builders and consumers because they can provide both heating and cooling.

The Government needs to address the future of DE under a regulatory framework that includes the ongoing implementation of the *ESC* (including the higher steps), mandated reductions in GHGs for new construction and potentially cooling requirements. We recommend that the Province have more oversight over DE systems, as there is none now – even by the BCUC. Local Governments that have DE systems who wish to pilot GHG regulations for new construction should be asked how their DE systems will be utilized to achieve the low emission targets and what the costs will be. The growth of the municipal DE systems may have to be limited in the future.

Existing Buildings

As noted above, owners of existing buildings will be asked to install high-efficiency equipment. This will begin in 2024. Under "*right-to-charge*" legislation, they will be mandated to provide EV charging.

This could be costly, and will be problematic for PBR landlords with rent control limiting their revenues. Landlords need be able to fully recover the costs of these initiatives through the new *Above the Guideline Increase Policy* or funding from senior governments. Alternatively, BC Hydro could provide the EVC infrastructure in PBR buildings.

Conclusion

UDI believes you can implement the Government's *CleanBC* goals for the building sector and still be able to increase the housing supply and improve affordability. To do so, steps are going to have to be taken to reduce the costs or offset them through incentives. For Part 3 builders, the best incentive is density, which also is important for reducing emissions – especially if it is located near transit. This would also assist the government with other objectives such as fully leveraging infrastructure investments and increasing the supply of high-performance buildings.

Notes from UDI Exec

From:	Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>
To:	May, Cheryl OHCS:EX <Cheryl.May@gov.bc.ca>
Cc:	Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>, Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent:	November 10, 2021 12:47:34 PM PST
Attachments:	FW: Some examples of Non-market housing project delays due to processing disfunctions and Inter governmental brinksmanship., image001.jpg

Hi Cheryl –

2.1 DAPR

- Some LGs are messaging that development approvals will slow/stop during election period. (Anne McMullin)
- Need monitoring of whether LGs are making use of the tools.
- Challenges NFP face – Provincial and City Legal drawing lines in the sand. Talked about Poverty Pimps extracting fees (unclear but I assume this is about endless reports) (Email from Rick Ilich, Townline Homes attached)
  - Atira – Stuck due to fights over a Land Lease (City of Van)
  - CLT - Stuck due to fights over a Land Lease (City of Van)
  - Took four months to negotiate access to City of Van SHORT program
- There was some discussion about 'pulling' BCH developments out of the LG development approval process and into a sanctioned provincial process/planning entity.

2.2 New Zealand Model – Policy and Land-Use Changes

- UDI believes it is a more
- Roughly same population, roughly same housing price challenges and NIMBYism
- Part of a larger framework – National Statement on Urban Development (2020)
  - Housing Needs Reports + that require a Competitive Margin of 15-250% that is required in addition to project 'need'
  - Municipalities are required to demonstrate their capacity to support development: resourcing and process
  - Monitoring program and tools for adjustments
  - Minimum requirement, within radius of transit, that requires minimum of 6 story zoning and eliminating parking minimums
- Gap: NZ Policy doesn't speak to Municipal Infrastructure and Hydro Service to support the development.
- Proposed solution (not related to NZ Model): Upzone large areas (not just around transit), set DCC and CAC rates – this will drive development.

***Key point: Equity to build rental is 45%, condo is 15% so for the same capital developers can build a ratio of 3:1 condo to rental for the same capital. Developers who don't hold and operate as rentals won't build rental.**

Rob Blackwell raised the following:

- Provincial: Province could waive PST on construction of rental.
- Federal: You must pre-pay GST to feds when you rent the first unit. You are paying GST on an asset you aren't selling – this is not just new, it is also major regeneration. ($3M GST on a 60 unit apartment they refurbished)

2.3 CleanBC Roadmap and Housing Supply

- **UDI will connect with us.**

2.4 Broadway Area Plan

- Overall pleased in the direction suggested about density but it lacks detail. Hard to decipher how the plan applies to individual sites.
- View cones to and from City Hall are unproductive.
- Station Areas are looking good – East of Main references to limiting heights due to View Cones.
- Wanted Burnaby Model (Burnaby gives 1.3FSR density bonus in exchange for rental.) for condo development to protect rental and generate affordable rental supply. Vancouver policy does not apply to Strata only – just buildings that will contain rental.
- Looks like there are tenant protections (right to return, rent protection), but looks like this is achieved through purposeful reduction of density permitted to make redevelopment economically unfeasible (CoV said that

outright to us) and it appears to UDI some renters may be able to return at lower rates because it is return at current rate but rather capacity at levels of affordability.

- Positives: relaxation of parking requirements, design specs for energy efficiency

John Thomson | Executive Director
Housing Policy Branch
Ministry of Attorney General and Minister Responsible for Housing
Mobile: 250.812.1915
Office: 236.478.2318
Pronouns: *he/him*



Offering acknowledgement in respect of the Lekwungen-speaking and Coast Salish Peoples, traditional keepers of this land

FW: Some examples of Non-market housing project delays due to processing disfunctions and Inter governmental brinksmanship.

From: LynesFord, Adam AG:EX <Adam.LynesFord@gov.bc.ca>
To: Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>, Dowler, Thea AG:EX <Thea.Dowler@gov.bc.ca>
Sent: November 10, 2021 8:27:46 AM PST
Attachments: image001.jpg, image003.jpg, image004.jpg, image005.jpg, image002.jpg

From: Michael Drummond <mdrummond@udi.org>
Sent: Wednesday, November 10, 2021 8:16 AM
To: LynesFord, Adam AG:EX <Adam.LynesFord@gov.bc.ca>
Subject: FW: Some examples of Non-market housing project delays due to processing disfunctions and Inter governmental brinksmanship.
Importance: High

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Here's what Rick is talking about

From: Rick Ilich <rick.ilich@townline.ca>
Date: Wednesday, November 10, 2021 at 6:41 AM
To: Cassandra McColman <cmccolman@udi.org>
Cc: Anne McMullin <AMcMullin@udi.org>
Subject: Some examples of Non-market housing project delays due to processing disfunctions and Inter governmental brinksmanship.

GENERAL

Any or all of the following general items would reduce barriers and promote development of non-market initiatives. All items not pertaining to use, form and character or density should be enacted on a regional or provincial basis– not by local AHJs. Across the board, please consider:

- DCC, DCL and CAC exemption for all non-profit, charity and municipal status societies;
- Exemptive status for Property Tax, land and improvement;
- Exemption of PTT;
- Working with the Federal Government, exemption of GST Self Supply;
- Waiver of Municipal fees, (RZ, DP, BP etc.);
- Drastically reduced parking; and
- Density bonuses and height relaxations relative to transit

In addition to the above. More cooperation is needed between levels of government. At present 1 project is heavily scrutinized and reviewed by all three levels of government – which is absolutely ridiculous.

Each level mandates their own regulations regarding environment/energy standards with differing baselines of measurement, accessibility/adaptability/universal design standards, and affordability targets. The result of this is a chaotic mess for the applicant and consultant team increasing average unit sizes, spec and costs unnecessarily all the while playing cat and mouse on the pro forma, underwriting and legal agreements. A pecking order is needed, governments need to cooperate and align with each other – or simply trust the other, roll in their contribution and stay out of the way.
As a general statement, the City planning departments get caught up on the latest untried in our region climate saving gimmick which often requires special treatment and inspections because they are not CSA approved, ….but they read about it, or saw it on while at a planning conference.

Some examples of the dysfunction and extreme vetting include:

CITY OF VANCOUVER

- On society owned land, the City has a 'SHORT' program for non-market initiatives. Problem, it takes 18 to 24 months of 'informal' design development and public 'information' before the application can be submitted and the clock actually start.
- On City owned land, lease terms and 'what if' scenarios City Legal and Finance departments come up with are endless. Chasing residual and a definition of low-end-of-market can drag on for months if not years. Land tenure has to be first in, rule No. 1, yet this endless nonsense continues while escalation and the hurry up to wait aspect of this redundancy comes full circle and restarts all new funding analysis.
- **Example:** Sawmill, a 337 unit VAHA/CLT deal funded under BCH CHF1.0. VAHA/Finance chased a lease definition from June 2020 to February 2021 preventing BCH PPA. Project costs soared during that time ultimately costing the Province $8m.
- **Example**: 177 W Pender, a 76 unit VAHA/CLT deal funded under BCH Supportive Housing, CMHC Co-I, and CoV grant. The legal structure (lease v. airspace v. head/subleases etc.) has taken 3 years to get road mapped and terms accepted by council. The latest, City legal is understaffed so the lease terms are back with BCH for 3rd or 4th ? time to draft the lease. Still no lease while CMHC has been on hold pending proof of tenure since late 2018. Another round of costs and modeling ahead, restarting the extreme vetting City finance inflicts jeopardizing the whole project and commitments.
- **Example**: Aaron Webster Co-op at 1885 E Pender with CLT owning the site. Not a mixed use project, a simple 6-storey, 64-unit family heavy co-operative fitting all parameters of the community plan. City required 'informal' Letter of Enquiry application of fully developed architectural and landscape design. LOE Application submitted March 10, 2020, then a pre-RZ submission, then finally late September 2020 the RZ is submitted. Nothing changed during that time. A couple minor landscape conditions. It is still the exact same design today yet 3rd reading took until July 2021. And this project truly was fast tracked because our client insisted and society led open house was unnecessary.
- **Example**: 450 Alexander Street, an Atira owned site. 180 unit building for women and children with a childcare and social CRU at grade. It essentially took 18 months of 'enquiry' and being the City's guinea pig to test different massing models soliciting community and departmental feedback on a tower v. mass wall built form to ultimately vary from the community plan and context. Right or wrong on built form, this is an extreme example of bureaucracy across departments with no authority weighing the options and applying direction. Ultimately this unnecessarily costs the non-profit a few hundred thousand in design fees, 18 months of land carrying costs and delays the whole process adding uncertainty to funders.

CITY OF RICHMOND

- They do next to nothing to support non-profits. They do require units within market projects but unlike utilizing a reserve to deploy sites and waivers, they bring nothing to the table for specific non-market deals.
- **Example**: Brighouse United Church, Townline offered to port 20 affordable housing units worth of cash in-lieu from its Luxe project to Brighouse Church in order for the church to leverage CMHC's Co-Investment program, achieving 47 units at deep levels of affordability and another 93 near market. In total 140 non-market units would have been added to local supply but instead the church is left with selling the site or restarting rezoning and design development towards a different program – RCFI which is all near market.
- **Example:** Steveston Buddhist Temple/Wisteria Place, a 107 unit independent seniors facility funded by BCH. The City provided minor sidewalk upgrades and cut back on some off sites but ultimately did not contribute anything to further deepen the level of affordability or expedite the project.

METRO VANCOUVER

- Same issues as City of Vancouver. Their oversight and due-diligence on simply putting in land that sat vacant for 20 years is astonishing.
- **Example:** The Alex, an Atira Women's Housing project creating a childcare, health clinic and 83 units for women and children funded by BCH's CHF. Construction was delayed 4 months after excavation because the ground lease dragged out for about a year, holding up financing and other registrations needed for BP and funding. Stopping a project, and restarting due to legal brinksmanship between Governing bodies, cost the project and us additional forming costs, and civil costs because the trades walked due to the delay.

BURNABY

- They have a 'fast track' system for processing non-market initiatives but they openly disregard it. In fact Burnaby is the absolute worst at either not following their adopted policies and regulations or requiring

applicants to follow unpublished and enacted regulations. This is hugely problematic in design development and prolongs the entire process requiring a 'learn as you go' approach; and

- Among other process and personalities to navigate, Burnaby requires an ass-backward approach to contributions, zoning and DP commitments. The whole order of things is messed up which creates conflict and uncertainty for applicants and funders.
- **Example:** L'Arche Greater Vancouver at 7401 Sussex Ave. They own a number of group homes in the City and are redevelopment their main outreach facility and community hub. 3 group homes/22 beds for people with disabilities and those who care for them, 10 semi-independent units, 29 rental homes plus office, programming an worship areas:
- First reading of RZ application was July 18, 2018. Fourth reading and adoption was early this week (November 8, 2021);
- On a 6 to 9 month turn-around time for BP, it takes 9 months to receive first round of comments;
- Burnaby required the site and existing facility be hazmat abated, demolished and completely removed before 4th reading and adoption – which is a Preliminary approval milestone for BCH funding. This adds and unreasonable amount of risk to the society and project partners.
- Once rezoned, super late in the grand scheme of things, then they entertain the municipal grant that is being sought. Again, it is all simply too late in the process adding unnecessary risk and uncertainty to the society and funders.

RICK ILICH

TOWNLINE

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Letter from the Building and Safety Standards Branch RE: Code Inquiry Service

From: OHCS Building & Safety Standards Branch OHCS:EX <Building.Safety@gov.bc.ca>
To: AMcMullin@udi.org, jfisher@udi.org
Cc: mdrummond@udi.org
Sent: November 17, 2021 11:15:16 AM PST

November 17, 2021

Dear Anne and Jeff:

I am reaching out to you as Urban Development Institute is a key partner in the building regulatory system in British Columbia. The Building and Safety Standards Branch (the Branch) is exploring the possibility of revising the code inquiry service to ensure that code users get the best value for this service and consistent guidance regarding the BC Codes.

The question has been raised if there is better value and service if Urban Development Institute members work through their associations when they have feedback or questions about the BC Codes. The Branch remains committed to connecting at an organization level, especially for BC Codes questions that are not resolved for your members.

I would appreciate the opportunity to meet and discuss our ideas for streamlining the code inquiry process further and will be following up shortly. You are also welcome to reach out to me at any time through any of the means below.

Sincerely,

Jun'ichi Jensen
Executive Director (Acting), Building and Safety Standards Branch
Junichi.Jensen@gov.bc.ca
250-858-1325 or 778-974-3910

RE: UDI notes - CQ and RACC discussion

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
To: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Cc: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Sent: November 30, 2021 1:01:02 PM PST

I think Jeff may have mixed up his language- he was clear at the outset in referring to a building policy committee and that he doesn't have a technical building code committee. Thereafter he referred to his code committee, which I took to be the policy committee. Not totally sure, but that was what I came away with.

Jun'ichi Jensen
Executive Director (Acting)
Building and Safety Standards
Ministry of Attorney General and Minister Responsible for Housing
Province of BC
250 858 1325
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From: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: Tuesday, November 30, 2021 12:06 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Subject: RE: UDI notes - CQ and RACC discussion

At the risk of repetition, here's my notes:

- UDI members; build range of products (primary focus Part 3 - though some members build Part 9 townhomes)
- JF not aware that members used code inquiry service
- Developers typically work through RPs on Part 3 projects / CHBA on Part 9 (JJ shared that some reach out via code questions)
- Jeff was member of past BC Building Policy Advisory Committee
- RACC - Increased responsibility for province to be connected to provincial industry
- JF supports/favours BPAC-type model for industry voice into system (via province) UDI has building policy committee (meets about 4 times per years)
- BPAC was at 30,000 foot level - advised on policy but was not a technical committee (though some members were also technical experts)
- Likely to find need to interact with UDI at both levels (policy and technical) probably at different times
- E.g. BPAC could strike/form technical working groups
- UDI always felt separated from national system (UDI does not have a national body)
- Support
- UDI has a building code committee(?) [perhaps misheard… maybe would consider striking one?]
- UDI Newsletter every 2 weeks to 3000 recipients
- Corporate- hard to count individual members; 900-950 corporate members
- BSSB; could distribute comms for harmonization via newsletter
- BSSB; send links to Accessibility consultation for newsletter
    - Send to Jeff and Lily at lshieldsanderson@udi.org
- Favours joint (other industry reps) committee such as BPAC (meeting about 2-3 times a year; Feb, May, Oct)
- JF suggests we talk to Applied Scientists, Engineers and Architects and CHBA
- Harmonization; JF asked the question "what do we want done first?" (advice; look at cooling)
    - Decarbonization basically means heat pumps; heat pumps made viable when cooling is required
- BPAC; what does BC want out of this change process?

Andy

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Tuesday, November 30, 2021 11:45 AM
To: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Cc: Williams, Melanie OHCS:EX <Melanie.1.Williams@gov.bc.ca>
Subject: UDI notes - CQ and RACC discussion

Jeff Fisher UDI

had building pollicy committee -we can meet with them.

UDI also has a news letter that we can sent items out with - either to building policy committee or more broadly - goes every 2 weeks - 900 corporate members. 3000 people .

favours BPAC model

Does not think his members use CQ much directly - they would ensure their members have first gone to their association.

For BPAC model- what is the breakdown of policy vs technical - we need a cross over comitteee and membership

does not think develpopers will go to UDI with questions- most go to architects/engineers association.

UDI does not have a national association.

Send comms on access to Jeff, jfisher@udi.org and Lily Shields anderson LShieldsanderson@UDI.org

lshieldsanderson@udi.org

joint meetings of all key partners may be helpful as well as one to one meetings with BSSB. UDI priorities could then be balalnced against other segments of the industry. BPAC could be 2-3 times annual.

Harmonization- cooling should be a priority. govt is pushing elecrification and decarbonization, so cooling mandate would make heat pumps more viable option.

Jun'ichi Jensen
Executive Director (Acting)
Building and Safety Standards
Ministry of Attorney General and Minister Responsible for Housing
Province of BC
250 858 1325
or 778 974-3910

RE: Metrics Research Report - Review Comments

From: Eoghan Hayes <ehayes@edgec.ca>
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>, mark@bernhardtcontracting.com, Remi Charron <rcharron@bchousing.org>, Chorobik, Maya (Community Energy Association) <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca, Bob Deeks - rdcfinehomes.com <bdeeks@rdcfinehomes.com>, patrick.enright@vancouver.ca, Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca <alex.ferguson@canada.ca>, Jeff Fisher <jfisher@udi.org>, SForoushani@richmond.ca, MGatensby@aibc.ca, joe.iconhomes@gmail.com, Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>, Nicholas Heap - NHeap@richmond.ca <NHeap@richmond.ca>, vanessa@chbabc.org, Pete.Koepfgen@fortisbc.com, Toby.Lau@bchydro.com, Wilma Leung wileung@bchousing.org <wileung@bchousing.org>, Iain.Macdonald@nrc-cnrc.gc.ca, susan@focaleng.com, HOLD - 211006 - May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Gregory.McCall@vancouver.ca, roberto@zebx.org, Harshan - hradhakrishnan@egbc.ca <hradhakrishnan@egbc.ca>, reception@concertproperties.com, kelly@hkrbuilders.com, Tanya.Rumak@fortisbc.com, pauline@chbabc.org, lsampliner@portmoody.ca, dave.sargent@davara.ca, Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com) <einar@e3ecogroup.com>, Jonathan Meads <JMeads@qualico.com>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: December 6, 2021 8:27:45 AM PST
Attachments: image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

All

See link below with all the mandatory ASHRAE 90.1 forms in one location. These are the mandatory forms I mentioned in the last meeting.

Supplemental Files for the Standard 90.1-2016 Users Manual (ashrae.org)

Cheers
E

Best regards,
Eoghan Hayes, P.Eng, BEMP, RESET AP , LEED AP BD&C
Managing Director
+1 (604) 338 1063 | www.edgesustainability.com
The Brickworks Building
304–1228 Hamilton St., Vancouver BC, V6B 6L2



Attention: Our office will be closed for the holidays from December 23rd until Jan 3rd. We will re-open on January 4th, 2022. Merry Christmas and Happy New Year from all of us at Edge Consultants.

-----Original Appointment-----
From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: November 26, 2021 4:31 PM
To: Andersson, Dale OHCS:EX; 'mark@bernhardtcontracting.com'; 'Remi Charron'; Chorobik, Maya (Community Energy Association); 'NConnolly@richmond.ca'; Bob Deeks - rdcfinehomes.com; 'patrick.enright@vancouver.ca'; Ferguson, Alex (NRCan/RNCan) alex.ferguson@canada.ca; Jeff Fisher; 'SForoushani@richmond.ca'; 'MGatensby@aibc.ca'; 'joe.iconhomes@gmail.com'; Eoghan Hayes; Alex Blue ablue@EvokeBuildings.com; Nicholas Heap - NHeap@richmond.ca; 'vanessa@chbabc.org'; 'Pete.Koepfgen@fortisbc.com'; Toby.Lau@bchydro.com ; Wilma Leung

wileung@bchousing.org; 'Iain.Macdonald@nrc-cnrc.gc.ca'; 'susan@focaleng.com'; HOLD - 211006 - May, Zachary OHCS:EX; Gregory.McCall@vancouver.ca; 'roberto@zebx.org'; Harshan - hradhakrishnan@egbc.ca; 'reception@concertproperties.com'; 'kelly@hkrbuilders.com'; Tanya.Rumak@fortisbc.com ; 'pauline@chbabc.org'; 'lsampliner@portmoody.ca'; 'dave.sargent@davara.ca'; Einar Halbig - E3 Eco Group Inc. (einar@e3ecogroup.com); 'Jonathan Meads'; Vukosavljevic, Nicole OHCS:EX
Subject: Metrics Research Report - Review Comments
When: December 6, 2021 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Hello Steering Committee Members,

We would like to meet with the committee to discuss the most recent draft and the review comments provided thus far prior to proceeding the final stages.
If you have not done so already, please provide your review comments as soon as you are able.

Thanks and have a wonderful weekend!

Microsoft Teams meeting

Join on your computer or mobile app
Click here to join the meeting

Or call in (audio only)
s.15 _____ Canada, Victoria
Phone Conference ID: s.15
Find a local number | Reset PIN

Learn More | Meeting options

RE: Engagement - ExB - Overheating and Air Quality

From: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>

To: nconnolly <nconnolly@richmond.ca>, Abdelaziz.Laouadi@nrc-cnrc.gc.ca, Eric Catania <ecatania@rdh.com>, Remi Charron <rcharron@bchousing.org>, Maura Gatensby <mgatensby@aibc.ca>, Susan MacDougall <susan@focaleng.com>, roberto <Roberto@zebx.org>, Kevin Shea <kevin.shea@integralgroup.com>, Marc Trudeau <marctrudeau@amegroup.ca>, Niels Anthonsen <niels@enerlytics.ca>, Mark Bernhardt <mark@bernhardtcontracting.com>, nheap <nheap@richmond.ca>, Faught, Brady <brady.faught@vancouver.ca>, Kelly Lane (Maple Ridge) <klane@mapleridge.ca>, gerry <gerry@3westbec.com>, peter.sundberg <peter.sundberg@citygreen.ca>, Pauline Rupp <pauline@chbabc.org>, bdeeks@rdcfinehomes.com, carmina@chbabc.org, Ian Cullis <ian@bcnpha.ca>, Jade Hume <Jade.Hume@metrovancouver.org>, Jeff Sevold <Jeffrey.Sevold@metrovancouver.org>, Ross Arbo <Ross.Arbo@metrovancouver.org>, Adrian Lynch <Adrian.Lynch@metrovancouver.org>, Erik.Blair <Erik.Blair@metrovancouver.org>, Conor Reynolds <conor.reynolds@metrovancouver.org>, Jason.Hingley@metrovancouver.org, Jason Emmert <Jason.Emmert@metrovancouver.org>, Julia Dugaro <Julia.Dugaro@metrovancouver.org>, Laurel Cowan <Laurel.Cowan@metrovancouver.org>, Michelle Lee <milee@bchousing.org>, Michael Pistrin <mpistrin@bchousing.org>, greg@inspirepm.com, Shahab Soltani <ssoltani@bchousing.org>, Wilma Leung <wileung@bchousing.org>, Sheryl Peters <speters@bchousing.org>, Dave Aharonian <daharonian@bchousing.org>, Jessica Woolliams <jwoolliams@bchousing.org>, dcampbell@bchousing.org, Bill MacKinnon <bmackinnon@bchousing.org>, Ainaz Bozorgzadeh <Ainaz.Bozorgzadeh@technicalsafetybc.ca>, Coral Buitenhuis <Coral.Buitenhuis@technicalsafetybc.ca>, Wark, Robyn <Robyn.Wark@bchydro.com>, King, Katherine <katherine.king@bchydro.com>, Lau, Toby <Toby.Lau@bchydro.com>, Berkhout, Tom <tom.berkhout@bchydro.com>, Richards, Victoria <Victoria.Richards@bchydro.com>, tony@choa.bc.ca, David Hutniak <davidh@landlordbc.ca>, john@visoa.bc.ca, president@visoa.bc.ca, tquinton@teamworkpm.com, Damian Stathonikos <dstathonikos@boma.bc.ca>, muneesh@boma.bc.ca, Jeff Fisher <jfisher@udi.org>, cmccolman@udi.org, Matt Greeno <mgreeno@crd.bc.ca>, maxwell.sykes@surrey.ca, Jared Wright <jwright@ubcm.ca>, Warren Perks <warrenp@bccassn.com>, chris.atchison@bccassn.com, rorykulmala@vicabc.ca, Joanna Eyquem <joanna.eyquem@uwaterloo.ca>, bchamplin@boabc.org, Tyler Wightman <tyler.wightman@boabc.org>, info@frescoltd.com, Li, Charling <Charling.li@vancouver.ca>, Enright, Patrick <patrick.enright@vancouver.ca>, matthew.wilson@saanich.ca, Jennifer Barber <Jennifer.Barber@campbellriver.ca>, Wells, Ralph <ralph.wells@ubc.ca>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Peter Mitchell <MITCHELL@egbc.ca>, dylan@ecotrust.ca, tarmstrong@chf.bc.ca, andrew@tenants.bc.ca, DRamslie@concertproperties.com, jamie.gray@quadreal.com, jovan@homeperformance.ca, Christine@homeperformance.ca, Kevin Ramlu <kramlu@tol.ca>, mluymes@hrai.ca, Danielle.Krauel <Danielle.Krauel@canada.ca>, meli.stylianou <meli.stylianou@canada.ca>, Alex Ferguson <alex.ferguson@canada.ca>, laureen.chung@canada.ca, Angie Woo <Angie.woo@fraserhealth.ca>, iain.macfadyen@zgf.com, colin.mingus@ubc.ca, martina@reloadsustainable.com, Ajeen Surendran <asurendran@tol.ca>, s.22 Christy Love <clove@rdh.com>, info@cpha.ca, Roy Thomassen <Roy.Thomassen@saanich.ca>, staceylightbourne@rossland.ca, tguidi@kelowna.ca, gcheetham@kamloops.ca, Paris Marshall Smith <pmarshallsmith@rdck.bc.ca>, cproctor@nelson.ca, ryan.smid@penticton.ca, David Kassian <david.kassian@penticton.ca>, Nathan Brooks <nbrooks@terrace.ca>, nhalim@newwestcity.ca, lburhenne <lburhenne@whistler.ca>, allison.morton@princegeorge.ca, Bill Darnbrough <bdarnbrough@dawsoncreek.ca>, Freya Phillips <fphillips@rdkb.com>, Paul Faulkner (RDCK) <PFaulkner@rdck.bc.ca>, Allison DenToom <adentoom@egbc.ca>, WrightA@dnv.org, Hamer, Gary <gary.hamer@bchydro.com>, Caroline Jackson <JacksonC@dnv.org>, Larisa Lensink <llensink@cnv.org>, Ian Theaker <iant@pembina.org>, Stupka, Robert <Robert.Stupka@fortisbc.com>, Cheryl Evans <c8evans@uwaterloo.ca>

Cc: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Madi Kennedy <madi.kennedy@integralgroup.com>, Lisa Westerhoff <lwesterhoff@integralgroup.com>, Robin Hawker <robin.hawker@integralgroup.com>, Berry, Julia ENV:EX <Julia.Berry@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>,

Hold - 230905 - Sheth, Namrata CITZ:EX <Namrata.Sheth@gov.bc.ca>, Walter, Monica CITZ:EX <Monica.Walter@gov.bc.ca>, Muir, Mitchel CITZ:EX <Mitchel.Muir@gov.bc.ca>, Alzate, Vanesa CITZ:EX <Vanesa.Alzate@gov.bc.ca>, John Grubb <usc@shaw.ca>, ftewfik <ftewfik@richmond.ca>, Sarah Rutherford <sruther@bchousing.org>, Ferguson, Alex <alex.ferguson@NRCan-RNCan.gc.ca>, Lim, Edwin CITZ:EX <Edwin.Lim@gov.bc.ca>, Kira Pederson <kpederso@bchousing.org>, Woo, Angie [VCH] <Angie.Woo@vch.ca>, Allan Cheung <acheung@bchousing.org>, Galloway, Ryan [PHSA] <ryan.galloway@phsa.ca>, Gharibnavaz, Mehrdad [PH] <mgharibnavaz@providencehealth.bc.ca>, Liao, Tina CITZ:EX <Tina.Liao@gov.bc.ca>, Demsar, Tjasa <Tjasa.Demsar@surrey.ca>, erogers@tapsbc.ca, Todd Brunner <TBrunner@kelowna.ca>, Manda McIntyre <mmcintyre@rdck.bc.ca>, jeff <jeff@zumundo.com>, Mike Kasuya <mikekasuya@amegroup.ca>, Magdalena Szpala <mszpala@bchousing.org>, Graeme Wood <GWood@rdck.bc.ca>, Jiang, Tao <Tao.Jiang@surrey.ca>, Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>, Shook, Cameron EMLI:EX <Cameron.Shook@gov.bc.ca>, Krauel, Danielle <danielle.krauel@NRCan-RNCan.gc.ca>, Tse, Eric 1 CITZ:EX <Eric.1.Tse@gov.bc.ca>, Suzanne Jay <sjay@bchousing.org>, Sadia Afrin <saafrin@bchousing.org>, Nikoofard, Sara EMLI:EX <Sara.Nikoofard@gov.bc.ca>, Martin Austin <maustin@bchousing.org>, Hosseinirahdar,Mohammad <MHosseinirahdar@richmond.ca>

Sent: December 7, 2021 8:12:18 AM PST

Attachments: BSSB_Workshop_OHAQ_DEC02.pdf, image001.jpg

Good morning – please find attached the PDF presentation from the December 2nd engagement.

Written feedback will be accepted until December 22nd.

Thank you,
Nicole

-----Original Appointment-----
From: Vukosavljevic, Nicole OHCS:EX
Sent: Thursday, October 14, 2021 4:59 PM
To: Vukosavljevic, Nicole OHCS:EX; Connolly,Norm; Abdelaziz.Laouadi@nrc-cnrc.gc.ca; ecatania@rdh.com; rcharron@bchousing.org; mgatensby@aibc.ca; susan@focaleng.com; Roberto Pecora; kevin.shea@integralgroup.com; marctrudeau@amegroup.ca; niels@enerlytics.ca; mark@bernhardtcontracting.com; nheap@richmond.ca; Faught, Brady; klane@mapleridge.ca; gerry@3westbec.com; Peter Sundberg; Pauline Rupp; bdeeks@rdcfinehomes.com; carmina@chbabc.org; Ian Cullis; Jade Hume; Jeff Sevold; Ross Arbo; Adrian Lynch; Erik Blair; conor.reynolds@metrovancouver.org; Jason.Hingley@metrovancouver.org; Jason.emmert@metrovancouver.org; Julia Dugaro; Laurel Cowan; Michelle Lee; mpistrin@bchousing.org; greg@inspirepm.com; Shahab Soltani; wileung@bchousing.org; Sheryl Peters; Dave Aharonian; Jessica Woolliams; dcampbell@bchousing.org; Bill MacKinnon; Ainaz Bozorgzadeh; Coral Buitenhuis; Wark, Robyn; King, Katherine; Lau, Toby; Berkhout, Tom; Richards, Victoria; tony@choa.bc.ca; David Hutniak; john@visoa.bc.ca; president@visoa.bc.ca; tquinton@teamworkpm.com; Damian Stathonikos; muneesh@boma.bc.ca; jfisher@udi.org; cmccolman@udi.org; Matt Greeno; maxwell.sykes@surrey.ca; jwright@ubcm.ca; Warren Perks; chris.atchison@bccassn.com; rorykulmala@vicabc.ca; Joanna Eyquem; bchamplin@boabc.org; tyler.wightman@boabc.org; info@frescoltd.com; charling.li@vancouver.ca; Enright, Patrick; matthew.wilson@saanich.ca; Jennifer Barber; Wells, Ralph; Harshan Radhakrishnan; Peter Mitchell; dylan@ecotrust.ca; tarmstrong@chf.bc.ca; andrew@tenants.bc.ca; DRamslie@concertproperties.com; jamie.gray@quadreal.com; jovan@homeperformance.ca; Christine@homeperformance.ca; Kevin Ramlu; mluymes@hrai.ca; danielle.krauel@canada.ca; meli.stylianou@canada.ca; Alex.ferguson@canada.ca; laureen.chung@canada.ca; angie.woo@fraserhealth.ca; iain.macfadyen@zgf.com; colin.mingus@ubc.ca; martina@reloadsustainable.com; asurendran@tol.ca; s.22 ; Christy Love; info@cpha.ca; Roy.thomassen@saanich.ca; staceylightbourne@rossland.ca; tguidi@kelowna.ca; gcheetham@kamloops.ca; Paris Marshall Smith; cproctor@nelson.ca; ryan.smid@penticton.ca; David.Kassian@penticton.ca; Nbrooks@terrace.ca; nhalim@newwestcity.ca; lburhenne@whistler.ca; allison.morton@princegeorge.ca; bdarnbrough@dawsoncreek.ca; fphillips@rdkb.com; PFaulkner@rdck.bc.ca; Allison DenToom; WrightA@dnv.org; Gary Hamer; Caroline Jackson; Larisa Lensink; Ian Theaker; Stupka, Robert; Cheryl Evans
Cc: Warkentin, Tiffany OHCS:EX; Williams, Scott B OHCS:EX; Wong, Hugo OHCS:EX; Madi Kennedy; Lisa Westerhoff; Robin Hawker; Berry, Julia ENV:EX; Dang, Tommy OHCS:EX; Sheth, Namrata CITZ:EX; Walter, Monica CITZ:EX; Muir, Mitchel CITZ:EX; Alzate, Vanesa CITZ:EX; John Grubb; Tewfik,Fred; Sarah Rutherford; Ferguson, Alex; Lim, Edwin CITZ:EX; Kira Pederson; Woo, Angie [VCH]; Allan Cheung; Galloway, Ryan [PHSA]; Gharibnavaz, Mehrdad [PH]; Liao, Tina CITZ:EX; Demsar, Tjasa; erogers@tapsbc.ca; Todd Brunner; Manda McIntyre; jeff; Mike Kasuya; Magdalena Szpala; Graeme

Wood; Jiang, Tao; Olsen, Tracy OHCS:EX; Shook, Cameron EMLI:EX; Krauel, Danielle; Tse, Eric 1 CITZ:EX; Suzanne Jay; Sadia Afrin; Nikoofard, Sara EMLI:EX; Martin Austin; Hosseinirahdar,Mohammad
Subject: Engagement - ExB - Overheating and Air Quality
When: Thursday, December 2, 2021 1:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Zoom (added)

Hello,

The Building and Safety Standards Branch (Ministry of Attorney General and Minister Responsible for Housing) is responsible for the BC Building Code which regulates health and safety, fire and structural protection, accessibility, and energy and water efficiency in building construction.

The Branch is developing an Existing Buildings Renewal Strategy that provides a path for today's buildings to become more energy and water efficient, cleaner, and safer for British Columbians during events like earthquakes, wildfires, wildfire smoke, heat waves, and floods.

BSSB is hosting a series of engagement sessions on increasing resilience and, carbon and energy performance in existing buildings, and would like to extend an invitation to you and your organization to attend the **Thursday December 2nd from 1:00PM – 3:00PM PDT engagement session on addressing overheating and air quality (wildfire smoke) in existing buildings**.

Future sessions will be held throughout the fall/early winter (see schedule below) to continue discussions and partnerships with affected parties and key influencers, such as your organization.

Topic	Date
Energy efficiency supporting measures	Wednesday December 8th, 2021
Integrating mitigation and adaptation	Tuesday January 11th, 2022

If you have any questions in advance of the session, or written feedback on the engagement topics, please contact Nicole Vukosavljevic by email at Nicole.vukosavljevic@gov.bc.ca.

We look forward to your participation and input.

Thank you,
Nicole

Nicole Vukosavljevic (she/her)
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
UC: 778-974-5044 (preferred) | Cell: 250-883-7419 | Email: nicole.vukosavljevic@gov.bc.ca

BRITISH COLUMBIA
BC Public Service
Where ideas work
2020 Top Work Unit Award

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

Topic: Engagement Opportunity: Overheating and Air Quality Impacts to Existing Buildings
Time: Dec 2, 2021 01:00 PM Pacific Time (US and Canada)

Join Zoom Meeting
s.15

Page 283 of 394

Withheld pursuant to/removed as

s.15

Existing Buildings Renewal Strategy
Overheating & Air Quality

December 2nd, 2021



Image source: Vancouver (Daily Hive, 2017)

INTEGRAL BRITISH COLUMBIA



Welcome

Facilitation and Provincial Team

Integral

- Lisa Westerhoff
- Robin Hawker
- Madi Kennedy

Building and Safety Standards Branch

- Nicole Vukosavljevic – Senior Policy Analyst & Project Lead
- Scott Williams – Senior Codes Engineer
- Hugo Wong – Policy Analyst
- Tracy Olsen – Senior Policy Analyst
- Tommy Dang – Codes Administrator

Objectives of Today's Session

- Describe the Province's role in supporting efforts to reduce the risk of overheating and air quality (AQ) issues in **existing buildings**
- Identify barriers to implementing overheating/AQ risk mitigating measures in **existing buildings**
- Identify Provincial actions to reduce overheating/AQ risks in **existing buildings**



Image source: https://www.penticton.ca/business-building/building-permits

Agenda

Time	Agenda
1:00pm	Welcome and Orientation
1:10pm	Background – Overheating
1:30pm	Breakout Session – Overheating
2:10pm	Background – Air Quality
2:20pm	Breakout Session – Air Quality
2:50pm	Report Back and Next Steps
3:00pm	Close



Background: Overheating

Climate Change and Increasing Temperatures

PAST Observed Changes (1900 to 2013)

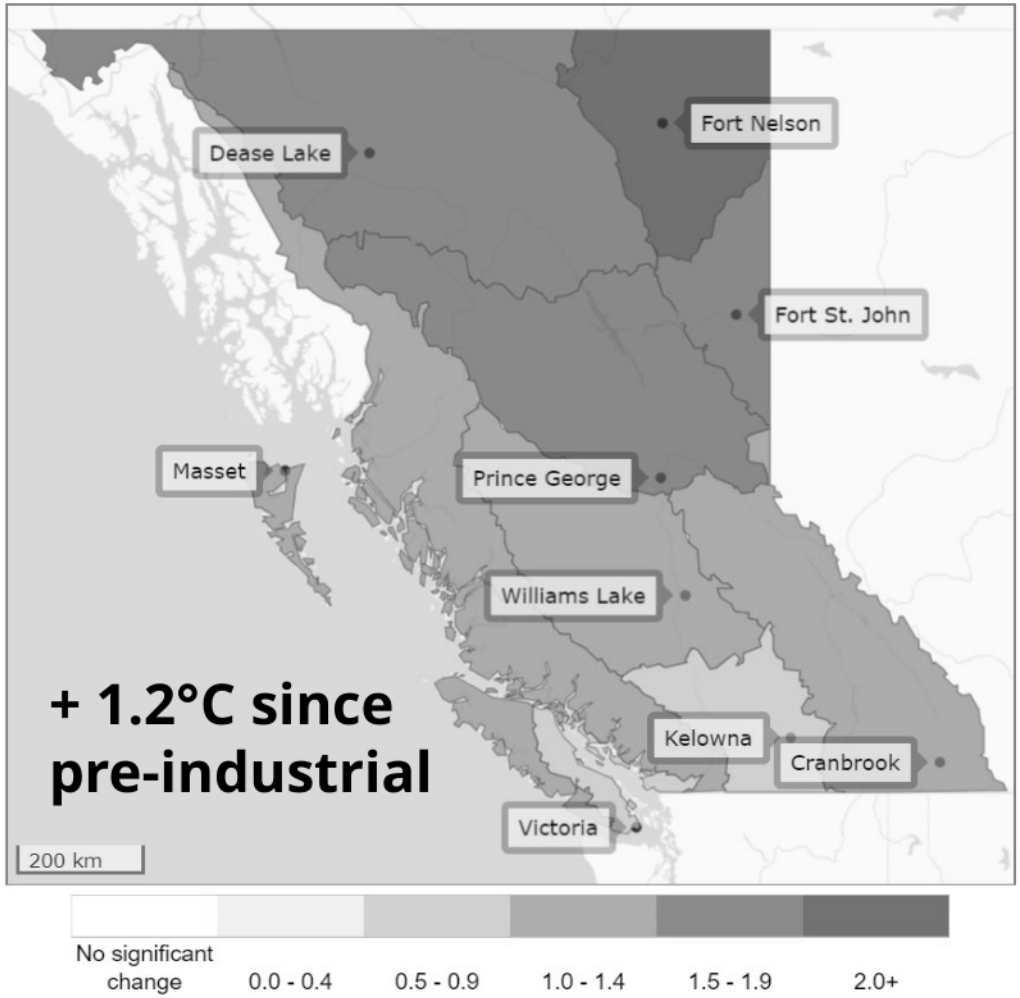


Image source: B.C. Ministry of Environment and Climate Change Strategy – Indicators of Climate Change

FUTURE Temperature Projections

- +3.2 average by 2050s (2040 – 2069)
- +5.4 average by 2080s (2070 – 2099)

- Cascading impacts including:
  - Warmer winters & hotter summers
  - More frequent & severe heat waves
  - Plant & animal species change
  - Changing growing season for crops & gardens

Extreme Heat in Summer 2021

2021 Heat Dome

At least 595 people died due to the extreme heat this summer

526 deaths occurred between June 25 and July 1, 2021

- BC Coroners Service Preliminary Findings
  - Province-wide death rate: 10.1 per 100,000 residents
  - Highest number of deaths in Vancouver, Surrey and Burnaby
  - Individuals 70+ years old accounted for 69% of deaths
  - 96% of heat-related injuries occurred in a residential setting

Table 7. Heat-Related Deaths by Injury Location and Health Authority of Injury, Jun 25 – Jul 1, 2021[1]

	Interior	Fraser	Vancouver Coastal	Island	Northern	Total
Inside Residence	57	265	118	46	20	506
Outside	3	2	1	1	1	8
Public Building[2]	1	1	0	0	0	2
Unknown	3	5	1	1	0	10
Total	64	273	120	48	21	526

[1]Health authority is derived from injury township. Death township is used in where injury township is unknown.
[2]Includes injury location occurring on or near the ground of a public building.

- Investigations into deaths by early 2022
  - Death review panel findings late spring 2022

Source: https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/news/bccs-heat-death-update.pdf
https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/heat_related_deaths_in_bc_knowledge_update.pdf

Extreme Heat Adaptation Measures

Increase Insulation	Cool Roof	Window Glazing	Exterior Shades	Increase Ventilation	Mechanical Cooling
					
Roof insulation – increase from R-20 to R-40 Wall insulation – increase from R-13 to R-20	Cool roof that reflects a greater portion of solar gain	Use of low Solar Heat Gain Coefficient windows to reduce solar gain.	Fixed or operable exterior shades on east, west and south sides	Increasing ventilation rates: make-up air units, HRVs, natural ventilation, bathroom / kitchen exhaust	Heat pumps, air conditioner units, chillers.

Policy Landscape



UBC Study – Future Climate Design for Multi-Family Buildings

Defining Thermal Comfort

Recommendations for defining – heat waves, future climate files, passive survivability

Possible approaches:

- Health and safety risk
- Consecutive hours
- NRC guidelines

01

Modelling Thermal Comfort

Consistent approach to evaluating overheating – ASHRAE 55

Inputs: natural ventilation, exterior or other shading, air speed, mechanical boost

Weather files

Reporting

02

Design Implications

Matrix:

- Strategies – active, passive, mixed
- Overheating mitigation potential
- Climate change mitigation
- Capital and operational impacts
- Architectural design implications
- Impact on resilience

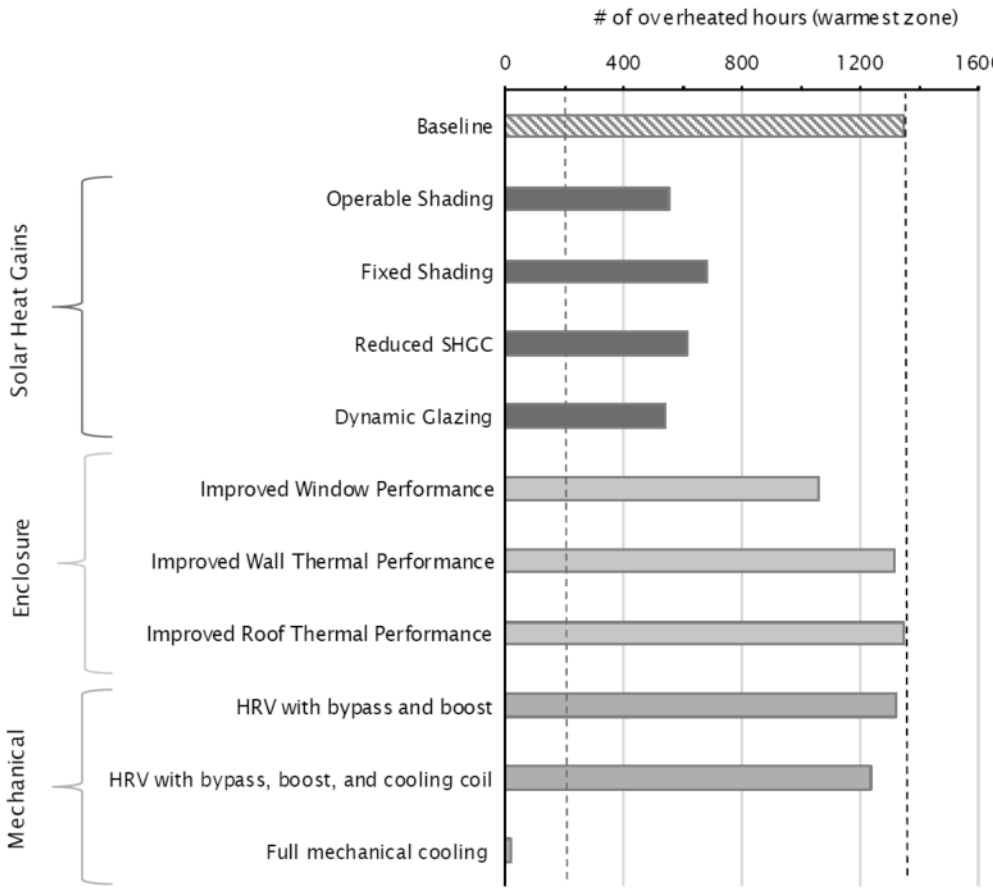
03

Code Recommendations

- Overheating as a health and safety issue
- Frequency and magnitude
- 2020, 2050 and 2080 weather files
- Future shifted RSWY
- Requirements for cooling with passive measures

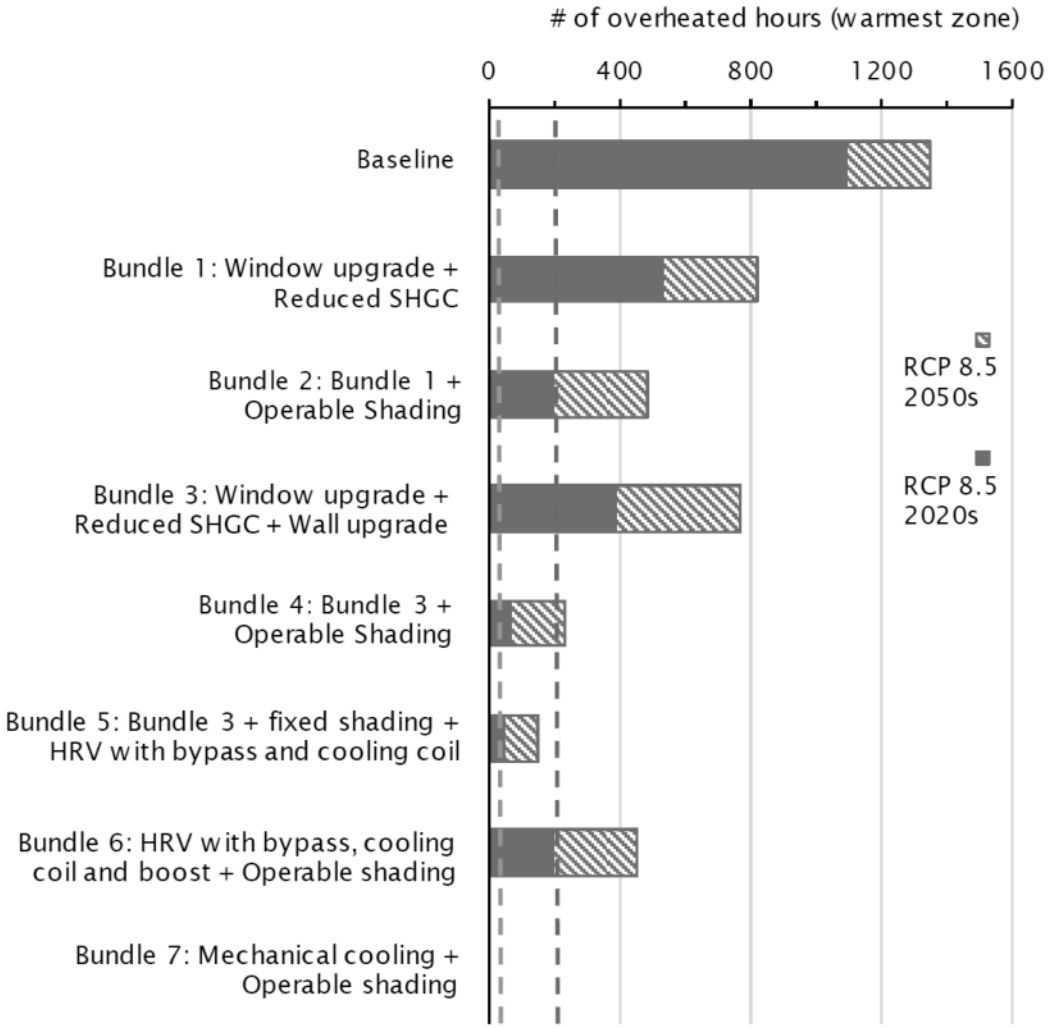
04

UBC Study – Designing Climate Resilient Multifamily Buildings



Excerpt from:
UBC – Designing Climate Resilient Multifamily Buildings
RDH Building Science

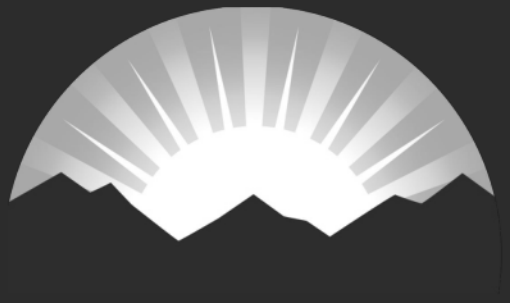
UBC Study – Designing Climate Resilient Multifamily Buildings



Excerpt from:
UBC – Designing Climate Resilient Multifamily Buildings
RDH Building Science



Questions?



Breakout Session #1

Experiences and Lessons Learned

We'll break into groups **by building type** to discuss the following topics:

1. **Challenges or barriers** to addressing overheating in existing buildings?
2. What are **specific actions** you would like the Province (BSSB) to take to address overheating in existing buildings?

Report Back – Experiences and Lessons Learned

- **Facilitators**
  - What were the **key takeaways** from your breakout session?

- **Participants**
  - Any further reflections? Add them to the chat!

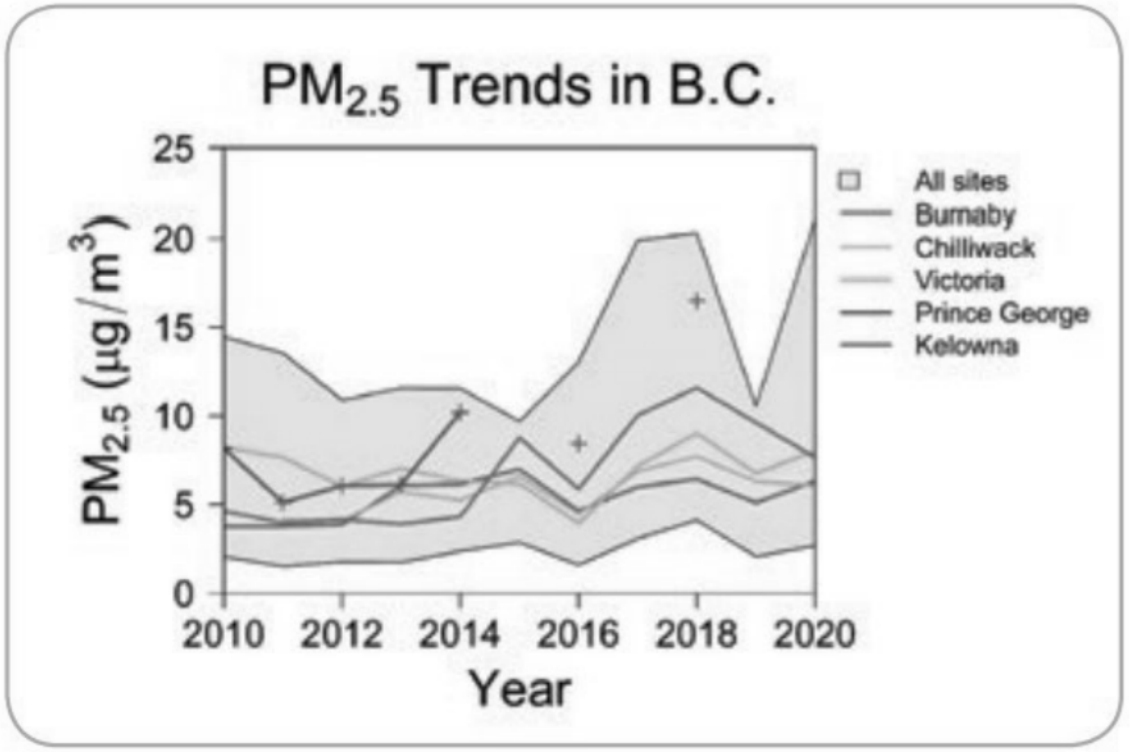




Background: Indoor Air Quality

Wildfire Events and Air Quality Issues





Source: BC Lung Association – State of the Air Report 2021

Wildfire Events and Air Quality Issues (cont'd)

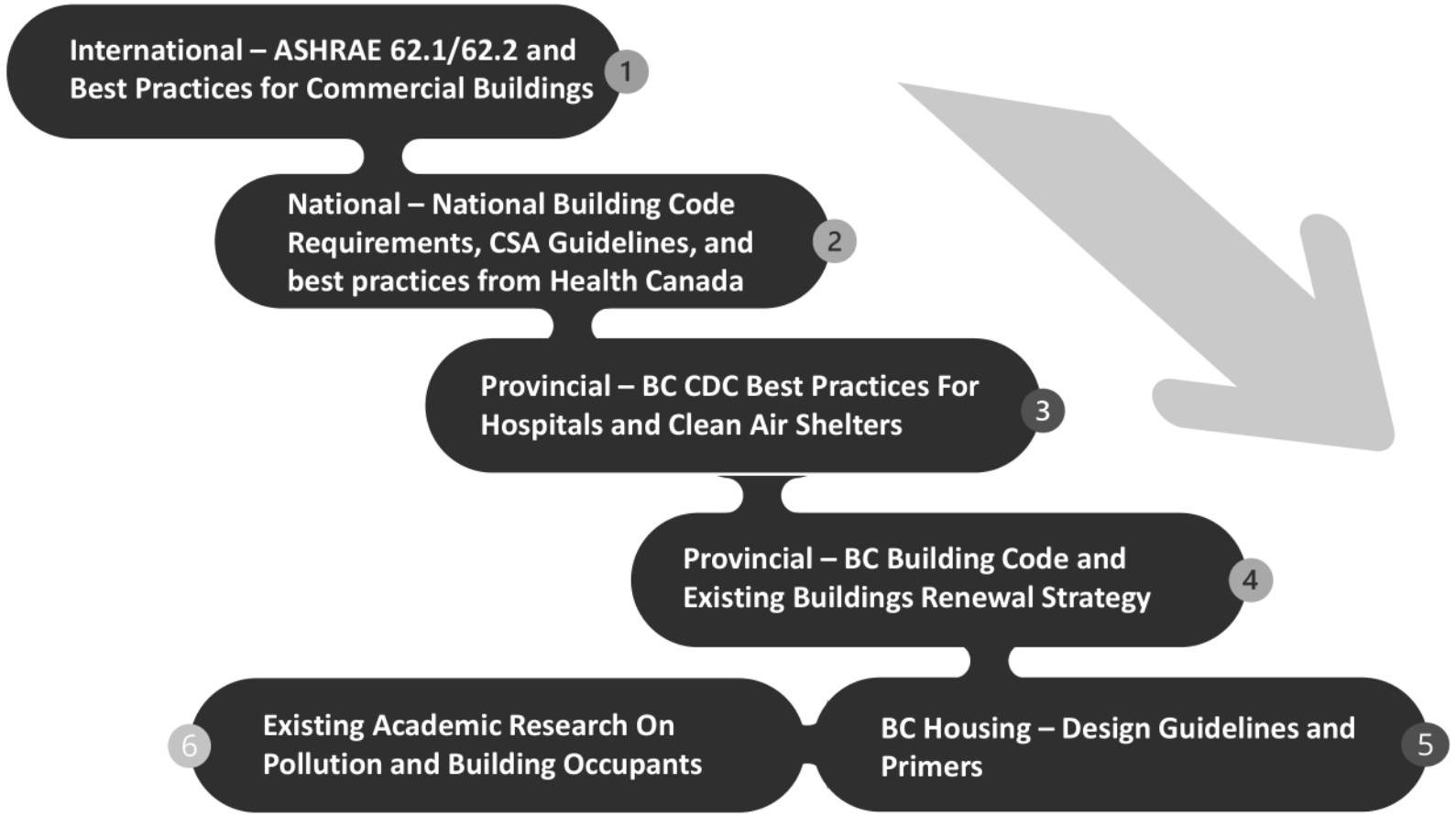
- 2018 wildfires – air quality advisories lasted in some places for more than 40 days
- Exposure can occur inside buildings

Consequences

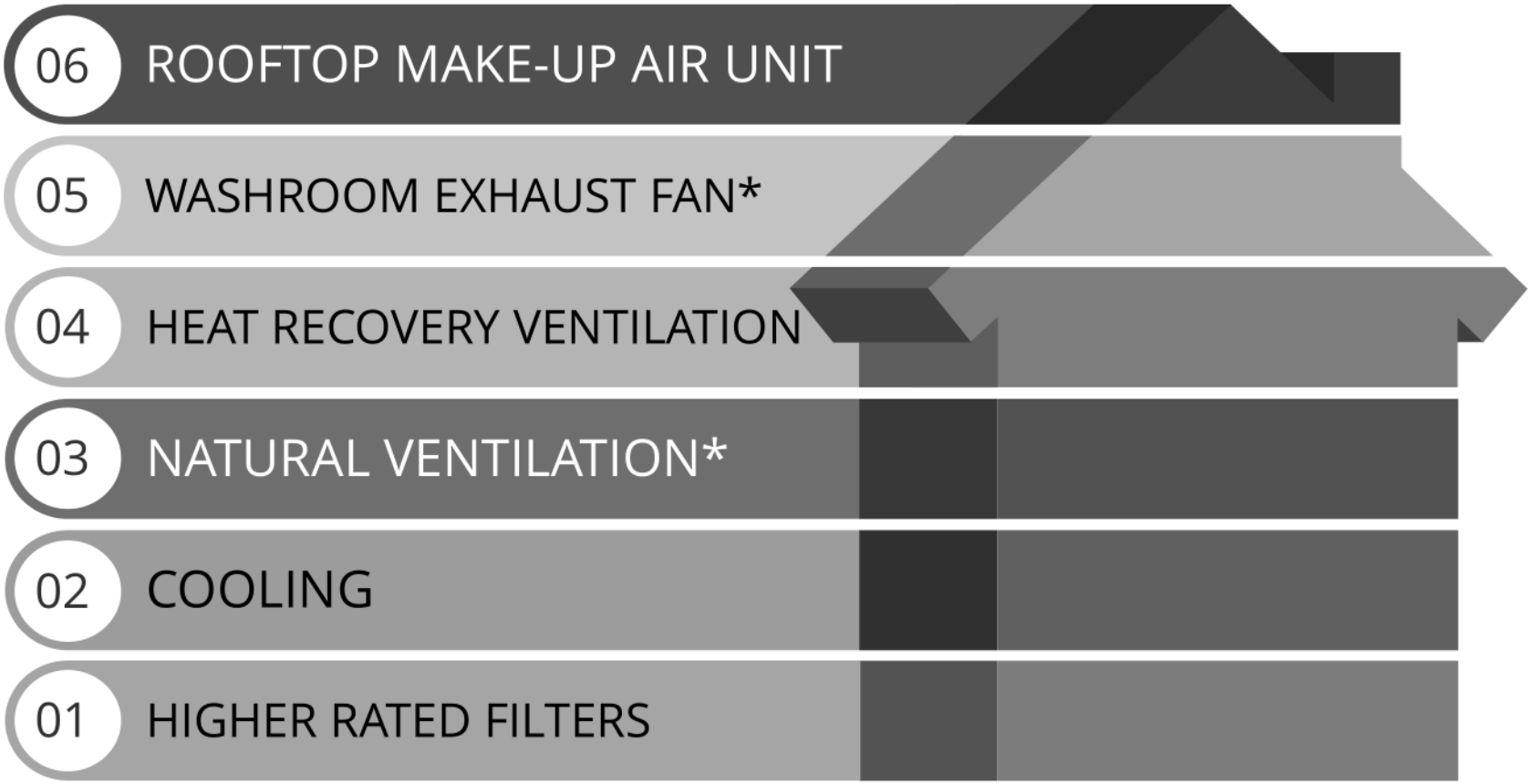
CATEGORY	CONSEQUENCE	RATING: INSIGNIFICANT / MINOR / MODERATE / MAJOR / CATASTROPHIC	DESCRIPTION
Health	Loss of life		Over 100 potential fatalities due to direct and indirect exposure
	Morbidity, injury, disease, or hospitalization		Risk of short-lived smoke irritation, severe respiratory and cardiovascular symptoms, and other illnesses for more than 1,000 people

Confidence level indicated by bar color: Low | Medium | High

Policy Landscape



Air Quality Adaptation Measures



*measures to mitigate overheating, which can be negatively impacted by wildfire smoke

Breakout Session #2

Actions to Address Air Quality

We'll break into groups **by building type** to discuss the following topics:

1. **Challenges or barriers** to addressing indoor air quality in existing buildings?
2. What are **specific actions** you would like the Province (BSSB) to take to address indoor air quality in existing buildings?

Report Back

- **Facilitators:**
  - What were the **key takeaways** from your breakout session?

- **Participants:**
  - Add any further reflections into the chat



Next Steps

Further Opportunities for Feedback

Additional opportunities to provide feedback:

- The Province will accept related feedback until **December 22, 2021**
- Written comments can be sent **by email** to **Nicole.Vukosavljevic@gov.bc.ca**

Next Steps

Topic	Date
CleanBC Roadmap	August 4th, 2021
Flood	September 28th, 2021
Water conservation	October 6th, 2021
Wildfire	October 19th, 2021
Energy efficiency regulation	November 30th, 2021
Overheating and air quality	December 2nd, 2021
Energy efficiency supporting measures	Wednesday December 8th, 2021
Integrating mitigation and adaptation	Tuesday January 11th, 2022



Thank you

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Agenda – December 9, 2021

1. Welcome and Chair's Remarks
2. Hon. David Eby, Attorney General, Minister Responsible for Housing
    - 2.1. ***CleanBC Roadmap* and Housing Supply**
        - Key affordability considerations
    - 2.2. **Municipal Positive and Negative Practices**
        - Memo
    - 2.3. **Application of GST to Purpose-built Rental**
        - Issues Note
    - 2.4. **Next Steps for Ongoing Discussion**

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To: The Hon. David Eby, Q.C., Attorney General and Minister of Housing
From: Anne McMullin, President & CEO, Urban Development Institute (UDI)
Date: December 7, 2021
Re: Municipal Incentives and Barriers for Rental Housing

Purpose

Rental remains a key area of housing need across British Columbia, and the approaches taken by municipalities can have a significant impact on the delivery of these new homes. Below we review four elements of municipal policy that illustrate both positive and negative examples of their impact. The examples provided are not exhaustive, and represent case studies rather than a comprehensive list of municipal incentives and barriers. This overview is intended to provide context to some of the discussions in the UDI meetings, and describe the variety of approaches within Metro Vancouver that impact rental housing.

Background/Discussion

Incentives

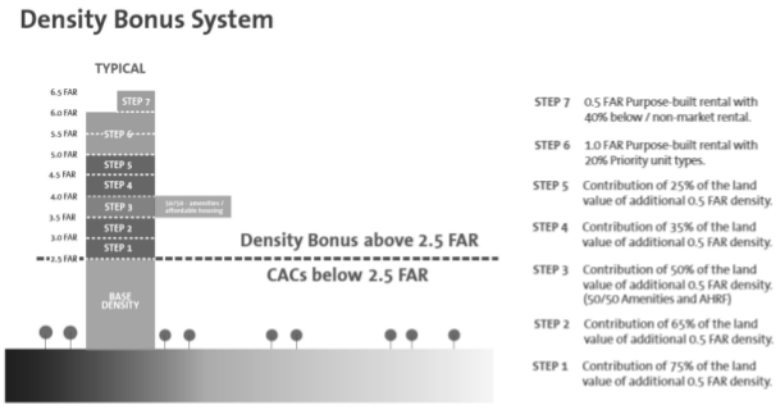
Coquitlam: Housing Affordability Strategy and Streamlined Process

Coquitlam is generally viewed by builders as a good place to build homes due to its favourable polices and collaborative approach. Through a combination of supportive policies and a streamlined application process, the City is adding significant housing stock to the region, including Purpose Built Rental (PBR). As of August 2020, the City had over 6,000 rental units under application or construction - nearly 1,000 of which were below-market or non-market units.

There are a number of incentives under Coquitlam's Housing Affordability Strategy (HAS) that the City provides to support rental development in transit-oriented neighbourhoods:

- Increasing the base densities up to 2.3 FAR in certain TOD neighbourhoods with a 10% density bonus for PBR- applying in medium density apartment zones (RM3); and
- Parking reductions, which lowered the number of spaces required to 0.75 spaces per unit from 0.85 for a 1-bedroom unit and 1.25 for a 2-bedroom unit.

In the higher density zones, for PBR with 20% of the additional space reserved for priority rental housing types (i.e., below market, non-market, accessible and/or three-plus bedroom rental units) the City provides the ability to obtain a 1.5 FAR increase in density. Additional density bonuses are detailed in the graphic below. The density bonus framework is simple, consistent and well-understood by builders and City staff, creating a more streamlined development process. This is a key reason that builders have increasingly chosen to build in Coquitlam.



In addition, the structure of the policy, including the parking reductions and density bonus contributions, is aligned with requirements from senior levels of government for additional supports (i.e. The CMHC Rental Construction Financing Initiative). This has allowed new developments to deliver more below-market housing than they would have otherwise been able to provide.

More broadly, the municipality has been able to consistently provide timely responses to enquires, which are often acknowledged within 24 hours. Development applications for medium-density projects are typically approved in 6 to 8 months, and the City is regularly reviewing their internal processes with builders to make improvements. However, Coquitlam is facing increased development applications due to its newly approved City Centre Area Plan, so adequate staffing levels and continued improvements in efficiency will be required to continue delivering these positive outcomes.

Coquitlam is one of several municipalities which have undertaken internal process reviews over the last few years. Coquitlam's approach encompassed both policy and process, inviting applicants who routinely work within the City's systems to provide specific feedback, and identify problem areas. This feedback is being incorporated into quick "wins" or larger process improvements. For example, the City created a dedicated application stream for builders who are developing smaller residential projects or have not built projects in the City and are unfamiliar with Coquitlam's processes.

This work is critical to builders' being able to deliver more housing in communities across the province. UDI has been outspoken in its support for the Province's role in funding this work.

<u>Key Elements of Success:</u>

- Simple and consistent incentives such as additional density increases, reductions in parking and streamlined processing can deliver more rental and affordable housing at scale.
- Alignment with senior levels of government can result in increased below-market housing delivery.
- Ongoing internal reviews and a focus on customer service creates a culture of collaboration to improve both processes and projects.

City of Burnaby: Rental Use Zoning Policy – Mixed Tenure Developments

In March 2020, Burnaby Council passed an innovative Rental Use Zoning Policy (RUZP). This policy was the result of work by the Mayor's Task Force on Community Housing, industry consultations and community input. The RUZP is comprised of four streams:

Stream 1: Rental Replacement

- New rezoning applications are required to replace all existing rental units on the site at a ratio of 1:1.
- Existing tenants will be offered first right of refusal to return to the new building in these replacement units at the same rent they were paying at the time the redevelopment application was submitted, plus any annual allowable rent increase per the *Residential Tenancy Act* (*RTA*).
- This is in addition to a suite of tenant assistance provisions required by the City when existing rental buildings are redeveloped.
- When initial tenants who exercised their right of first refusal leave the units, they are converted to the same rent structure as Stream 2.

Stream 2: Inclusionary Rental

- All sites within a Community Plan area subject to rezoning are required to provide 20% of the total number of market units (strata and rental) as below-market rental housing, where rents are set at 20% below the CMHC Market Median rates for the applicable rental survey zone.
- Part of this 20% requirement can be satisfied through the replacement rental units delivered through Stream 1. The balance up to 20% of the market units should meet the Stream 2 affordability requirements.
- A density offset in the form of up to 1.125 FAR of market condo density is available for the provision of the Stream 1 and Stream 2 rental replacement/below-market units.

Stream 3: Rental Housing in Commercial Districts

- Market rental units can be provided in commercials districts as part of mixed-use developments that meet specific conditions.
- The gross floor area of the rental components may not exceed the area of the commercial component.
- This is a voluntary component, however the requirements within Streams 1 & 2 must be fully satisfied before a proponent can utilize this policy to build these additional market rental units.

Stream 4: Rental Tenure Zoning

- This Stream will eventually require that all existing purpose-built multi-family rental units throughout the City be rezoned under the rental tenure zoning policy.
- This has not yet been implemented by the City.

Taken together, the streams have created an effective model for the delivery of below-market rental housing alongside market condominiums. Tenants have some of the most robust protections in the region; the rate of return is expected to be high, minimizing the impacts of displacement. Although few applications have advanced to the stage that tenants will be returning to a new building - it is

anticipated that more tenants will choose to use their right of first refusal than in other jurisdictions. Typically, the uncertainty regarding the number of replacement units that will be required in new projects is problematic for builders; however, the structure of Burnaby's policy, in conjunction with the inclusionary requirements and the density offset, has lessened this impact.

The fundamental component of Burnaby's policy is the availability of a density offset for the provision of below-market rental housing. This additional market condo density allows for the provision of the replacement rental units/below-market housing. In addition, the City offers reduced parking requirements for rental units: 0.6 spaces per unit, and 0.1 visitor parking spaces per unit. Further reductions are currently being explored for transit-oriented areas. These incentives were sufficient enough to enable projects to proceed under this new policy.

Burnaby has also provided flexibility for the rental component of new developments to be constructed in a stand-alone rental building, rather than strictly requiring a mixed-tenure building. This is beneficial for non-profit operators who are engaged to operate the below-market rental homes, because it gives them greater control over their costs.

As a result of the RUZP, the City of Burnaby is on-track to see considerable new below-market housing added to the market over the next several years.

Key Elements of Success:

- Robust tenant assistance policy reduces some of the impact on existing tenants during the redevelopment process and creates opportunities for them to return to their neighbourhoods in new rental housing at their same rents. This policy has addressed some of the community's concerns around tenant displacement as a result of redevelopment.
- Below-market rental housing is secured in all new residential developments within Community Plan areas going forward, and is offset through market condo density.
- The City's innovative approach to large mixed-use projects will contribute to complete communities through the blending of commercial and rental components while creating an incentive to deliver rental housing.

Barriers

City of Burnaby: Rental Use Zoning Policy – Market Rental Barriers

The City of Burnaby has developed robust tenant assistance policy, and below market policy with density offsets. Despite these innovative steps, the City has not provided the same level of support for market rental housing. This impacts multi-tenure projects which already are providing below-market rental housing under the RUZP, as well as 100% purpose-built rental housing proposals.

Under the RUZP, projects can provide additional voluntary rental density, however any units provided beyond the required inclusionary requirement must be provided at a 1:1 ratio of market and CMHC market median rents (e.g. for every one market rental unit proposed, an equivalent one unit at CMHC market median rents is required). The provision of this 1:1 ratio of market and CMHC market median rents is not eligible for a density offset.

This restriction has severely limited the number of voluntary rental units being provided as a component of new multi-tenure developments. In March 2021, UDI estimated that there have been more than 750 rental units forgone across 9 projects in the Metrotown area currently under review as a result of the 1:1 ratio policy. To note, the City has plans to review the RUZP in 2022.

As we noted in our September 7th letter to the City of Burnaby, there are also challenges for new purpose-built rental proposals. The underlying assumption from the City is market rental can be treated similarly to condo in terms of its ability to bear City costs (density bonus charges) and inclusionary below market rental housing expectations. In PBR projects, the value is significantly less than a comparable condo project, and rental housing builders are unable to pay the same amount for bonus density. In addition, the density offsets noted above, paired with the City's inclusionary requirements, are not effective due to rental density being worth less than condo density.

This gap in supporting policy will likely result in the development of below-market rental housing and condo, but little market PBR - thereby ignoring a key component of the housing continuum. This is particularly concerning given the City's context. Burnaby's Housing Needs Report is projecting a need for more than 3000 additional rental units over the next five years, 650 of which are identified as being for households earning $85,000 or more annually. Canada has immigration targets of more than 400,000 new immigrants per year for the next several years, with over 10% of new immigrants to Canada historically settling in Metro Vancouver. Burnaby is well situated with 11 rapid transit stations, a Regional City Centre in Metrotown, two major post-secondary institutions, and is in close proximity to Vancouver's metro core. Vancouver's downtown core alone is expected to see considerable job growth over the next decade as new office spaces are constructed. Consideration of these contextual factors makes Burnaby an attractive destination for new residents of the region, many of whom will be seeking rental homes.

Key Barriers:

- Restricting the delivery of additional market rental housing in mixed-tenure projects by requiring 50% of the units to be limited to CMHC market median rents creates is a missed opportunity for rental housing delivery.
- The treatment of market rental housing as market condo housing for the purposes of securing larger density bonus amounts and more inclusionary housing fails to acknowledge the difference in market value between rental and strata housing.
- These policies make developing market rental housing in Burnaby less competitive than other municipalities.

City of Vancouver: Community Amenity Contribution Policy

The City of Vancouver's Community Amenity Contribution Policy was originally designed to ensure that new growth contributes to the development of complete communities for new and existing residents of the City. Voluntary contributions are made through either a target-based or negotiated approach relative to the increase in value created by the redevelopment. These contributions are provided in the form of cash or in-kind contributions. There are also exemptions for "*routine, lower density secured market rental*" housing that meet certain criteria.

The City's process for securing these contributions is usually lengthy if they are negotiated, which most large projects are. In some cases the process can take over seven years to reach a conclusion. There can also be varying assumptions regarding the property's valuation, and any land-lift generated by the rezoning proposal. Unfortunately, there are limited mechanisms to resolve these differences. This creates a lack of certainty and delay for the delivery of new housing in the City, including purpose-built rental. Some PBR proponents have elected not to proceed with their projects based on the City's CAC expectations, resulting in projects being re-designed for alternate uses other than rental housing.

CAC expectations have forced the cancellation of projects in the past, such as the 276-unit market rental building in the Coal Harbour neighbourhood proposed by Hollyburn Properties. The high-level of CACs expected made the project financially unfeasible, as the City was expecting $43.05M in cash contributions, based on the assumed increase in value, without market evidence. The property was eventually sold and it is expected that the site will eventually be redeveloped as market condos in the future.

Another example of a project contributing amenity space and non-market housing that met similar challenges is the partnership between Boffo Properties and the Kettle Society. The proponents were asked to provide both in-kind amenities as well as a large cash contribution. This project was initially designed to deliver 180 market condos alongside 30 supportive homes for individuals with mental illness and a new turn-key drop-in facility owned and operated by the Kettle Society. The project faced challenges regarding the ownership of the non-market housing units and the community centre by the Kettle Society rather than the City, as well as the additional cash contribution based on the City's pro forma assumptions for the project. Due to the lengthy process, numerous revisions and the large CAC request, the project was paused in 2018, despite expressions of support from several provincial cabinet ministers.

The Kettle Society and Boffo subsequently approached the City on a 'Plan B' approach that was also ultimately withdrawn this past year. This plan followed the same ethos as the original plan, but changed some of the project parameters. Plan B was designed to deliver approximately 75 market condos alongside 50 supportive homes for individuals with mental illness (owned by the City, operated by the Kettle Society) and the new turn-key drop-in facility would also be owned and operated by the non-profit. A $5M commitment was also made by BC Housing to support the project. This project did not receive support from the City as they wished to enter into an open-call, request for proposals process for a 12-storey concrete supportive housing project developed through Vancouver's own affordable housing agency.

Today, work remains ongoing for a revised proposal ten years after the original letter of inquiry was submitted. The Kettle Society and Boffo are currently exploring what re-development opportunities exist within the existing four-storey zoning. It is highly likely that the supportive homes and new drop-in facility that was originally envisioned will not come to reality, and that a well-regarded neighbourhood non-profit partner will be looking for a new location.

Key Barriers:

- The protracted negotiation process with limited mechanisms for resolution creates uncertainty and increased risk associated with developing rental housing in Vancouver.
- High contribution expectations based on the City's valuation assumptions creates a situation where some projects cannot proceed, preventing the delivery of market or below-market rental housing.

Conclusion

Although the delivery of rental housing is influenced by many other factors, these case studies provide examples of ways in which municipal policies and processes can affect housing delivery both positively and negatively. Some of the positive approaches may have wider applicability, but underlying all of the preceding discussion is the role for municipal housing targets. Housing targets combined with a robust framework for monitoring and reporting would force municipalities to ensure their policies facilitate development across the breadth of housing types.

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To: The Hon. David Eby, Q.C., Attorney General and Minister of Housing
From: Anne McMullin, President & CEO, Urban Development Institute (UDI)
Date: December 7, 2021
Re: Application of GST on Purpose-built Rental Housing

Purpose

UDI was asked to provide background on the impact that the Federal Goods and Services tax (GST) has on the costs of new rental housing. Below we outline the way in which the tax is applied and the inefficacy of the rebates currently provided.

Background/Discussion

The GST was introduced by the Federal Government in 1991 to replace the previous Manufacturers' Sales Tax (MST). The rate was initially set at 7%, but has since been reduced to 5%. This tax applies to newly built housing including the construction of rental housing through the "self-supply" rule.[1] Self-supply is deemed to occur when the building is determined to be substantially complete or the first tenant takes possession of a unit under the terms of their lease. At that time, the builder is required to calculate the "fair market value" (FMV) of the building, applicable land and structures, based on the highest price that could be expected based on comparable values of similar housing in the local market. FMV is determined for each unit separately, and this value will determine whether certain rebates are applicable.

Payment of GST required under the self-supply rule is capitalized to the building value and written off on a 5% declining balance basis over time. Builders are also able to claim tax credits for some of the costs associated with building (or substantially renovating) a rental building through input tax credits (ITCs).

The GST application to purpose-built rental adds significant additional costs to new housing, and can often equal or exceed the cost of all other government taxes and fees combined (excluding community amenity contributions/density bonuses). For example, a 4-6 storey rental building built in Vancouver today could be charged nearly $40,000 in GST per unit on average.

Of note, the application of the GST to rental housing has been the topic of political discussion previously. In the 2015 Federal Election, the removal of the GST from purpose-built rental housing was one of the Liberal Party of Canada's campaign promises. There are rebates for rental housing that were intended to mitigate this impact on purpose-built rental projects that provide more affordable homes to make them more competitive to build, however there are several challenges with the current framework.

[1] "Self-supply" is the term used to describe the situation when a builder is considered to have made a taxable sale of real property and to have immediately repurchased that property.

Rebate Thresholds

In B.C., builders can claim a rebate of up to 36% of the value of the GST paid on new rental housing. The full rebate applies to units with a FMV of $350,000 or less. For units valued between $350,000 and $450,000 the rebate decreases until it reaches zero. Units valued over $450,000 are not eligible for any reductions in the GST payable. Therefore, the maximum that a rental development could claim in rebates would be $6,300 per unit.

These thresholds are set at the national level and do not vary based on local markets, unlike the calculation of FMV. The result is that the majority of rental units built in major urban centres, where rental housing is in high-demand, will exceed the rebate thresholds. This removes any incentive that was intended to support the creation of rental housing in these areas.

In addition, the rebate thresholds have not been tied to inflation, and the thresholds have remained unchanged since the GST was introduced 30 years ago. For comparison, the average rent across all bedroom types in Vancouver was $633 per month in 1991, and today that amount has increased to $1,519. Although this does not directly illustrate the change in FMVs in that time period, it clearly shows that the increase in value has been substantial. When the rebates were introduced 30 years ago most rental units would have qualified for at least some part of the rebate, however this is not the case today. While the rebate thresholds may continue to mitigate the impacts of the GST in lower-priced markets, they have become outdated in many of Canada's urban centres.

Larger Unit Types

The FMV used to determine eligibility for GST rebates is calculated on a per-unit basis. Unfortunately, two and three-bedroom units are valued higher than one-bedroom units in the same building, largely due to the higher square footage of the units and the lack of comparable housing in the market. Given this calculation, smaller units have a greater opportunity to qualify for a portion of the federal rebate, creating a disincentive to build larger two-plus bedroom rental homes. In markets like Metro Vancouver, very few of these units would receive any rebate at all.

Fair Market Value Calculation

The determination of FMV and self-supply at the substantial completion of a building or when initial possession occurs is very late in the process. This is after a builder has had to secure financing, pay other government fees and complete construction. Given how quickly local markets change in response to a variety of factors, it is very difficult to estimate the value of the GST that must be paid. Once the assessment of FMV has been made by the builder, it is increasingly common that an audit will be conducted by the CRA, and in some cases a supplementary appeal, which can take months or years. This lack of predictability creates additional risk when determining the feasibility of a purpose-built rental project and may deter some builders.

Application to Substantial Renovations

The federal GST is also applied to housing that has undergone a substantial renovation, where all or substantially all areas of the building have been renovated to a minimum degree. This is generally considered to be 90% of the building based on the percentage of the rooms renovated or the percentage of the floor/wall area renovated relative to the building total. In these cases, the building is treated in the same way as new housing through the self-supply requirement, with limited exceptions.

While this treatment may affect a building owner's decision to renovate or redevelop rental housing, there are certain circumstances where redevelopment may not be possible. In these cases, the GST may disincentivize large upgrades, for example in:

- Heritage buildings which cannot be demolished; and
- Existing buildings that are larger than what could be built under current municipal planning and development guidelines/zoning.

There are numerous sites in Victoria as an example whereby rental was built to a scale that would not be permitted today and so there would either be less or the same scale of new building allowed which would economically prohibit replacement. While these examples are not the majority of circumstances, they are still impacted by the current framework. Overall, the application of the GST to substantial renovations, with limited access to rebates in certain markets, adds significant cost to renovations and upgrades that may extend the life of the building.

Conclusion and Recommendations

The application of the GST creates a substantial added cost to the delivery of rental housing. To address the challenges discussed above and create more meaningful rebates to support rental growth we have the following recommendations:

- Review the structure of GST payments, and consider revising its treatment to become an expense in the period paid to help reduce of offset income taxes in the initial years after a new or substantially renovated rental building is completed.
- Review and revise the rebate thresholds to more accurately reflect market values in local markets, either by market type/size or jurisdiction.
- Create a mechanism that allows rebate thresholds to adjust with inflation to ensure they remain relevant to current context.
- Scale rebates by unit type or size remove disincentives for the construction of larger rental homes.

We recognize that application of the GST is a federal issue, however it does affect the delivery of rental housing in British Columbia, particularly in the province's urban centres where market values are elevated. We hope that this high-level summary of the issues faced by rental builders and our subsequent recommendations can provide context for our ongoing discussions.

RE: Follow Up from Tuesday's Meeting

From:	Jeff Fisher <jfisher@udi.org>
To:	Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc:	Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>, Laboucane, Shannon OHCS:EX <Shannon.Laboucane@gov.bc.ca>, Heather Park <hpark@udi.org>, Cassandra McColman <cmccolman@udi.org>
Sent:	December 8, 2021 9:23:34 AM PST
Attachments:	image004.jpg, image007.jpg, image008.png, image006.jpg, image005.jpg, image003.jpg, image002.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks, we will place this in our next newsletter going out Tuesday

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
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From: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: December 1, 2021 3:59 PM
To: Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Laboucane, Shannon OHCS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: Follow Up from Tuesday's Meeting

Hello Jeff and Lily,

Jeff, it was a pleasure to meet with you the other day and Jun'ichi and I are extremely grateful for your feedback and willingness to work together.

We have an open engagement (survey) to help inform direction for changes to the BC Building Code to make new buildings mode accessible. If it is possible, we would very much appreciate the word being spread through your networks. Copied here is an invitation from Parliamentary Secretary Dan Coulter that you would be welcome to share via your newsletter.

----------Message Start----------

As you may know, the Attorney General and Minister Responsible for Housing and I are committed to achieve our shared mandate to ensure the next iteration of the BC Building Code includes changes to make new buildings more accessible for all people.

I am writing to invite you to participate in an online survey to provide feedback to help improve accessibility in new buildings.

The online survey will be available on the govTogetherBC website, from October 28, 2021 to January 13, 2022, at https://engage.gov.bc.ca/govtogetherbc/consultation/building-code-accessibility.

Information about the BC Building Code accessibility requirements is available on the Building and Safety Standard's website at https://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards/accessibility.

Your feedback will help inform proposed changes to the next BC Building Code. In the second phase of our engagement, planned to occur in 2023, we will provide an opportunity for you to comment on the proposed BC Building Code changes.

Please email BSSB.public.review@gov.bc.ca, if you have any questions about the survey or wish to submit supplementary materials related to accessibility in new buildings. Please ensure documents are publicly available and unlocked.

Removing barriers to accessibility and inclusion experienced by British Columbians will help create better buildings and stronger communities for all people.

Please share this information as appropriate with others in your organization.

Yours truly,

Dan Coulter
Parliamentary Secretary for Accessibility
----------Message End----------

If you are looking for something shorter, we have a very simple pointer on our website that you could use:

You are invited to complete an online survey to provide feedback to help increase accessibility in new buildings.

The survey is available on the govTogetherBC website from October 28, 2021 to January 13, 2022.

More information about the public engagement and resources are available on the BC Building Code public review web page.

If you have any questions about the survey or the invitation I'd be happy to respond.

Regards,

Andy Chase | A/Director, Building Policy
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-677-0944
Email: andy.chase@gov.bc.ca
Website: www.gov.bc.ca/buildingcodes

Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live, work and play.

FW: Minister's mtg with UDI

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Cc: Horner, Shannon E OHCS:EX <Shannon.Horner@gov.bc.ca>
Sent: December 9, 2021 5:37:46 PM PST
Attachments: Agenda and Memos- December 9, 2021 UDI Meeting.pdf

Hi,

Some key feedback to address for projects sitting with both of you. Shannon FYI only.

Jun'ichi Jensen
Executive Director (Acting)
Building and Safety Standards
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From: May, Cheryl OHCS:EX <Cheryl.May@gov.bc.ca>
Sent: Thursday, December 9, 2021 11:13 AM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Thomson, John OHCS:EX <John.Thomson@gov.bc.ca>; Elder, Kathy A OHCS:EX <Kathy.Elder@gov.bc.ca>
Subject: Minister's mtg with UDI

Good morning,

The Minister meets regularly with UDI and today's meeting touched on a broad range of topics which will be of interest to all of you. I've attached the material they provided for the meeting, but also here are my notes below – something for everyone – apologies for length, they were on fire!

C.

Dec 9
-mitigating costs of carbon zero buildings

- Heat pumps are going to cost more (Tier 2 rates - were designed to encourage energy efficiency but they penalize people in fully electric buildings and EVs) There is a review going on now, hopefully the review will fix that.
- Options like bulk purchasing of heat pumps may be needed given the demand for heat pumps and ability to bring down costs. Other issue is training - a lot of construction trades not that familiar with heat pumps.
- Connection costs with BC Hydro - if you are the unlucky developer or owner who happens to be the one who pushes over the capacity then you have to pay not only for your connection, but also for everyone in the future. You don't find out about it until late in the project - so unanticipated costs. There is some flow of money coming back for 5 years, but it is inadequate.
- Fortis - not nearly the same issue - simpler infrastructure and Fortis will pay for it sometimes just to get the connection
- Right to charge legislation could create this problem - so one building will end up footing the bill.
- Ideally, these infrastructure costs are in the rates - not disproportionately on one owner or other method for dispersing costs.
- BC Hydro is going to have to be heavily involved in local planning - eg. Broadway infrastructure needs.

- Prioritization of building code policies - Embodied carbon should wait until after GHGs, rain water(?)
- Equipment standards. Link that policy to other jurisdictions and make sure we have access to equipment at cheaper rates and are aligned
- Alterations code - suggest you slow down. Model being put forward - big issue is going to be permitting delays. Need performance path options - (at least for Part 3) otherwise you are going to have building departments bogged down dealing with existing buildings.
- Mandatory upgrades to energy efficiency standards could trigger GST - including on the land.
- We could be mandated to connect to a municipal district energy system that emits carbon post 2030. These all run on gas (except one in Burnaby moving to waste heat)
  - Concern raised about mandatory air conditioning as there was some interpretation of previous comments by MDE that the province is looking at this.

RTB and the ARI - municipal process and RTB processes - concerned about what happens when they don't mesh. Does the RTB determine what energy efficiency processes are appropriate - need to streamline this.

Coquitlam - see memo

- Is this a good model for transit development? Yes - Predictable - consistent.
- Right of first refusal - includes income testing - this means projects can receive BCH funding (grant) - this is better than Burnaby.

Port Moody - case study in how not to do transit.

Vancouver - 6.35% increase in property tax - good example of how quickly the small margin on PBR suddenly becomes economically problematic. Need the policy goals to align.

Getting rental build fast

MDE - we are looking at TOD, predictability around zoning, OCPs, parking

- I'm looking for something that is an crisis response that will bring on a bunch of market housing quickly
- So cities stop knocking down building density by 25%

UDI

- If you're going to add the 25%, then you can't add all the extra policies - otherwise they won't actually get built
- A *state of emergency* in housing would take off political heat on municipalities
- How can CMHC bolt onto this with attractive interest rates - that plus mandated height by the province would bring together pieces now in silos.
- Build fast - go with wood - way faster time. 5-6 story wood frame.

Burnaby - see memo

- Right to return policy - no income testing means that BCH funding is not available.
- New Vista (Non profit) - getting funding to purchase building, but right to return policy did not permit income testing threshold - so no matter what the income they are allowed to move back in. We had to elect not to proceed with New Vista.
- CHF Policy issue: Province could exempt those right to return tenants from income testing until they move out.
- Burnaby is requiring vacancy control on market rentals - developers have walked away and left hundreds of units on the table. Math doesn't work.

Vancouver - Broadway

- Have concerns about plan: ranges in density from 6-18 stories - what does that mean?

- Hearing from CoV staff: Current plan is best it's going to be - if density is cut back in RT areas, for example, it won't go up elsewhere - we sense staff think it is going to get cut back. We don't believe that Council will approve this before election
- We have given strong feedback about wanting more space for strata
- Discretionary shadow policy, view cones - all very unclear how this will work.
- s.16

-

Thanks,
Cheryl

Cheryl May
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Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
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Summary: *CleanBC* Comments – UDI Meeting December 9, 2021

A key concern amongst builders with the changes being proposed in the new *CleanBC* plan is that the *BC Energy Step Code* (*ESC*) regulatory roadmap that was established several years ago is changing under the new *Roadmap to 2030*. Our members had a clear understanding of what was going to be expected of them from both the Province and local governments over the next decade until buildings achieved the final *ESC* Step (Step 4 for Part 3 residential structures) to become net-zero energy in operations. The timeframe province-wide to achieve Step 4 was 2032, but several local governments have shortened them. Extensive training and education programs have been established as well as incentives to help builders adjust to the *ESC*.

Now a new requirement is being established – greenhouse gas (GHG) emissions also have to be reduced to net-zero. The timeframes being proposed for GHG reductions are shorter than those outlined under the *ESC* for energy efficiency changes, as they have to be achieved before the end of the decade across British Columbia. There are several other concerns related to GHG reductions outlined by the *CleanBC* plan as outlined below:

1. Adoption Timeline
   - While some municipalities are already implementing GHG reduction requirements, the *CleanBC* plan creates the framework for all municipalities to move towards this approach through pilot projects before the Provincial requirements are in place.
   - The Building and Safety Standards Branch (BSSB) under the Housing Ministry is currently developing an implementation bulletin for municipalities to adopt GHG reduction requirements.
   - There are also other key issues that need to be addressed, including a how Renewable Natural Gas can be used to meet the requirements as well as the ongoing review of Tier 2 rates and extension fees by BC Hydro (see below) that need to be addressed before local governments mandate substantial GHG reduction standards.

2. Municipal Requirements for GHG Reductions and the Energy Step Code
   - Local Governments are already incenting the reduction of GHGs in new buildings. They have developed an approach in which builders can reduce the required ESC step if their projects use low carbon energy systems. This provided builders with options to balance costs.
   - Some local governments have indicated that this option will not be available if they can mandate GHG reductions. We will likely see the highest step of the ESC mandated as well as substantial GHG reduction requirements.
   - If both become requirements it will add cost to housing development, especially if they continue to have urban design requirements that make it difficult to implement the highest step of the ESC (e.g. small floor plates, high building articulation and having wedding cake designs).

3. Provincial Requirements to reduce GHGs in new construction to zero by 2030
   - This will require heat pumps, which are still expensive upfront or utilizing Renewable Natural Gas which will have higher operating costs.
   - Heat pumps will be a key element of carbon reductions; however, they are currently expensive capital investments.

4. The Alterations Code for existing buildings
   - This change has the potential to add delays in permitting processes due to its complexity as well as adding costs to building capital costs.

- It is not clear how the costs will be passed onto tenants in rental buildings.
- It is also not clear how the Residential Tenancy Branch (RTB) and local government building departments will determine together what landlords should be mandated and compensated to upgrade their buildings. It may be more appropriate to have the RTB determine what the upgrades should be as they are responsible for managing the Above the Guideline increases. This latter point would also apply to the *Right to Charge* regulation for electric vehicles.

5. Mandating 100% efficient heating equipment
   - This will initially add costs for this equipment for both new and existing buildings.
   - However, overtime the costs should decline. However, the Province may look at linking its requirements with other jurisdictions in North America to ensure that builders and building owners have access to inexpensive high efficiency equipment.

6. Building electrification
   - Electrifying buildings will also have cost impacts to new housing through BC Hydro infrastructure upgrades and more expensive Tier 2 rates.
   - When new buildings being proposed necessitate BC Hydro infrastructure upgrades these are added costs to the project that are high and usually a surprise.
   - Although the benefits of these upgrades will extend beyond the projects funding them, there are limited mechanisms to recover these capital expenditures.
   - In a worst-case scenario, a rental building could be required to fund upgrades that would support redevelopment of adjacent buildings regardless or tenure (i.e. They could be luxury owned homes).
   - In addition, the more expensive Tier 2 BC Hydro rates would likely apply to a fully electrified building (especially if there is electric vehicle charging) This would make the building more expensive to operate, and when utilities/electricity is factored into the cost of rent in purpose-built rental buildings, it makes it even more difficult to achieve a sustainable financial model.

However, there are approaches that can mitigate or offset the impacts, specifically related to:

- Linking land-use and infrastructure development - this is the biggest mitigation measure;
- Establishing requirements for the municipal GHG reduction pilot programs;
- Increasing accessibility and affordability of heat pumps;
- Prioritization of future changes to building requirements;
- Broader Public Sector Leadership to build industry capacity;
- Expansion of research, education and training programs;
- Prefabrication; and
- Addressing challenges in the District Energy model.

These measures are outlined in greater detail in the initial memo regarding *CleanBC* and housing affordability.

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Agenda – February 10, 2022

1. Welcome and Chair's Remarks
2. Hon. David Eby, Attorney General, Minister Responsible for Housing

2.1. Low-Density Housing Initiatives

- Strong Suburbs Report (Memo only)
- Making HOME Strategy

2.2. Expediting Supply

- Mandated Housing Targets and Aligning Municipal Priorities
- Regular OCP Updates
- Financing Growth through needs-based charges (Super DCC Model)

2.3. Next Steps for Ongoing Discussion

- Federal Housing Discussions
- Spring Legislative Session: upcoming opportunities to collaborate

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To: The Hon. David Eby, Q.C., Attorney General and Minister of Housing
From: Anne McMullin, President & CEO, Urban Development Institute (UDI)
Date: February 4, 2022
Re: Policy Exchange *Strong Suburbs: Enabling Streets to Control Their Own Development Report*

Purpose

The Policy Exchange think tank in the United Kingdom (UK) recently released a report on overcoming NIMBY responses to densification in suburban "*renewal*" areas allowing "*street votes*" on the types of development homeowners would want in their neighbourhoods. Their proposal also includes provisions that would allow owners to economically benefit from higher densities and retain the character of their neighbourhoods. Development would still need to comply with government policies (e.g. green building requirements).

Background/Discussion

UDI Response

UDI is supportive of some of the approaches in Policy Exchange report – although the ideas would have to be substantially modified to work in British Columbian communities, as the UK has older suburbs and a higher reticence to high-rise projects (which clearly noted in the report). The key advantage of the idea is educating homeowners on the financial benefits of development for their households and ensuring that those benefits are shared across a street or neighbourhood.

If applied in British Columbia, a modified version of the proposal could be run in innovative municipalities with growing housing needs, but would need to be expanded to the area plan/neighbourhood plan level, rather than street-by-street. The financing mechanisms proposed would also require substantial adaptation. Overall, this tool would be most applicable to low-density areas to generate some additional housing through neighbourhood support, however it should be paired with municipal housing targets.

Street Votes and Area Planning

The Policy Exchange is advocating that residents along individual streets vote take control of and vote on whether and how growth should be accommodated on their streets. We support more democratization of the process (with the caveats noted below). However, having votes on density increases initiated by local citizens and run street-by-street would result in haphazard growth. Local governments, Metro Vancouver and TransLink would have difficulty determining where to expand and improve infrastructure and services if they have no idea when/where votes will occur. If the vote is positive, it would also not be clear how many homeowners would proceed with redevelopment. This would require that street votes be incorporated into neighbourhood or area-wide planning processes.

With an expanded area, municipal staff would likely need to lead these planning processes rather than the residents, architects and surveyors, which are proposed. Staff would be familiar with the infrastructure, environmental and soil issues as well as the overarching policies that would need be followed.

If street votes were tied into the municipal area planning process, they could allow citizens to push municipalities to pursue new area plans if a certain percentage of residents support this through petitions. In addition, when area plans are conducted, some streets/subareas may accept

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or demand more growth than would have been approved if they understand and benefit from new development. This could have positive impacts by opening up new areas for growth or enhancing current density levels in other neighbourhoods.

Growing Community Support

We agree with the sentiment in *Strong Suburbs* that many local neighbourhoods would vote to increase development opportunities if they benefited from the changes and understood this. Providing neighbourhoods with more control of the general character and design of new projects would likely improve this support further. We agree that this needs to be done at the front-end of the process, so there are now surprises later in the process and that projects should be fast tracked if the vote is successful.

We note that some residents may not wish to stay in their neighbourhood if densities are increased. In these cases, they would likely be willing to allow their community to be transformed if there was a financial benefit. A good example of this is Oakdale in Coquitlam where residents demanded increased heights and densities (including mid-rise towers) when they understood the positive impact on their home values.

We would also need to ensure that the results of the votes are as fair and equitable as possible to all of the homeowners. There is the potential that a supermajority from one part of a street or neighbourhood could vote themselves increased density – but not for other properties. Unless there are valid reasons for lower densities on a site (e.g. size, configuration, proximity to a stream), what is allowed should be fairly similar.

Increasing the Scale of Density

In the UK suburbs highlighted by this proposal, there were concerns about high and mid-rise projects, protecting the high number of heritage homes in the UK and shadowing. As such, the authors recommended minor density increases (only a few storeys), even if the neighbourhood supports more growth.

In some communities in British Columbia these densities, would be less viable and less cost effective to build. If there are renters in an area, much more density would be needed to fully protect them from displacement (as in the City of Burnaby), which is critical to gaining support for more growth. Housing affordability, adaptability and sustainability requirements would also need additional density to make projects viable for builders while providing the compensation needed to homeowners.

Greater densities would make these redeveloped neighbourhoods more durable. Near the Canada Line stations at Cambie/King Edward and Cambie/Broadway, new buildings have been constructed at unnecessarily low densities. They will likely need to be replaced within a few decades, which is a waste of resources and embodied carbon.

Areas with Higher Development Potential

Near rapid transit stations, senior governments and TransLink need much more growth to fully leverage the billions of dollars being invested on SkyTrain lines by taxpayers across the country and province. There should no expectation that the character of these neighbourhoods will remain the same after redevelopment occurs. In the *Strong Suburbs* report, it is noted that the UK government is providing housing targets that must be achieved by local authorities. UDI has supported targets in British Columbia – especially near transit stations. In these areas, local votes

should not override those minimum levels of development. However, if residents want to support and benefit from higher rates of growth than those targets, they should be allowed to do so.

Taxes/Development Finance

The Policy Exchange model relies on senior government taxes being remitted to local authorities as opposed to Development Cost Charges (DCCs) and Community Amenity Contributions (CACs) to fund the hard and soft infrastructure costs related to development. Thirty percent of the Stamp Duty Land Tax (similar to B.C.'s Property Transfer Tax) collected "… *on the next transfer of property* …" after a successful vote to increase density would be transferred to local governments. Given the increased revenue the Province would be collecting as land values increase as well as the additional homes that would be sold and resold, the Government should consider a similar approach.

The other proposed tax revenue sources to fund infrastructure costs would be more difficult to achieve. The Federal Government controls the capital gain tax, which would make a one-time loss of the residential capital gains tax exemption difficult to implement. There is also an expectation that local governments will benefit from an increased residential tax base. However, because of the ratio between business and residential property taxes in many British Columbia municipalities, local governments would "lose" money on new homes are built. Residents use more services than they pay for through property taxes. This impact would be moderated if retail areas rebounded as a result of new residents moving into their communities.

If the Government were to proceed with this model, the development finance issue would need to be addressed. UDI would support the use of DCCs, but local governments also charge CACs. It would be problematic if local areas voted to support development (and even fast tracking it), only to have projects derailed because local governments having lengthy CAC negotiations and taking 75% of the lift of value from the increased density. This issue is critical, especially with small density increases, because the *Strong Suburbs* model relies on homeowners benefiting from the increased development opportunities of their property. Having provincially mandated housing targets would resolve this as local governments would be incented to ensure these new homes are built.

Government Regulations

UDI agrees that overriding government priorities should be incorporated into new housing units such as adaptability or environmental standards. For example, we argue above, communities should not be able to vote to keep densities low near transit stations because building homes near these stations is a Provincial priority. However, government requirements need to be clearly established upfront and understood in terms of their impact. These policies may necessitate higher densities to offset higher costs, and residents need to be educated about this at the beginning of the process. Late hits where new costs and requirements are added near the end of the approvals process should not be allowed.

There is still the common problem of conflicting regulations and requirements. In their report, the Policy Exchange advocates for beautiful buildings that are stepped back at higher heights and have more glazing; at the same time, they note the need to improve energy efficiency. The highest steps of the *BC Energy Step Code* will result in homes with heavy envelopes (fewer windows), and simpler designs with larger floor plates. The homes will not necessarily be built to the beautiful urban design specifications in the report – without substantial cost increases which

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would undermine affordability. We note low/zero carbon buildings would have less of impact on design and costs. In consultation with the neighbourhood, municipalities must reconcile these discrepancies.

Regulatory processes at all levels of government also need to be streamlined, so that approvals are not delayed. The benefits of having a fast-tracked rezoning process in these areas would be undermined if it takes 18 months to get a Provincial approval or it takes several months for a municipality to determine which of their conflicting regulations takes more precedence.

We support the need for on-street parking regulations as identified in the report, especially in areas well served by transit. On-street parking concerns has led many councils to restrict development or mandate expensive and underutilized off-street parking garages in projects in order to address public opposition to projects. The government should consider ways to ensure that areas near transit have on-street parking regulations. Without them, there will not be public support for growth without large expensive garages.

Conclusion and Recommendations

The *Strong Suburbs* report proposes an innovative approach to increasing density in suburban communities through greater resident involvement and decision-making. While there are several concepts that could support lower density increases in B.C. municipalities, the proposal would need significant adaptation. It would require greater municipal involvement and linkages to area planning processes to integrate with transportation, services and utilities. Overall, the *Strong Suburbs* report contains innovative ideas that would be most applicable in lower density contexts.

FW: [External] FW: Suggested Updates to Metrics for Part 3 MURBs

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Attachments:	image003.png, image005.jpg, image006.jpg, image004.jpg

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Hi all

Great meeting on Friday. Mark's presentation was a real highlight. Thanks so much for sharing Mark.

Below is the email that Brendan sent out prior to the meeting. We've gone through the data and his proposed changes, and agree with his conclusions that there's room to require slightly more stringent requirements for MURBs than what was initially proposed. Sharing out conclusions FWIW.

Looking forward to moving ahead together with this important Standard.

Cheers … Robyn

Robyn Wark, MRM MCIP | Manager, Advanced Demand Side Management

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Subject: Suggested Updates to Metrics for Part 3 MURBs

Hi Jeff & all

Thanks for the chat earlier today.

As discussed, local governments feel that, ideally, we would tweak the metrics for Part 3 MURBs. However, we don't want to add delays. I'm writing the suggestions below, so these can be considered in advance of the ESCC meeting tomorrow.

1. **Change "Low carbon" to GHGI of 3 $kgCO_2e/m^2/yr$, instead of 4 $kgCO_2e/m^2/yr$, for Part 3 MURBs.** – Agreed. Gas hybrid option in CZ 8 is what is driving up the GHG in this category. Otherwise, all other CZ's and options for "Low" fit within 3 kg/m2 or really, really close (e.g., 3.1).
    - City of Vancouver has found that many MURBs are being submitted that would achieve the GHGI of 4, while still featuring conventional gas combustion equipment. In contrast, GHGI of 3 $kgCO_2e/m^2/yr$ will ensure decarbonization of both space heating & gas.
    - The intent of the "Low Carbon" level is to decarbonize both space heat & hot water.
        i. A concern was raised that some local governments would feel they need to go straight to "Zero Carbon" to ensure decarbonization of both space heat & DHW.
        ii. Jeff has suggested merging Zero Carbon & Low Carbon. I think there is some hesitancy to decide on this at this point, though I agree with Jeff that much of what is actually constructed will likely be all-electric new buildings, regardless of if it is "Low Carbon" or "Zero Carbon".
    - We understand impacts in Climate Zone 5 (CZ5) is a key priority for UDI – there are many Part 3 MURBs in CZ5, of course. I spoke with Alex Blue (of Evoke, who led energy modeling for this study) about whether buildings can achieve GHGI of 3 in Climate Zone 5. Alex told me she'll look into the data to confirm at the tomorrow. But, at this point, based on review of the data & conversation with Alex, <u>I believe it is very likely that MURBs in Climate Zone 5 would have no problem achieving a GHGI of 3, if decarbonizing both space heat & hot water.</u>
    - What was the reason GHGI of 4 $kgCO_2e/m^2/yr$ was contemplated? In Climate Zone 7a, the modeled MURB at Step 3 had a GHGI of 3.1 $kgCO_2e/m^2/yr$. In CZ 8, GHGI of 3.7 $kgCO_2e/m^2/yr$.
        i. However, very few (any?) Part 3 MURBs are built in CZs 7a & 8.
        ii. The model assumes conventional gas back up provides 30% of space heating energy. A small reduction of modeled gas for backup would hit 3. Likely would be viable in CZ 7a & 8, and, again, in CZ5.

2. **Change from a "Medium Carbon" to GHGI of 7 $kgCO_2e/m^2/yr$, instead of 8, for Part 3 MURBs (<u>lower priority</u>) –** Agree with this proposed change. Only modeled results that don't fit within the cap are Step 2 buildings that uses a gas condensing boiler with fan coils. Seems like workable solutions exist for Step 2 and definitely for higher Steps.
    - It will be much more common for Part 3 MURBs to achieve "Medium Carbon" by decarbonizing space heat and conventional gas hot water (e.g. baseboards, or heat pumps with cooling, plus conventional gas fired hot water).
        i. Local governments broadly see this in applications; likewise, the study suggests decarbonizing space heat will be the lower cost option.
        ii. Cooling is a common feature of new market housing, encouraging heat pump space heating.
    - The GHGI of 8 $kgCO_2e/m^2/yr$ was set to allow for all gas space heat, but all electric hot water. Very uncommon.
    - Anticipating electric space heat and gas hot water suggests a GHGI of 7 $kgCO_2e/m^2/yr$ (or actually 6.5 $kgCO_2e/m^2/yr$, in all but Climate Zone 8). For reference Vancouver requires 6.

3. **Consider changing "Zero Carbon" to 1.5 $kgCO_2e/m^2/yr$ (<u>lowest priority</u>)** – Agree with this proposed change. Based on the model, the 2.0 ceiling does nothing except allow for gas condensing with electric fan coils.
    - Study suggests this would be achieved in all but CZ8.

Below, I summarize the Province's "straw dog" metrics, and potential changes.

	Province Straw Dog Proposal			Alternate		
(all GHGI targets in $kgCO_2e/m^2/year$)	Medium	Low	Zero Carbon	Medium	Low	Zero Carbon
MURB	8	4	2	7	3	2 (or 1.5?)
Office	5	3	1.5	5	3	1.5
Retail	6	3	2	6	3	2
Hotel	9	4	2	9	4	2

I'm hoping that by summarizing this here, we can have a better chance of substantial consensus on this issue tomorrow.

Thanks & best

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Agenda – March 10, 2022

1. Welcome and Chair's Remarks
2. Hon. David Eby, Attorney General, Minister Responsible for Housing

2.1. Updated Polling Data

- Presentation on updated polling results from Stratcom

2.2. Implementing Housing Targets

- UDI Presentation and Memo *(p.2)*

2.3. *Ontario Housing Affordability Task Force* Report

- Discussion and Memo *(p. 20)*

2.4. Draft Broadway Plan

- Comments on final draft

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To: **The Hon. David Eby, Q.C., Attorney General and Minister of Housing**
From: **Anne McMullin, President & CEO, Urban Development Institute (UDI)**
Date: **March 10, 2022**
Re: **Establishing and Implementing Housing Targets**

Purpose

In summary of previous discussions, UDI is providing recommendations on establishing a municipal housing targets regime.

Summary

The amount of housing built in British Columbia has been dictated by individual municipalities with no targets linked to population growth. Building housing has often been a second priority to the desire of current residents to maintain community character, or increasing municipal revenue through development changes. The reality is that in the current development processes, most cities will not approve enough housing to address this crisis. It is critical for the Province to take a leadership role and provide municipalities with enforceable housing targets.

UDI does not recommend that the Province attempt to micro-manage all of the municipal policies that are undermining the delivery of new housing units. We believe that performance-based housing targets would be far less intrusive and difficult to impose. Performance-based targets would provide local governments with the autonomy they need to reflect community priorities – while still ensuring that provincial housing objectives are met.

Planners have chronically underestimated the number of units we need in our communities. We recommend that the Province adopt the advice provided by the *Canada-British Columbia Expert Panel* and others, and consider demographic trends and growth projections when developing the targets. To simplify them, we believe that they should be expressed as the number of housing units approved through the issuance of *Building Permits*. *Building Permits* are used universally, and are granted later the development review process. Although UDI is not opposed to using floor area, we believe that the number of units is a simpler approach. However, we support the Ministry Responsible for Housing being given the power to establish targets with both measures if needed.

Initially, UDI recommends that the targets be applied where the Province has made substantial investments in transit infrastructure and services – high-order rail (and SeaBus), Bus Rapid Transit, and RapidBus lines. The Province's funding commitments provide greater authority in areas near transit stations and stops. Growth near transit will also achieve several other provincial objectives.

For the targets to be taken seriously by local governments, there need to be clear enforcement mechanisms. However, UDI advocates that the Province not immediately utilize the enforcement mechanisms until there has been a discussion between the Province, the impacted local government(s), the Transit Authority, and builders. There may be extenuating circumstances and opportunities to work with municipalities to improve their policies/processes so even more housing can be built. UDI proposes several incentives and enforcement mechanisms that could be used to ensure the delivery of housing.

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Background/Discussion

Putting Housing First: Performance-based Targets

UDI recommends that the Province adopt performance-based targets rather than attempt to manage how local governments administer the wide-ranging issues in the development review process.

One of the biggest concerns that our members have with municipal development review processes is the number of policies that often take priority over providing new housing – negotiated Community Amenity Contributions (CACs), urban design constraints (e.g. shadowing policies, regulation of floor plate sizes and unit layouts), protecting employment lands, heritage conservation, tree retention, extensive and duplicative public consultation, and many others. Whenever a new policy emerges, housing always seems to take second place.

Addressing policy layering

Conflicts often emerge due to the numerous policies affecting the development process. For example, the *Energy Step Code* (*ESC*) is much easier and less expensive to adopt if buildings have simpler designs, larger floor plates that do not recede (like a wedding cake) and have less glazing (windows). This is the opposite of the urban design policies of many municipalities. It can take months to address these types of conflicts for projects because these policies are often viewed as the client, taking precedence over the delivery of the housing project or opportunities for future tenants/homebuyers.

There are too many of these policies (and several new ones which emerge every year), for the Government to legislate one-size fits all requirements for municipalities across British Columbia. This approach could lead to complaints that the Province is micro-managing issues under the purview of local governments. It would also be costly and time consuming for Government ministries to oversee and enforce requirements on many municipal policies when they conflict with housing objectives – especially since (unlike Ontario) there is no standard provincial development review process. They differ in each community.

A Tailored Approach

Each community will have its own priorities and unique circumstances. Therefore, regulating individual policies such as CACs or heritage conservation, will result in the need for different provisions or exemptions in each community, such as sloped sites or historic brewery districts. This would make the regulations very complicated and would also likely lead to loopholes that would need to be addressed subsequently.

Even if the Province were to successfully fix these issues through regulations, there will always be other policies that could slow down development. This includes policies that the Provincial Government would have difficulty addressing such as demanding high energy efficiency/low carbon targets; difficult to achieve accessibility requirements; high park standards; and mandating affordability levels that would make projects unviable - without substantial density increases.

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As we noted in the last meeting, a Toronto Deputy Mayor last November publicly stated that he hopes the City's new inclusionary zoning policy (that has no density offsets) will slow down new housing supply. Addressing these types of challenges on a municipality-by-municipality basis would be cumbersome and resource intensive. This is the basis for our recommendation that the Province adopt a performance-based approach.

Addressing Municipal Priorities

Establishing performance-based targets is easier to administer and less intrusive. They would allow local governments to deliver the housing that communities need while balancing their unique circumstances, and supporting individual priorities. If a community wanted to protect a heritage area it could, so as long as it achieved mandated housing targets. Local governments would have the option of moving their required density to where it would be less impactful, thereby requiring trade-offs like allowing additional density for builders, in order for projects to proceed.

Targets would force municipalities to determine what their priorities are (versus nice to haves) and encourage innovative compromises and quicker negotiations for projects, speeding up the development approval process. When new policy proposals emerge, they would truly be evaluated in terms of their impact on the delivery of housing. Municipal staff and Councils would also be more likely to consult the industry. This does not mean new policies would not be adopted, but **municipalities would be more likely to work with the building industry to have the policies implemented in ways that mitigate the impact on approval processes, project risks, and housing costs.**

Innovation and Collaboration

Beyond policy, local governments would be motivated to make their approval processes more efficient; although we still recommend continued provincial funding to support the digitization of these processes. Municipalities will take advantage of the many tools in the tool box that the Ministry of Municipal Affairs has developed. The City of North Vancouver has already done so, taking advantage of the recent changes that allow increased delegation to staff, and make it easier to waive public hearings when re-zonings are in compliance with Official Community Plans (OCPs). If local governments find that new tools need to be developed, they can be, and there will be more confidence that they will be utilized.

Setting Global Targets

UDI recommends that the Province establish global housing targets which can then be allocated to municipalities – specifically the areas around transit stations and stops.
Currently, regional and local governments identify their housing needs through *Region Growth Strategies* and the mandated *Housing Needs Assessments*. Unfortunately, the methodology for these measures is not robust, and as documented in the *Opening Doors Report*, planners have consistently underestimated the number of housing units we need in British Columbia and elsewhere.

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The Province would need to establish a consistent methodology to calculate housing targets. We do not provide recommendations on a specific approach; however, we encourage the Ministry responsible for Housing to consider several key components.

UDI recommends that any methodology adopted should account for the following factors:

- **Projected immigration as well as inter- and intra-provincial migration;**
- **Foreign workers in emerging sectors;**
- **Foreign students;**
- **Rental vacancy rate;**
- **The current level of unaffordability in most B.C. markets and its impact on household formation (the "*affordability adjustment*" noted in the *Opening Doors Report*);**
- **The "*competitiveness margin*" noted in New Zealand's *National Policy Statement on Urban Development 2020*; and**
- **Netting out demolitions when redevelopment occurs.**

Once a global target has been established, it should be used to apportion housing targets for specific municipalities. **We recommend that municipality level targets be set largely based on current/future access to transit infrastructure and access to Central Business Districts, as well as the land they have available for development.**

This would need to be within the urban containment boundary, and not be restricted due to environmental issues (e.g. floodplains), the Agricultural Land Reserve (ALR) or lands reserved for Industrial uses. For example, we expect much more growth to occur in Vancouver, which has twenty SkyTrain stations and is almost completely within the Urban Containment Boundary, whereas Pitt Meadows that has no stations and has a significant portion of its land base in the ALR.

Lastly, we recommend that municipal targets be distributed across transit stations and stops to provide the greatest initial opportunity to deliver benefits to the community and accelerate growth. The Ministry Responsible for Housing would need to determine how much faster these station/stop areas in each municipality should grow relative to the rest of each community. A key factor in this assessment should be impact on TransLink's or BC Transit's operations, revenues and costs.

Application Area

UDI recommends that for the initial phase, the housing targets be focused within a minimum of 400 metres of SkyTrain stations and Light Rail Transit (LRT) stations as well as at least 200 metres around Bus Rapid Transit (BRT) and RapidBus stops. This should begin with the highest order transit in the region (e.g. SkyTrain in Metro Vancouver and RapidBus in the Capital Region), and expand in the future to cover the Frequent Transit Network and Town Centres, as well as 800 metres around mass transit stations. This would eventually lead to city-wide targets.

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Rationale and Support

The 200/400 metres represents the walking shed for these stops and stations. People living and working in these areas are much more likely to shift their mode of transportation to use transit because of the convenience. It provides the greatest opportunity to locate density because:

- Multi-billion-dollar transit investments will be fully leveraged, and TransLink's as well as BC Transit's revenues will increase without raising ticket prices and taxes;
- Affordability is improved because households will not have to own as many cars, which cost $10,000 per annum to operate;
- Greenhouse Gas (GHG) emissions and energy use will drop as people will walk, roll, bike and take transit for more of their trips. Housing units in these areas are also generally smaller with less exposure to the elements than single-family homes;
- If there is a mixing of land uses (commercial and residential), the station/stop areas will become vibrant retail areas for new businesses; and
- Other economic benefits from expanding transit will be fully realized as more people will find it easier to access jobs, while businesses will have access to a wider pool of potential employees.

Despite these positive benefits of mandating housing targets around transit, the geographic impact of the targets is minimal. There are less than dozen municipalities in the Province with SkyTrain and SeaBus service now (or under construction) and only six more with RapidBus stops. The map below shows the region relative to how small of an area would be impacted by the targets in Metro Vancouver, and the current and proposed RapidBus lines that would be included in the Capital Region and Central Okanagan.

TransLink
SkyTrain network



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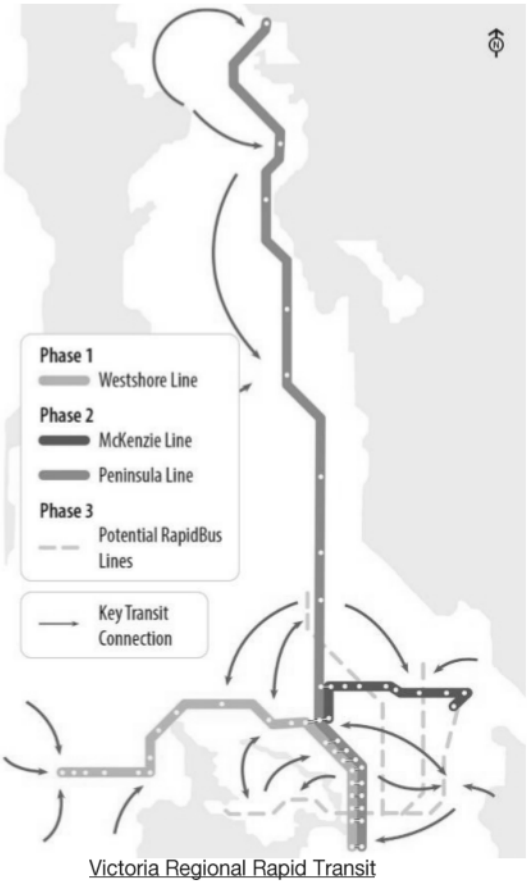
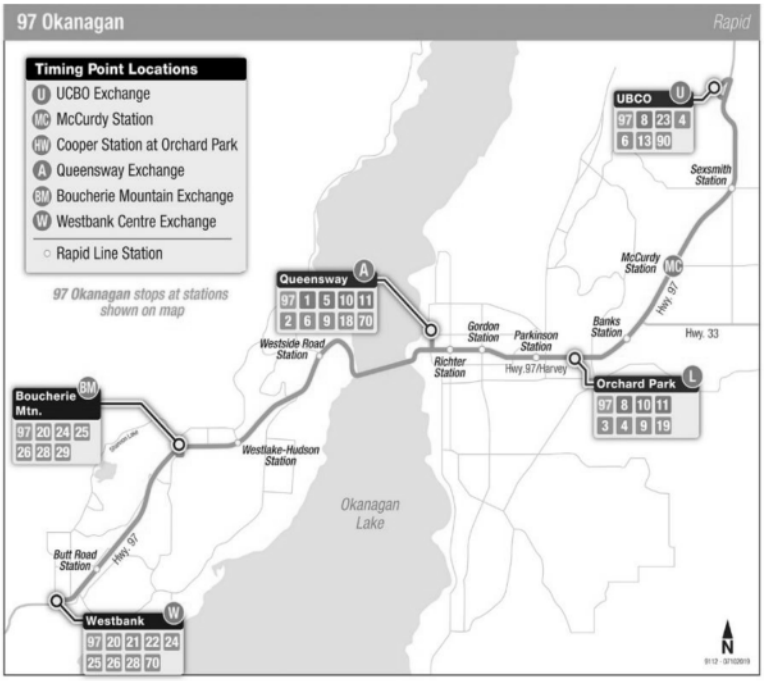


Victoria Regional Rapid Transit



Kelowna Regional Transit System – Route 97X

The Province also has a much stronger case for eroding "… *local government autonomy …,*" near transit stations because of the billions of taxpayer dollars from across B.C. and Canada used to fund the SkyTrain lines serving these areas. Port Moody was connected to the Millennium Line in 2016, yet its population declined by 16 people from 2016 – 2021 (according to the recent census), when many other growing communities did not receive these types of investments.

For the same reasons noted above, NIMBY groups arguing against development occurring near stations will face an uphill battle. Growth is coming to the region, and these are clearly the best places for it to occur from social, economic and environmental perspectives, and in consideration of the tremendous taxpayer investments made to build the lines and the stations. Taxpayers who themselves are not benefiting from transit lines want to see these projects fully leveraged, and new homebuyers and tenants want to be able to move into these areas to access high-order transit.

UDI conducted a second round of polling building on the information gathered in 2021. The results further support the implementation of housing targets in transit-oriented areas. There is

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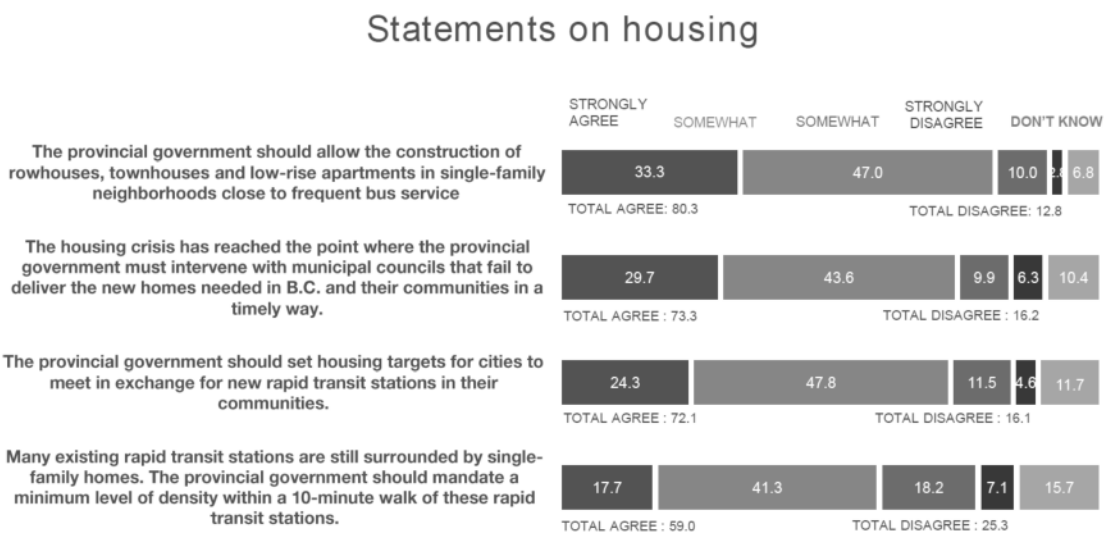
growing support for implementing targets in these locations. The recent polling that UDI conducted this spring shows that 60% of those polled support housing targets within walking distance of existing transit. There is also support for targets around future Bus Rapid Transit and RapidBus stops. The results show that 80% believe the provincial government should allow more density in single-family neighborhoods close to frequent bus service. These results illustrate the need to go beyond traditional Transit Oriented Development nodes and create more housing options across a wider range of areas.



[The survey was conducted by Stratcom with 801 BC residents over 18 from February 7th to 14th, 2022. A random sample of panelists were invited to complete the survey from a selection of panels and river sources through Lucid. Sample of 801 BC residents (18+) statistically weighted to match the gender, age, region and proportion of Chinese mother tongue in BC as per the 2016 Census.]

Flexible Application

UDI recommends that the Ministry Responsible for Housing allow local governments some additional flexibility to shift their target requirements between stations, or between BRT and RapidBus. This approach would accommodate unique circumstances or community priorities, including culturally or environmentally sensitive areas. Many municipalities have several transit stations. Instead of having defined targets for each station, a global target for all of the station areas could be established for each local government. Municipalities could then move their required density to the station areas where it is more easily accommodated – as long as all of the growth lands were within the walking shed of SkyTrain stations. A similar approach could be taken with BRT and RapidBus stops.

Over time, the Province could contemplate city-wide targets. However, UDI recommends these targets be limited to the fast-growing areas of the Province where housing affordability is very challenging (e.g. the communities where the *Speculation & Vacancy Tax* applies).

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We recognize that other parts of B.C. have housing affordability issues, but it is not because of local government actions or inactions. We have found that places like Prince Rupert are actively trying to attract developers and are providing wide-ranging incentives for new housing. There are, unfortunately, capacity issues for both the municipalities and builders in these communities, so separate solutions are needed for them.

Measuring Progress

UDI recommends that municipal progress towards targets be measured by the number of units that receive *Building Permits (BPs)*, and include a measure of zoned capacity during the initial transitional phase.

The issuance of *Building Permits* occurs at the end of the approval process, and it is very rare that a builder would choose not to proceed after receiving a *BP* because of the costs of obtaining them, and charges that are levied at this time (Development Cost Charges or Levies). *BPs* have an expiry window if construction does not begin within a specific timeframe. *BPs* are also universal and are issued in every municipality – for every type of construction.

However, due to the amount of time required for a development to reach the issuance of a *BP,* it will take several years to evaluate whether or not local governments will achieve their targets. The Province has reiterated its goal to address the current housing crisis through quick actions. Zoned capacity in the interim transitional phase can be used to assess whether local governments are likely to achieve their *BP* targets in the future. If there is inaction by some Councils, the Ministry Responsible for Housing can act quickly.

There were several other options that were considered, all of which had potentially challenging gaps in their application.

Units vs. Floor Area

Concerns have been raised that local governments may only approve small units to more easily achieve their targets. However, UDI supports the use of units as the measure over floor area for several reasons. First, it is simpler and easier to administer for the Province. It is also less intrusive on local governments and would be less likely to appear to as micro-managing.

Secondly, each community has their own demographic profile and market conditions. It would be difficult for the Government to establish requirements to impact the sizes of units for each station. Flexibility is needed. At stations closer to downtown, buyers and renters may expect smaller units because of higher price levels. Stations that are further out may be more suitable for families that are willing to trade off space for a slightly longer commute. Builders look at their sites and the local market conditions to determine what product is most likely to sell or rent. Their vision for projects is then negotiated with the local governments and communities. Imposing a Provincial standard on the size of units would be counterproductive and may undermine the ability of builders to sell/rent units and deliver the type of units a local community needs.

Finally, we do not believe that local governments would take advantage of using units as the target measure to approve only small units that are unsuitable for most of their growing population. Many local governments already have "family-friendly" policies that mandate a certain percentage of two and/or three-bedroom units. Also, by establishing housing targets, the Province will send a message that it is serious about housing, and would consider further regulations for local governments if they do not deliver the housing needed in their communities. In addition, if local governments do not have policies that reflect local market conditions for unit sizes, they will risk not meeting their housing targets because builders will be wary of investing in projects that will not sell or be leased.

Despite the above, **UDI also recommends that the Province give the Ministry Responsible for Housing the power to establish and regulate targets based on the total amount of newly built floor area around stations/stops and regulate a minimum amount of growth to be achieved at each station/stop**. The Minister should be able to use floor area targets based on square feet or metres in combination with the targets based on housing units if it is found that such steps are needed for local governments that are being manipulative in the delivery of housing units to achieve their targets (e.g. only zoning 400 ft^2 units). In the future, floor area targets could also be contemplated if there is a need to ensure that there is enough job space near transit. It would be difficult to establish a unit target for office, industrial and retail.

One issue that would need to be addressed when utilizing floor area targets is avoiding the use of the gross area, as this would include non-livable portions of buildings such as parking garages, storage spaces, bike lockers, elevator shafts, stairwells, halls and lobbies. This can represent 20% of the square footage of a building. In order to exercise the ability to regulate floor area targets, the Province would need to develop a standard definition of the net floor area of buildings that reflects the true living space.

Other Stages of the Development Process

Zoned Capacity

Zoned capacity would be challenging as a measure of housing delivery because it includes any unbuilt density on sites. There are many sites where this may represent only a few storeys, so it would be unviable to demolish the current structures for a redevelopment project (e.g. knocking down a four-storey structure to build a six-storey one). There is a lot of confusion in the City of Vancouver regarding this issue. There has been ongoing media attention about City studies that show an abundance of undeveloped density – but a lot of this undeveloped density will not be constructed until buildings come to the end of their useful life and/or the densities on the sites increase further.

Secondly, pre-zonings (and some re-zonings) can include conditions that make it difficult to develop. This could include excessive fees or high on- and off-site, inclusionary zoning and/or sustainability requirements.

Finally, pre-zoning and re-zonings can be overturned by Councils, as they have the ability at any time to downzone a property. UDI is not opposed to downzoning in cases where live safety is in jeopardy - although we support the use of density transfers in these cases. However, local governments have downzoned properties in response to community opposition (as described

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below); to protect rental housing through *Residential Rental Tenure Zoning* (*RRTZ*) and job spaces; and to increase revenues (as municipalities can then charge CACs for a future zoning increase, as was done in Ucluelet).

Development Permits (DPs)

Development Permits can also include excessive conditions, but this is not the main concern. Not all local governments issue *DPs*. Burnaby, which is a critical municipality for growth with eleven current SkyTrain stations as well as a proposed new line and gondola, does not issue *DPs*. In addition, *DPs* can be revoked after they are approved as was done in the City of White Rock. In a recently released B.C. Court of Appeal Decision, the Court allowed a newly elected anti-growth Council to downzone a property that had received an OCP Amendment and rezoning in September 2017 and then a *DP* in July 2018.

Occupancy Permits (OPs)

Similarly, to *Development Permits*, not all local governments issue *Occupancy Permits*. New Westminster, which has several rapid transit stations, does not issue them.

BC Housing New Home Registrations

Another option that was considered is measuring the BC Housing (formerly the Homeowner Protection Office) registrations for new homes built. This occurs at the end of the process, and it is unlikely that builders would pay the fee and secure a warranty for a project, then not go forward with construction. The registrations are limiting because the requirements do not apply to rental housing or job space.

Time Requirements

There are two significant problems with establishing time metrics on the various stages of the development review process. First, every municipality has its own development review process that is unique. This is why Provincial ministries have struggled to align their requirements with municipal processes. Secondly, municipalities would likely reject projects more quickly. To receive an approval, the local government may expect more information, discussion and time.

There are two instances where mandated timeframes may be appropriate. Provincial Ministries may require mandated timeframes for their processes. It will be difficult for municipalities to achieve mandated housing targets if developments are significantly delayed in obtaining Provincial approvals. In addition, B.C. Housing may want to establish timeframes for the approvals of non-profit housing, so money is not tied up in long municipal processes that do not result in an approval. The funding could then be moved to municipalities that are more willing to accept affordable housing.

Target Timing

UDI recommends that the Province set a 10-year global target for growth, broken into 2-year increments and apportioned to municipalities. Targets should be updated bi-annually to ensure they remain responsive to the market and to coincide with the 2-year delivery period.

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UDI recognizes that on a short-term basis there can be changes in the market. This is clearly been exemplified over the past two years with both dramatic lows and highs in the housing market. Local governments may argue that these changes will make it difficult for them to keep up. However, the intention of having targets is not that local governments should aim to precisely achieve them and approve no more housing. They will need to ensure that they have more than enough real development capacity in their area plans near transit stations/stops, as well as adjust their policy priorities and improve processing procedures. This is able to be accomplished in several jurisdictions in North America.

We note that during the slow market when the COVID-19 pandemic began, several major housing applications were held up in key municipalities because of CAC negotiations. If they were resolved earlier, thousands of units could have been started well before the market heated to near record levels.

Enforcement: Carrots and Sticks

Without enforcement mechanisms, the targets will not be taken seriously by local governments, so **UDI recommends a wide range of incentives and penalties if local governments do not achieve their targets.** With some of these measures in place, area planning discussions near transit stations will rapidly change from "*whether or not there be density near the stations*" to do we "*how best deliver the growth we need near the stations*."

We note that *Metro 2040*, the current *Regional Growth Strategy (RGS)* for Metro Vancouver, includes housing projections. However, not only are the projections low, but they are aspirational only, and according to the Homebuilders Association of Vancouver, most local governments are not meeting these already low targets. We note that the proposed *RGS* update for Metro Vancouver, *Metro 2050*, does not include the dwelling projections by municipality. At this time, they are broken down sub-regions (e.g. Burrard Peninsula, North Shore, etc.).

Provincial Funding

Funding can be used by the Government to encourage meeting the targets and/or as a punitive measure. With regard to the former, we note that the recently released *Report of the Ontario Housing Affordability Task Force* recommended: "*The Ontario government should establish a large "Ontario Housing Delivery Fund" and encourage the federal government to match funding. This fund should reward:*

a. *Annual housing growth that meets or exceeds provincial targets;*
b. *Reductions in total approval times for new housing; and*
c. *The speedy removal of exclusionary zoning practices.*"

The Province, in conjunction with the Federal Government (under the *Housing Accelerator Fund*) could fund local governments for every additional new housing unit above the established targets. **UDI also recommends that the senior governments continue to fund the digitization of the development review process through programs like the $15-million *Local Government Development Approvals Program* and potentially assist in the funding of area plans if the number of housing units under those plans substantially increases.**

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The Province could also prioritize transit and other infrastructure investments such as roads, transit, schools, and other community amenities to those local governments achieving or exceeding their housing targets.

With regard to penalties, the Ontario Task Force also recommends, "*Reductions in funding to municipalities that fail to meet provincial housing growth and approval timeline targets.*" UDI agrees, and this could include funding for infrastructure. TransLink and BC Transit, through regular reviews, could direct investments in bus routes, including the Frequent Transit Network and RapidBus services, to communities accepting more growth.

Transit Taxes
The regional property taxes that are used to fund transit services could be increased for those local governments that do not achieve their housing targets. This is justifiable because of the extraordinary investments made in those communities. If these investments are not being fully leveraged because of a lack of development, the regional taxes should increase to cover some of the additional operating and debt servicing costs that are being lost due to lower ridership revenues.

Municipal Powers (Tools in the Toolbox)
The Province is routinely providing additional tools or powers to local governments. A few years ago, the *RRTZ* power was provided to them, which UDI supported because we thought it would allow local governments to incent (e.g. through additional density, faster processing times, and tax reductions) the construction of additional purpose-built rental (PBR) housing. For the most part, this has not occurred as municipalities have focused on using the *RRTZ* to preserve existing units instead. The Province also provided local governments with powers to introduce the *ESC*. Now, the Housing Ministry through the Building and Safety Standards Branch will be granting powers to local governments to establish their own GHG intensity targets. In both cases, this was done even though the Province itself will be regulating GHGs in new construction over the next decade.

The Province could begin enhancing the powers of municipalities that achieve their targets and curtailing the powers for those that do not. We do not support local councils such as Port Moody being granted the power to regulate GHGs over and above provincial standards, when they have not changed their land use policies to support increased transit access for more new homes. This is especially critical as *CleanBC* recognizes that:

"*Along with directly controlling emissions from their own facilities, operations and vehicle fleets, municipalities and regional districts have the capacity to influence about 50% of our GHG emissions through decisions on land use, transportation and infrastructure that affect where people live and work, how they get around, and how their communities grow and change with time.*"

The Government could also consider limiting the ability of local governments to downzone properties if they are not achieving their targets – unless there is a life-safety issue. It would be

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counterproductive to downzone properties in the middle of a housing crisis – especially for those communities with excellent transit service.

Provincial Land-Use Decisions

If targets are not met, the Province could impose its own pre-zoning around stations, by establishing "as of right" density and heights. Our members who work in California found that some councils were able to use the threat of losing local control over some planning decisions to convince NIMBY groups to accept more housing. Several older retail areas are now being redeveloped and revitalized with new mixed-use housing projects as a result.

We note that the Ontario Housing Affordability Task Force Report recommends allowing "… '*as of right' zoning up to unlimited height and unlimited density in the immediate proximity of individual major transit stations within two years if municipal zoning remains insufficient to meet provincial density targets*." The intent is not to have to take these steps; it is to ensure that local governments themselves plan and allow an appropriate number of units – given the amount of infrastructure investments made by senior governments in these areas.

As part of its land use decision making, the Province could increase densities even higher if PBR or non-profit housing units are incorporated into projects.

The Government may wish to consider allowing "super" density bonuses on sites where there are projects led by First Nations. We note that there has been little opposition to the Squamish Nation's *Senakw* project by the Burrard Street Bridge with towers as high as 59 storeys. As clearly shown, the densities for this project are well above what has been allowed in the surrounding neighbourhoods. Higher densities are very appropriate in this area. It is close to downtown and has great access to transit/ferries as well as active transportation infrastructure.



2021 artistic rendering of Senakw. (Revery Architecture/Westbank/Squamish First Nation

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Supportive Policies Agreements

On a go-forward basis, the Province could extract **even higher growth from local governments** around stations **through *Supportive Policies Agreements* (*SPAs*)** for new lines and extensions. *SPAs* are agreements between TransLink and local governments that are intended to ensure coordination between the agency and municipalities receiving transit, and a local government's plan for growth along the new lines.

However, there are several shortcomings with the *SPAs* currently:

- They are not signed by senior government partners that are funding the transit projects;
- They are not clear in terms of the targets that local governments need to achieve, and there are no incentives or punitive measures regardless;
- They are not binding on future councils;
- There are loopholes that local councils can use to sidestep the agreements, such as this provision in the *SPA* for the Surrey-Langley SkyTrain Project, "… *the Parties acknowledge and agree that this Agreement is not intended to, and will not operate so as to, create legally binding rights and obligations nor to fetter the lawful discretion and powers of either Party with respect to the subject matter of this Agreement*;" and
- There needs to be a link to incentives and enforcement measures.

UDI believes that if the above changed, there would be an opportunity to use *Supportive Policies Agreements* to deliver even more housing in the future near transit stations and BRT/RapidBus stops because local governments would be agreeing to the provisions. The *SPAs* could be used to establish additional targets – not just along new lines or extensions – but for other transit stations and BRT/RapidBus stops that are already in place in the municipalities signing the *Agreements*.

This type of agreement which binds future councils is already in place through *Phased Development Agreements (PDAs).* These *PDAs* allow councils to establish agreements with developers, which can last up to 20 years and bind the specific zoning and subdivision servicing provisions that will apply to the sites under the *Agreements*.

Municipalities that do not have rail transit, and may not for the foreseeable future, could still benefit from *SPAs.* They would address the traditional issue of municipalities being wary of delivering density along corridors when transit service is subpar, and transit agencies being wary of improving services without the requisite density or ridership in place. For example, Langford, which has been taking more than its share of growth in the Capital Regional District, could agree to densify along a key corridor if a RapidBus is put in place by an established date. BC Transit would be comfortable in providing the improve service levels before the density is fully in place as there would be agreed upon density levels along the RapidBus corridors, and penalties (e.g. higher regional taxes) if they are not achieved in set timeframes.

Using Debt as an Incentive

Another approach that could be used is placing some of the debt of the new lines (e.g. the costs for the stations) onto municipalities. However, local governments could avoid interest charges

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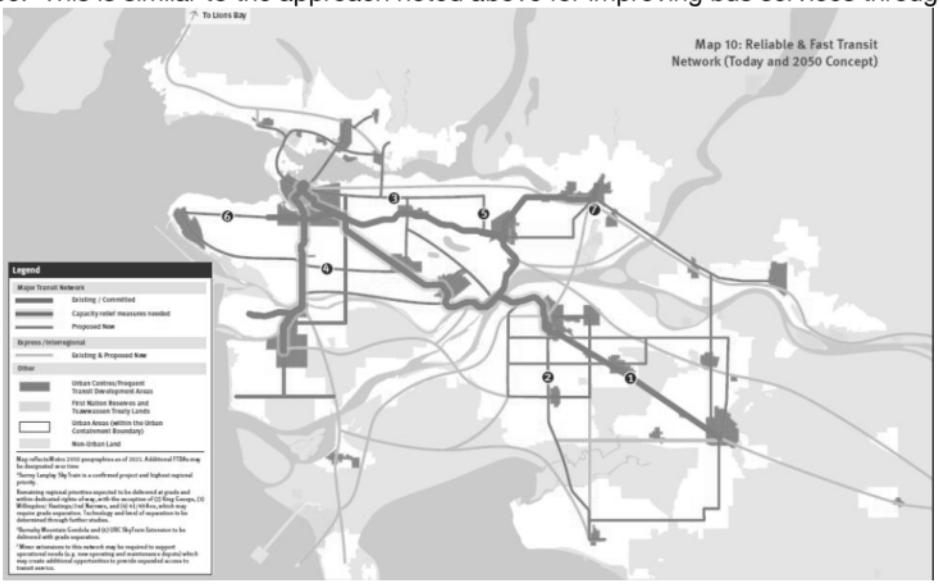
and pay off the debt if they achieve their housing targets in a timely way. The Province could reduce the debt every time a unit is delivered along the new line – or other stations that are already built in the municipality.

Prioritization of Transit Expansion through Housing Delivery
TransLink's *Transport 2050* includes a large number of future lines that will be constructed over the next thirty years, but they are not prioritized as of yet. In the past, this has been determined with little reference to how much housing local governments will deliver as a result of the new and substantial infrastructure investments. The Province and the Mayors' Council could prioritize future transit lines, in part, by asking which local governments will deliver the most housing at their new as well as current stations, and establishing this as an important criterion in determining the prioritization of investments.

Many of the new lines being contemplated by TransLink in *Transport 2050* will be BRTs, which may not attract as much investment as rail options. If an *SPA* is signed or the Municipal Debt approach noted above is adopted, a local government could work with the Province and TransLink to upgrade the BRT route to an LRT or SkyTrain line; although for investments that cross municipal borders, this would require a few local governments to agree to the higher level of service. This is similar to the approach noted above for improving bus services through *SPAs*.



Transport 2050's rapid transit expansion plan. (TransLink)

Review Period

UDI recommends that before penalties are applied, there should be a review period; to address extenuating circumstances, or where more units can be delivered with changes to municipal policies.

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The Province, could first discuss why the targets were not achieved with those local governments, Transit Authorities, Regional Districts, UDI and Canadian Home Builders' Association Chapters/members. For example, if a municipality can demonstrate that there will likely be a substantial increase in new housing units because they have a high number of Re-zonings and *Development Permits* issued, then the Province does not need to act.

If this is not the case, changes in the market, environmental conditions, resource limitations and delays in senior government approvals could have prevented municipalities from achieving their targets. However, it could also be that municipal policies and processes need to be improved. These discussions could prove critical to making sure that improvements are made, more housing can be built in the future, and targets in the future are achieved. **We recommend that at the conclusion of a review, a binding agreement, such as a Supportive Policies Agreements be put in place to ensure the delivery of housing in the future.** If a municipality refuses to act or sign an agreement with the Province when they have clearly failed at achieving their targets, the Ministry Responsible for Housing could utilize enforcement mechanisms.

Capacity Considerations

In addition to the recommendations for implementing housing targets described above, there are other capacities that will impact on the ability of builders and municipalities to meet housing targets that should be considered.

- Industry capacity to develop and construct increased housing volumes – including trades and consultants;
- Municipal capacity to review and approval development applications as well as complete area plans;
- The alignment of senior government and municipal permit processes to avoid unnecessary delays; and
- *Metro 2050*, may have to be amended to further expand the residential uses that will be allowed on employment lands near transit stations. Currently, Metro Vancouver staff are recommending that affordable residential homes be allowed *"… within 200 metres of rapid transit stations within Urban Centres or Frequent Transit Development Areas..."* if the units are built on top of employment spaces. UDI has recommended that this be increased to at least 400 metres, so local governments would have the option of building more affordable homes near transit stations.

We encourage the Province to consider how capacities may need to be increased to meet housing targets in the future, and would be happy to continue to collaborate on solutions to address these potential challenges.

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Recommendations and Conclusion

It is critical for the Province to take a leadership role and provide municipalities with enforceable housing targets. UDI has provided several recommendations for Province as it considers the use of housing targets:

1. That the Province establish global housing targets which can then be allocated to municipalities – specifically the areas around transit stations and stops.
2. Any methodology adopted should account for the following factors:
    - Projected immigration as well as inter- and intra-provincial migration;
    - Foreign workers in emerging sectors;
    - Foreign students;
    - Rental vacancy rate;
    - The current level of unaffordability in most B.C. markets and its impact on household formation (the "*affordability adjustment*" noted in the *Opening Doors Report*);
    - The "*competitiveness margin*" noted in New Zealand's *National Policy Statement on Urban Development 2020*; and
    - Netting out demolitions when redevelopment occurs.
3. Municipality level targets be set largely based on current/future access to transit infrastructure and access to Central Business Districts, as well as the land they have available for development.
4. Subsequently, municipal targets be distributed across transit stations and stops to provide the greatest initial opportunity to deliver benefits to the community and accelerate growth.
5. For the initial phase, the housing targets be focused within a minimum of 400 metres of SkyTrain stations and Light Rail Transit (LRT) stations as well as at least 200 metres around Bus Rapid Transit (BRT) and RapidBus stops, beginning with the highest order transit in the region.
6. That the Ministry Responsible for Housing allows local governments some additional flexibility to shift their target requirements between stations, or between BRT and RapidBus.
7. Municipal progress towards targets be measured by the number of units that receive *Building Permits (BPs)*, and include a measure of zoned capacity during the initial transitional phase.
8. The Province gives the Ministry Responsible for Housing the power to establish and regulate targets based on the total amount of newly built floor area around stations/stops and regulate a minimum amount of growth to be achieved at each station/stop.
9. Set a 10-year global target for growth, broken into 2-year increments and apportioned to municipalities. Targets should be updated bi-annually to ensure they remain responsive to the market and to coincide with the 2-year delivery period.
10. A wide range of incentives and penalties if local governments do not achieve their targets.

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11. Senior governments continue to fund the digitization of the development review process through programs like the $15-million *Local Government Development Approvals Program* and potentially assist in the funding of area plans if the number of housing units under those plans substantially increases.
12. Before penalties are applied, there should be a review period; to address extenuating circumstances, or where more units can be delivered with changes to municipal policies.
13. Finally, at the conclusion of a review, a binding agreement, such as a Supportive Policies Agreements be put in place to ensure the delivery of housing in the future.

We believe that housing targets represent an opportunity for the Province to intervene and address the current housing crisis, and encourage consideration of the methods and approaches described in this memo. By implementing housing targets focused around transit, it will compel municipalities to prioritize the delivery of housing.

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To: **The Hon. David Eby, Q.C., Attorney General and Minister of Housing**
From: **Anne McMullin, President & CEO, Urban Development Institute (UDI)**
Date: **March 10, 2022**
Re: **UDI Memo on the Report of the *Ontario Housing Affordability Task Force***

Background/Discussion

In December, Ontario's Minister of Municipal Affairs and Housing, the Hon. Steve Clark, appointed an *Ontario Housing Affordability Task Force* to develop recommendations to improve the availability and affordability of market-rate homes.

Released in February of 2022, the *Report of the Ontario Housing Affordability Task Force* referred to in this memo as the *Ontario Report,* includes proposals for the "*ambitious but achievable target*" of 1.5 million new homes over the next ten years. The strategic solutions to achieving this goal include:

- More housing density across the Province;
- Ending exclusionary municipal rules that block or delay new housing;
- Depoliticizing the housing approvals process;
- Preventing abuse of the housing appeals system (which B.C. does not have); and
- Tying financial support to the construction of more housing.

Ontario Housing Affordability Task Force Report Recommendations

The *Ontario Report* outlines 55 recommendations to improve the affordability of housing in Ontario. These recommendations recognize the lack of change associated with demand-side measures that have been put in place when there hasn't been sufficient supply. They also note that Ontario's housing supply challenges are hurting the most vulnerable in society such as new immigrant communities. They argue building supply and streamlining measures as the most efficient ways to build new homes.

Recommendation Comparison: B.C. and Ontario

Many of the recommendations in the *Ontario Report* mirror those in the *Canada-British Columbia Expert Panel's Opening Doors: Unlocking Housing Supply for Affordability Report,* referred to in this memo as the *Opening Doors Report*, as well as UDI's own advocacy. UDI recognizes the Ontario recommendations are very bold, especially with regard to regulating local governments. For example, the explicit direction of reducing funding in municipalities that resist new housing is an approach that has been extends beyond the recommendations of the *Opening Doors Report.* Instead, *the Opening Doors Report* recommends that the Province considers tying transit investments to development approvals and housing targets, where the *Ontario Report* recommends, "***Reductions in funding*** *to municipalities that fail to meet provincial housing growth and approval timeline targets*."

In addition, UDI has recommended that the Province take more direct action to pre-zone near stations if targets are not achieved. The *Ontario Task Force* goes further, recommending: "... '*as*

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of right' zoning up to ***unlimited height and unlimited density*** *in the immediate proximity of individual major transit stations within two years if municipal zoning remains insufficient to meet provincial density targets*."

The O*pening Doors Report* calls for statutory timeframes for each part of the approval process, and the *Ontario Report* recommends to, "*Legislate timelines at each stage of the provincial and municipal review process, including site plan, minor variance, and provincial reviews,* ***and deem an application approved if the legislated response time is exceeded****."*

Below is a summary comparison of the recommendations in the *Canada-British Columbia Opening Doors Report* to the *Report of the Ontario Housing Affordability Task Force* as they apply to key policy themes.

Policy Theme	***Opening Doors Report*: Canada BC Expert Panel**	***Ontario's Housing Affordability Task Force***
Streamlining Processing	• The B.C. government and local governments implement some ideas presented in the *Development Approvals Process Review* (*DAPR*) *Report* including a Provincial policy review to consider tying development approvals to housing targets. • Developing a province-wide digital development permitting system designed to meet local government and industry needs in a streamlining, timely and cost-efficient fashion.	• Require a pre-consultation with all relevant parties at which the municipality sets out a binding list that defines what constitutes a complete application. • Establish province-wide zoning standards or prohibitions for minimum lot sizes, setbacks, minimum heights, angular planes, shadow rules, floor space index, etc., as well limiting floor plate restrictions. • Establish a Province-wide definition of plan of subdivision and a standard set of conditions. • Require mandatory delegation of site plan and minor variances to staff or third parties. • Fund the adoption of a consistent e-permitting system. • Fund "approvals facilitators" who would have the authority to resolve policy conflicts and ensure timelines are met.
Municipal Approvals	• Impose statutory time limits to all stages of the property development process.	• Reduce or eliminate minimum parking requirements. • Limit municipalities from requesting or hosting additional public meetings beyond those that are required under the *Planning Act* (*PA*).

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		• Legislate timelines at each stage of the provincial and municipal review process... deem an application approved if the legislated response time is exceeded (please note that Ontario already has a standardized municipal approval process under the *PA*).
Transit-Oriented Development	• Require province-wide interests and priorities to be reflected in OCPs. Notably, minimum density requirements and sufficient pre-zoned sites for the development of market and non-market homes around provincially-funded transit infrastructure.	• Allow "as of right" zoning of six to 11 storeys with no minimum parking requirements on any streets utilized by public transit (including streets on bus and streetcar routes). • Infinite up-zoning in height and density around stations should municipalities not achieve their housing targets in these areas.
Housing Targets	• Update the *Housing Needs Reports* methodology to include an "affordability adjustment" and require local governments to use anticipated growth numbers from the *Housing Needs Reports* as binding minimum targets from which to determine land-use policies and decisions.	• Set a goal of building 1.5 million new homes in ten years across Ontario. • Require municipalities to use Ministry of Finance population projections as the basis for housing need analysis and related land use requirements. • Requiring consistent municipal reporting on housing data by enforcing compliance as a requirement for accessing programs under the *Ontario Housing Delivery Fund* (see below).
Government Incentives	• Federal and provincial governments create a municipal housing incentive program rewarding the creation of net new housing supply wherever demand occurs... to recognize municipal costs incurred in growing the housing stock and reward growth of housing supply where it is needed.	• The Ontario government should establish a large "*Ontario Housing Delivery Fund*" and encourage the federal government to match funding. This fund should reward annual housing growth that meets or exceeds provincial targets, reductions in total approval times for new housing, the speedy removal of exclusionary zoning practices. • Reductions in funding to municipalities that fail to meet

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		provincial housing growth and approval timeline targets. • Waive development charges on all forms of affordable housing guaranteed to be affordable for 40 years. • Prohibit interest rates on development charges higher than a municipality's borrowing rate when the payment of Development Charges is delayed. • Provide provincial and federal loan guarantees for purpose-built rental, affordable rental and affordable ownership projects. • Require municipalities to accept Surety Bonds.

Conclusion

Both reports make clear that Ontario and British Columbia are in the midst of a housing crisis that needs to be addressed now; one that is harming both their economies and their social structures. UDI believes that the strong recommendations in both reports should receive serious consideration by both provinces. However, the key recommendation is the need to establish housing targets for local governments – with a focus on building near transit infrastructure. The targets should come with real incentives and penalties to ensure that they are achieved. If this were to occur, many of the other recommendations would not have to be implemented – or would be at the request of municipalities. Without enforceable targets, it is doubtful that many of the recommendations would have a strong enough impact on their own to solve the housing crises.

MJO UDI & ULI Final Speaking Notes

From: Connie, Alanah GCPE:EX <Alanah.Connie@gov.bc.ca>
To: Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: March 9, 2022 3:06:10 PM PST
Attachments: UDI_Capital Region_MJO_SN_27Oct2021_FINAL.docx, ULI_BC_MJO_SN_19Jan2022_FINAL.docx

Hello Eric and Cimarron,

Attached are the final versions of MJO's speaking notes for UDI and ULI. Please let me know if you need anything else.

Thank you!
Alanah

Alanah Connie
Senior Public Affairs Officer | Ministry of Municipal Affairs
Government Communications & Public Engagement
Office: 236.478.3459 | Mobile: 250.880.4935 | Email: Alanah.connie@gov.bc.ca
she/her

Speaking Notes

Hon. Josie Osborne

Minister of Municipal Affairs

UDI: Capital Region
Housing Needs in the Capital Region: A Follow Up Discussion with Minister Josie Osborne

Oct. 29, 2021
12:00pm

Event contact:
Emily Donner
Events & Admin Coordinator
250-514-4402

Please check against delivery

Event: Urban Development Institute: Capital Region – Housing Needs in the Capital Region

Time: 12:00 -1:00pm
Minister speaks at 12:08pm
Followed by a 40-minute Q&A discussion

Length of speech: 10 minutes

Contact: Emily Donner, Events & Admin Coordinator

Logistics:
Please join the meeting at 11:50am for a pre-meeting mic and video check.

Minister Osborne's unique link to join the webinar:
s.15

Event summary:
UDI Capital Region is hosting a webinar with Josie Osborne, Minister of Municipal Affairs, discussing the housing needs of the Capital region and how the province is supporting local governments. The event is a follow up to a discussion on the same topic with Minister Eby that the group had in May 2021.

What does the audience want to hear?
The audience would like to hear about the Province's 30-Point Plan for Housing Affordability in BC and improving local government development approvals processes. They would also like an update on Development Approvals Process Review and Housing Needs Reports and how these pieces all fit together to help communities reach their housing needs in the Capital Region.

Key participants:
- Adam Cooper, Director of Development at Abstract Development (moderator)
- Josie Osborne, Minister of Municipal Affairs

Audience: 50-60 UDI members

Key Messages:

- We are working closely with local governments, developers and housing advocates (including UDI) to increase the supply of housing and get the right homes built for individual communities.
- We understand that a key piece of supporting housing diversity and affordability, particularly for urban areas, is looking at the bigger picture of creating complete, compact communities.
- My ministry has been focused on taking foundational steps that will support local governments and the development sector as we work together to build the housing British Columbians need and create more resilient communities.
- To support more efficient and effective development approval processes, we have introduced legislative amendments to revise public hearing requirements for zoning matters

that are consistent with the Official Community Plan and to allow elected officials to delegate decisions on minor development variance permits to staff.

- This is one important piece in the work all orders of government must do to meet housing needs for people in our communities.
- We know there is more to do and Minister Eby and I are working together to support local governments and the development sector to deliver more affordable housing in B.C.

Agenda

11:50am – Minister Osborne joins our pre-meeting to check mics/video feeds etc.
12:00pm – Webinar goes live, welcome from Moderator
12:03pm – A word from Sponsor
12:06pm – Moderator introduces Minister Osborne
12:08pm – Minister Osborne speaking time begin
12:18pm – Q&A Session and Discussion begins
12:58pm - Final thoughts and thanks from our Moderator
1:00pm - Webinar closes

INTRODUCTION

Good afternoon.

I'd like to acknowledge that I am speaking to you from the territory of the Tla-o-qui-aht [Tu-low-qui-at] First Nation.

Thank you for inviting me to join you today.

Over the next hour, we have an important opportunity to talk about a matter that concerns us all - working together to create resilient, strong communities in the Capital Region and across the Province.

I’m going to keep my remarks brief today because I believe the real value from this meeting will be hearing firsthand from all of you who are doing the important work of delivering housing to communities throughout British Columbia.

I want to hear your thoughts, your questions and your feedback about on the things our government is doing that work for you, and how we can continue to collaborate to get the homes that British Columbians need right now, built faster.

Because it’s conversations like these that will help inform our future policy and make the biggest difference for people.

I’m hoping to gain lots of insight today so please utilize the chat tool.

30-Point Housing Plan

I’ve always believed that we get our best work done when we are working together.

One partnership I’ve been committed to since my early days as mayor of Tofino is collaboration between all orders of government and the development sector on tackling the housing crises in our communities.

It can be tough work, but it’s work we all have to roll up our sleeves and continue to do.

Because everyone deserves a place to call home.

[PAUSE]

All orders of government need to take bold steps to address the housing crisis and provide British Columbians with access to homes they can afford.

Tackling the housing crisis requires both day-to-day work and a long-term vision.

Which is why we took an historic step in 2018 and launched Homes for BC, the largest investment in housing affordability ever in our Province – $7 billion over 10 years.

Since then, we've made real progress – with more than 30,000 homes complete or underway for people who are struggling to find a place to live.

From people who are experiencing homelessness and seniors on fixed incomes, to middle-income families, students and individuals.

We know there is more to do.

And this year, we also announced an additional $2 billion dollar investment to finance the construction of thousands of new homes for middle-income families.

[PAUSE]

Working with the development sector and local governments to get the homes we need built as soon as possible is a top priority for my ministry and for Minister Eby.

We're grateful for your work and need your continued partnership to help us keep delivering more homes, faster.

But as I spoke about at the start, if we're to be successful at managing the housing issues we're facing today, we need to collectively understand our end goal – we need a vision.

Resilient Communities

Our government understands that a key piece of supporting housing diversity and affordability, particularly

for urban areas, is looking at the bigger picture of creating complete, compact communities.

We cannot achieve the housing we need without the transportation and infrastructure systems to support it.

My ministry is working with the Ministry of Transportation and Infrastructure to develop an approach to effectively integrate land use and transportation planning decisions.

And here’s where the long-term vision comes into focus.

As we work towards building complete, compact communities everyone wins, and housing, climate action, economic development and community health are all supported.

And we move the dial toward cleaner, more sustainable and resilient communities for our future and our children's future.

I will have more to say about this approach in the months ahead.

But I will point out one tactic that is already being used in other urban areas to advance this integrative approach.

Supportive Policy Agreements between TransLink and host local governments are bridging the gaps between large transit projects, like the Broadway Skytrain extension in Vancouver and the new Surrey-Langley Skytrain, and how the land around them is being used.

I know that what we learn from these partnerships will inform and greatly benefit how we work together in **all** communities, to create strong, resilient places to live for the future.

[PAUSE]

Each and every one of you, as urban developers, local government representatives and housing advocates, are key partners in this work.

And I know that many of you are already working together through community development planning and collaboration on innovative ways to contribute to sustainable regions across the province.

At the same time, my ministry has been focused on taking foundational steps that will support local governments and the development sector as we work together to build the housing British Columbians need and create more resilient communities.

Development Approvals Processes

On Tuesday, we introduced legislative amendments which when passed will give local governments more tools to simplify and speed up their development approvals processes, helping to get the homes people need built faster.

The amendments will update the *Local Government Act* to:

- remove the default requirement for local governments to hold public hearings for zoning bylaw amendments, as long as they are consistent with the official community plan; and
- enable local governments to delegate decisions on minor development variance permits to staff.

These tools will support local governments to move forward more efficiently on developments, bypassing barriers and speeding up housing approvals.

They were identified through consultation with housing providers and builders, including UDI, local governments, housing advocates, and other important stakeholders as part of our ongoing Development Approvals Process Review.

These changes will build on the work of the Local Government Development Approvals Program that is providing $15 million to help local governments modernize development permitting and approvals by removing barriers and streamlining processes.

43 local government projects [option to include the three CRD communities that received funding – Central Sannich, Colwood, and Sooke] were recently approved under the program and are now underway across B.C.

Housing Needs Reports

Another important step forward is the requirement for local governments to develop housing needs reports,

Because every community's housing needs are unique and local governments know best how to address those needs.

Since the program started, 144 local governments and seven modern Treaty Nations have received funding to help them assess their communities' housing needs.

Including all communities in the capital regional district.

This means towns, cities and municipalities in British Columbia will soon have the detailed information they need to make the best decisions for housing in their communities.

Everybody benefits when that happens, and most importantly, access to good housing makes life better for people, now and in the future.

Many housing needs reports are now complete, and we're already seeing how they are helping shape planning and land use decisions around current housing gaps.

These reports are also supporting community partners, including non-profit housing providers and home builders – giving them up-to-date information about municipalities and regional districts, including some First Nations.

In fact, in my own hometown of Tofino, I've seen home builders and developers step forward with proposals citing information and direct quotes from the housing needs assessment our community completed a few years ago.

This is important work, and it is continuing – guiding us as we build healthier, more resilient communities throughout the province.

Rental Zoning

We have also implemented legislative changes allowing local governments to require new housing in multi-family residential areas to be developed as rental units or preserve existing rentals in residential areas through their zoning bylaws.

This authority provides another way for local governments to address the housing crisis – and we are seeing many communities using it.

For example, the City of Victoria has incorporated a rental zoning framework into its bylaws, to enable use of the tool on a site-by-site basis.

So far, rental zoning has been applied to several new developments, including earlier this month when the City approved a 42-unit rental development close to downtown.

We are continuing to work with local governments as they consider whether and how to use this rental zoning tool.

We are also developing a guide for local governments outlining good practices for supporting new rental housing supply.

And this guide was postponed is expected to be ready later this year.

Conclusion

We are experiencing a housing crisis in our province.

No one solution can lift us out of that crisis, just as no one issue brought this challenge upon us.

We've all heard about measures being taken in other jurisdictions to combat housing issues.

I’m sure there are as many potential responses for dealing with housing supply and affordability as there are municipalities in B.C.

Because as I’ve said, each community in our province is unique, and has unique needs.

This is why our government has chosen the path of working closely with local governments, developers and housing advocates to get the **right** housing built for individual communities.

And we've chosen to engage with colleagues across ministries and at the federal level on the work we are doing, so that when houses are built, the vital transportation and infrastructure to service people is also in place.

This is all critical to economic recovery from the pandemic and the long-term sustainability of healthy communities.

And we all have a stake in this.

I am inspired by what we've accomplished so far.

I am committed to continuing this work with all of you and am eager to dive into the hard work in the months and years ahead.

[PAUSE]

Now, its time to hear from you.

I miss the in-person gatherings where we could so easily facilitate a dialogue, but we will rely on technology for today.

So I want to see that chat tool really heating up.

I understand we have a couple of predetermined questions, and then I'd like to hear more from you, whether it's a question, feedback, or to share best practices and ideas.

Your voices are so important for informing our vision for the future, so don’t hold back.

Let’s begin.

--30--

Speaking Notes

Hon. Josie Osborne

Minister of Municipal Affairs

ULI: British Columbia
Webinar: A Conversation with Honourable Josie Osborne, Minister of Municipal Affairs

Jan. 20, 2021
12:00pm

Event contact:
Shannon Paterson
Events & Admin Coordinator
604.761.8060

Please check against delivery

Event: Urban Land Institute: British Columbia – A Conversation with Honourable Josie Osborne, Minister of Municipal Affairs

Time: 12:00 -1:00pm
Minister speaks at 12:08pm
Followed by a 40-minute Q&A discussion

Length of speech: 10-15 minutes

Contact: Shannon Paterson, Events & Admin Coordinator; 604.761.8060

Logistics:
Please join the meeting at 11:50am for a pre-meeting mic and video check.

Below are the Zoom links to attend the meeting:

Join from PC, Mac, Linux, iOS or Android:
s.15

Event summary:
ULI BC chapter is hosting a webinar with Minister Osborne discussing the housing needs of communities across B.C. and how the Province is supporting local governments and the development sector to meet those needs.

ULI is a global, member-driven organization comprising more than 45,000 real estate and urban development professionals. In B.C., ULI's membership is mostly focused on Metro Vancouver with a view to expanding to the Fraser Valley. Its goal is to provide professional development opportunities for real estate and urban development leaders and to be fully engaged in communities to help them tackle the greatest urban challenges they face now and in the future.

What does the audience want to hear?
The audience would like to hear about the Province's 30-Point Plan for Housing Affordability and the plan to improve local government development approvals processes. They would also like an update on the Development Approvals Process Review, housing needs reports and rental zoning.

Key participants:
- Duncan Wlodarczak, Chair of Urban Land Institute: British Columbia (moderator)
- Josie Osborne, Minister of Municipal Affairs

Audience: 50-60 ULI members (real estate and urban development professionals)

Key Messages:

- Our government is working closely with local governments, developers and housing advocates, including ULI, to increase the supply of housing and get more of the right homes built for people faster.
- We understand that a key piece of supporting housing diversity and affordability, particularly for urban areas, is looking at the bigger picture of creating complete, compact communities.
- My ministry has been focused on taking foundational steps that will support local governments and the development sector as we work together to build the housing British Columbians need and create more resilient communities.
- To support more efficient and effective development approval processes, we have:
    - revised public hearing requirements for zoning matters that are consistent with the Official Community Plan,
    - supported local governments with funding to streamline and approve their development processes, and
    - given elected officials the ability to delegate decisions on minor development variance permits to staff, to help speed up the process.
- These are just a few key examples of the important work all orders of government must do to meet housing needs for people in B.C. communities, and ensure that everyone has a safe, affordable place to live.
- We know there is more to do, and Minister Eby and I are committed to continuing to work together to prioritize supporting local governments and the development sector to deliver more affordable housing in B.C.

Agenda

11:50am – Minister Osborne joins our pre-meeting to check mics/video feeds etc.
12:00pm – Webinar goes live, welcome from moderator
12:06pm – Moderator introduces Minister Osborne
12:08pm – Minister Osborne speaking time begins
12:18pm – Moderated Q&A begins
12:38pm – Audience Q&A begins (Zoom chat tool – moderator to facilitate)
12:58pm – Final thoughts and thanks from moderator
1:00pm – Webinar closes

INTRODUCTION

Good afternoon.

I'd like to acknowledge that I am speaking to you from the territory of the Tla-o-qui-aht [Tu-low-qui-at] First Nation.

Thank you for inviting me to join you this afternoon.

It's a pleasure to be speaking to you for the first time in my role as Minister of Municipal Affairs.

As Minister of Municipal Affairs, I'm incredibly grateful for the opportunity to work with partners committed to building stronger, more resilient communities.

Whether it’s in Metro Vancouver, the Fraser Valley, or in communities across the Province, housing is a cornerstone of this work.

The Premier has mandated me to work with the Minister responsible for Housing, David Eby, to help local governments streamline and modernize their development permitting and approvals.

When we speed up the development process, we get more housing supply, and that helps to bring the cost of housing for British Columbians down.

This collaboration is well under way and I’ll be sharing more on our work to date and where we’re going.

But today, is also an opportunity to hear directly from all of you.

I want to hear your feedback and discuss how we can continue to collaborate to get the homes that British Columbians need right now, built faster.

I've always believed that we get our best work done when we are working together.

As developers and housing advocates, I know you're on the front lines delivering on the housing needs in urban communities across the province.

It’s conversations like these that will help inform our future policy and deliver on our shared goal of housing British Columbians.

[PAUSE]

Since being first elected as mayor of Tofino, I’ve been committed to collaboration between all orders of government and the development sector on tackling the housing crisis in our communities.

It can be tough work, requiring us all to roll up our sleeves, and it’s work that our government is committed to advancing…

Because everyone deserves a place to call home.

[PAUSE]

Tackling the housing crisis requires ongoing work that supports a long-term vision.

In 2018, our government launched Homes for BC, the largest investment in housing affordability ever in our Province – $7 billion over 10 years to deliver 114,000 affordable homes.

Since then, we've made real progress – with more than 30,000 homes complete or underway for people who are struggling to find a place to live.

From seniors, to students, to people experiencing homelessness, these homes are benefitting British Columbians in every corner of the province.

We're also investing an additional $2 billion to finance the construction of thousands of new homes for middle-income families.

We know there is much more to do.

Which is why Minister Eby and I are committed to working with the development sector and local governments to meet housing needs in growing communities.

We're grateful for your work and for your continued partnership with the Province to deliver the homes we need.

But as I spoke about at the start, if we're to be successful at managing the housing issues we're facing today, we need to collectively understand our end goal – we need a vision.

Resilient Communities

Our government recognizes that a critical piece of supporting housing diversity and affordability – particularly in urban areas like Metro Vancouver and the Fraser Valley – is the creation of complete, compact communities.

This work is at the heart of a strategy being developed by staff in my ministry and the Ministry of Transportation and Infrastructure around effectively integrating land use and transportation planning decisions.

The idea is to build the communities of the future. Ones that are diverse, affordable, and resilient, connected by efficient transportation systems.

We know families and individuals thrive when their communities are truly livable…

Where there's access to reliable systems that link together neighbourhoods, regions, services, jobs, greenspaces and amenities.

I will have more to say about this approach in the months ahead.

But this work is already underway in parts of Metro Vancouver.

Supportive Policy Agreements between TransLink and local governments are bridging the gaps between large transit projects, like the Broadway Skytrain extension in Vancouver and the new Surrey-Langley Skytrain, and how the land around them is being used.

As we build complete, compact communities, we're supporting affordability, economic growth, and community health.

And we know the development of these communities will help us reach our collective climate goals.

We recognize that local governments are leaders in climate action and the Province is here to support them.

We've set aside $11 million dollars to help local governments plan better for building complete, compact, energy efficient communities.

And, over the coming months my colleague, Minister Heyman, and I will establish a new program to support local governments' broader climate actions.

[PAUSE]

Each and every one of you, as professionals in real estate and land use, local government representatives and housing advocates are key partners in this work.

And I know that many of you are already collaborating on community development planning and creative ways to contribute to building sustainable regions across the province.

At the same time, my ministry has been focused on taking foundational steps that will support local governments and the development sector.

Development Approvals Processes

In the fall, we made legislative changes giving local governments more tools to simplify and speed up their development approvals processes, helping to get the homes people need built faster.

Local governments can now hold public hearings for zoning bylaw amendments, as long as they are consistent with the official community plan,

And they can delegate decisions on minor development variance permits to staff.

These tools allow local governments to move developments forward more efficiently, bypassing barriers and speeding up housing approvals.

They were identified through consultation with housing providers and builders (including ULI), local governments, housing advocates, and other important stakeholders as part of our ongoing Development Approvals Process Review.

[PAUSE]

While these amendments affect virtually all of B.C.'s local governments, I will note that they do not apply to Vancouver as the City already has a broader ability to delegate matters to staff,

And unlike Official Community Plans, Vancouver's Official Development Plans do not require public hearings.

But we've been in touch with the City and are committed to working together to support Vancouver's plans to improve their development approval processes as well.

[PAUSE]

These legislative changes build on the work of the Local Government Development Approvals Program that is providing $15 million to help local governments modernize development permitting and approvals.

43 local government projects, including nine communities in Metro Vancouver and three in the Fraser Valley, were approved under the program and are now underway.

Housing Needs Reports

Another important step forward on housing supply and affordability is the requirement for local governments to develop housing needs reports.

Every community's housing needs are unique and local governments know how best to address them.

Since the program started, 144 local governments and seven modern Treaty Nations have received funding, including most communities in Metro Vancouver and the Fraser Valley.

This means communities across British Columbia now have detailed, relevant information to help them make the **best** decisions for housing in their communities,

And that benefits everyone – community partners like non-profit housing providers and home builders, and most importantly, the people who need homes.

Many reports are now complete, and we're already seeing how they are helping shape planning and land use decisions around current housing gaps.

This important work will continue to guide us as we build healthier communities throughout the province.

Rental Zoning

We have also implemented legislative changes allowing local governments to use their zoning bylaws to require new housing in multi-family residential areas be developed as rental units or preserved as existing rentals.

This authority is already giving many communities, including Burnaby, Richmond and Vancouver another way to address the housing crisis.

In addition, we are developing a guide for local governments outlining good practices for supporting new rental housing supply, which is expected to be ready early this year.

Conclusion

An incredible amount of work has been done since 2018 and yet, the housing crisis persists.

No one solution can lift us out of this crisis, just as no one issue created it.

Our government has chosen the path of working closely with local governments, developers and housing advocates.

Because we know that each community has its own unique needs, and it's important we get the **right** housing built for British Columbians.

We've chosen to engage with colleagues across ministries and at the federal level on the work we are doing so that when houses are built, the vital transportation and infrastructure to service people are also in place.

This work is critical as we emerge from the pandemic and continue to support the long-term sustainability of communities across the province.

I am motivated by what we've accomplished so far and am eager to dive into the hard work with all of you in the months and years ahead.

Thank you.

--30--

RE: UDI Meeting - March 10, 2022

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: March 9, 2022 4:10:15 PM PST
Attachments: image011.jpg, image014.jpg, image003.png, image013.jpg, image012.jpg, image009.png, image010.jpg, image001.png

Hi Doug,

I haven't done a deep dive or proper analysis of the entire proposal, but here are some initial high-level thoughts for consideration for Teri/MDE. I have not added any bullets signaling future initiatives. The DAPR bullets are from MUNI.

High-level Points:

- We appreciate the perspective of UDI as a key stakeholder and representative of the development sector.
- The summary presents an in-depth suite of proposals, many of which staff in the ministries of Housing, Municipal Affairs, Transportation and Finance are aware of and review as part of ongoing policy analysis. The summary has been shared with staff for review.
- Housing Policy staff work closely with the Ministry of Transportation, Municipal Affairs, TransLink and the Cities of Vancouver, Surrey, Langley and Langley Township on federal/provincial funded mass transit projects in those communities to ensure market and affordable housing are delivered as part of those major projects (#30 of the 30 Point Plan).
- Government staff have reviewed the 55 recommendations of the Ontario Housing Affordability Task Force, the majority of which focus on land use planning and municipal governance. This information is examined together with related policy initiatives from other jurisdictions as part of our ongoing strategic housing policy analysis.
- As part of its Development Approvals Process Review, the Ministry of Municipal Affairs has implemented policies to support more efficient and effective development approval processes, including:
    - revised public hearing requirements for zoning matters that are consistent with the Official Community Plan,
    - supported local governments with funding to streamline and approve their development processes, and
    - given elected officials the ability to delegate decisions on minor development variance permits to staff, to help speed up the process.
- The Province has made great strides implementing the 30 Point Plan and we recognize that more work needs to be done to move the needle on housing to ensure BC's economic competitiveness for years to come.

Points and my initial thoughts on the following:

s.13

Cimarron Corpé
Director, Housing Secretariat

Ministry of Attorney General and Minister Responsible for Housing
Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: Wednesday, March 9, 2022 1:53 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: FW: UDI Meeting - March 10, 2022
Importance: High

Cim, I'm in meetings all afternoon. Do you have some time to take a quick look at this for Teri? It's 23 pages.

Doug

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: Wednesday, March 9, 2022 1:33 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: FW: UDI Meeting - March 10, 2022

Anything specific to highlight here? Meeting is tomorrow morning so won't be time for a detailed review, but anything jump out at you?
t

From: Cassandra McColman <cmccolman@udi.org>
Sent: Monday, March 7, 2022 3:36 PM
To: Minister, AG AG:EX <AG.Minister@gov.bc.ca>
Cc: LynesFord, Adam AG:EX <Adam.LynesFord@gov.bc.ca>; Cooke, Angela AG:EX <Angela.Cooke@gov.bc.ca>; Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Anne McMullin - UDI <presidentandceo@udi.org>; Michael Drummond <mdrummond@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Meeting - March 10, 2022

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Good afternoon Minister Eby,

Ahead of the meeting with UDI's Executive Committee on Thursday, please find attached our suggested agenda and materials. Following the meeting, we would be happy to follow-up with any additional background or support that is needed.

If there are any questions, please let us know.

Warm regards,
Cassandra

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March 10, 2022

Tiffany Warkentin
Director, Strategic Policy
Building and Safety Standards Branch
Ministry of Housing
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2

Dear Ms. Warkentin:

Re: Greenhouse Gas Intensity (GHGI) Targets

On behalf of UDI, I would like to thank you for extending the comment period for us, so we could discuss our response with the Canadian Home Builders' Association of BC (CHBA BC).

Based on the discussions at the Energy Step Code Council (ESCC) and through the review of the *Metrics Report* and proposed *Carbon Pollution Standards*, we recommend that the Province remain in a leadership role with regard to the ongoing work with the *Metrics Report* and *Best Practices Guide* and delay the implementation of Greenhouse Gas Intensity (GHGI) targets by municipalities. UDI does not have any issue with local governments proceeding with consultations this summer regarding the GHGI targets, but we have concerns about decisions being made about them in a short timeframe when the information is incomplete.

Background and Context

A key question for UDI is the timing of when local governments will be able to make decisions on the GHGI targets as well as how they will integrate them with their *Energy Step Code* (*ESC*) targets. The length of the consultation periods is also critical. However, it is stated in the *Carbon Pollution Standards* PowerPoint presentation that "… *local governments may change their bylaws*," this summer. We are also concerned that the Province is only going to have a six-week consultation process after the release of the documents (and GHG data tables) to meet the summer deadline, and then local governments will rapidly move forward with their decisions.

We are rushing forward to allow local governments to make potentially critical decisions when there will not be enough information for those decisions to be made in the short timeframes being proposed. This is also occurring a few short months before the

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municipal election. We also note that construction costs are rapidly increasing (due to supply chain issues) to the point where they are difficult to estimate for projects.

It would help local governments and the industry to have the time to understand the impact of these cost pressures and more work is needed with regard to the costing analyses. It is stated in the draft *Metrics Report* that "*This document is meant to be an initial costing analysis …,*" and "*… a more detailed or specific analysis …,*" is needed. **We recommend that the Province lead this work as opposed to leaving it to industry and local governments who have less capacity to conduct this work and to ensure there is more consistency.**

However, UDI does not have a problem with the summer deadline or allowing local governments to start their consultation processes on the GHGIs then, but we recommend that no decisions be made by councils regarding the GHGIs until after:

- **A more thorough *Metrics Report* is completed by the Province with more consultation with municipalities and their building industries (see below);**
- **The new energy efficiency requirements in the *B.C. Building Code* (*BCBC*) are in place, which is supposed to occur in December.**
- **The B.C. Utilities Commission (BCUC) has made decisions regarding the BC Hydro Tier 2 Rates, and the Fortis Renewable Natural Gas (RNG) proposal;**
- **There has been substantial progress made on the electrical extension fees issue, which is described in the *Bulletin*;**
- **A more detailed *Best Practices Guide* is released (or the current *ESC* one is updated); and**
- **January 1, 2023.**

UDI is generally supportive of the *Roadmap* for Provincial requirements noted in the *Carbon Pollution Standards* PowerPoint presentation:

- Medium carbon (decarbonization of space or hot water heating) in 2024;
- Low-carbon (decarbonization of space and hot water heating) in 2027; and
- Zero-carbon ready (all systems use low-carbon fuels) in 2030.

However, there are still several issues that need to be resolved over the next few years before the provincial regulations come into effect.

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Part 3 Metrics Report

We want to thank the Ministry for adding the information in the *Part 3 Metrics Report* for Climate Zone 5. There are a substantial number of large buildings being constructed by our Okanagan Chapter, so it is important that this information be included in the *Metrics Report*. However, there are still several issues with the current *Metrics Reports* if it were to be used as the basis for municipal decisions on GHGI targets.

First, it only provides the costs of the measures needed to lower GHGs – not the costs of meeting the higher *ESC* steps with the GHG reduction measures – which builders and regulators need to understand. On pages 11, 19 and 25 there are tables with the energy efficiency measures needed to go above the Step 2 base case, which potentially could be used to estimate these costs.

Second, we also need more viable options for the industry to assess. For Low-Rise MURBs in the Okanagan, few options are shown that would be realistic as there are many with Initial Capital Costs (ICCs) that are $40 to $67 per square metre (with no annual energy cost savings).

There is also nothing modelled for the higher steps of the *ESC* for hotels and retail, and no modelling has been done for mixed-use buildings, which many of our members build.

On page 10, the average cost for the ten lowest ICC options are listed "… *for each archetype, Step and climate zone* …". However, they are not identified (could they be?), so it is difficult for builders to assess their viability. In the *Carbon Pollution Standards* PowerPoint presentation, the Ministry indicates that the GHG data tables will be released on the website for the public consultation. It is not clear how user friendly the GHG data tables will be and the timeframe for the consultation is only six weeks. Clear and viable options (with costs) to meet the GHGI targets will be needed by our members to assess what is being asked of them.

Third, it is critical to understand that the industry has not experienced the same costs as identified in the previous metrics reports on the *ESC*. They have generally been higher; in part, due to companies needing to learn new ways of building. For this reason, it is even more important to have a robust and detailed *Metrics Report* for GHGIs.

We need several realistic options that would be used by the industry and accepted by local governments. The GHG reduction options in the *Report* do not represent what the industry is building; what local governments would want; or what the Province is advocating through *CleanBC*. For example, Heat pumps were not modeled for hot water heating… *to reduce modelling runs*," even though "… *these are likely to be a common and viable decarbonization measure* …".

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For low-rise MURBs, the *Report* indicates one of the most cost effective way to achieve Zero-Carbon Ready is electric resistance for hot water heating and electric baseboards for space heating. Electric resistance for hot water is not used by many of our members because of high energy costs. Many projects in the Okanagan and other areas use heat pumps for space heating because they can be used as air conditioners during the hot summers. There is also an assumption that portable A/C units will be used which would occupy too much space in new units – where space is premium.

Heat pumps are also what local governments and BC Hydro have been pushing the industry to use. UDI has held seminars telling our members to start using heat pumps because we were told this is the future. Hundreds of thousands of heat pumps are supposed to be installed in the Province over the next decade according to the Government's own *CleanBC Roadmap*, but the *Metrics Report* undermines this and shows heat pumps lead to much higher initial capital costs and higher annual modelled utility costs.

Fourth, the following is stated in the draft *Report* – "*This document should not be considered an exhaustive costing study to meet the carbon pollution steps in your area. This analysis is not representative of all buildings in all situations. Local governments and the construction industry should conduct more detailed or specific costing analysis which builds on this initial analysis*."

We are concerned that there may be an expectation that in the six weeks of consultation, industry and local governments will download the GHG data tables and determine what is best for their areas. There is no way that industry associations and local governments are going to do this work – especially in a short time period. Municipalities will be relying on the *Provincial Metrics Report*. **This is why we recommend that the Province continue its work with the *Metrics Report* to make it more robust and detailed.** We note that the Ministry has to do this work anyway for its own GHGI requirements for the *BCBC* that may be starting this year (reporting GHGs) and in earnest by 2024.

Finally, due to the timing of the *Metrics Report*, it does not reflect the proposal that Fortis has put forward to the BCUC about RNG, and it will not reflect whatever decision the Commission makes with regard to RNG or pricing for it. **As a result, we recommend a more detailed *Metrics Report* be released to reflect the regulatory environment for RNG after the BCUC makes its decision.**

Our key recommendation is the Province take a larger role with a follow-up *Metrics Report*. We support the Province releasing the draft *Metrics Report* (and GHG data tables), but use it to have consultations with local governments and their industry associations to develop a more detailed *Metrics Report* with more viable options for each climate zone. This information can then be used to

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develop a more detailed *Best Practices Guide* (see below) and improve local government consultations with industry on GHGI targets.

Again, we do not have an issue with a Regulation coming out in the summer allowing local governments to proceed with their consultations. However, as noted above, decisions should be deferred until after a detailed *Metrics Report* and *Best Practices Guide* are released and other issues are resolved.

Provincial Policy Bulletin

The *Bulletin*, is called the *Provincial Policy Bulletin for Reducing Greenhouse Gasses from New Construction: A* ***Best Practices*** *Bulletin for Local Governments and Other Authorities Having Jurisdiction*. Is this *Bulletin* also the *Best Practices Guide*? If it is, more details will be needed (e.g. incentives, timing/geographic scope of the GHGI target steps, electric vehicle charging, urban design issues), as the original *BC Energy Step Code: A Best Practices Guide for Local Governments* was 48 pages. If it is isn't, using "*Best Practices*" in the title of the *Bulletin* will be confusing.

Under the *About the Greenhouse Gas Reduction Targets* section, you may also want to consider numbering the GHGI levels as is done with the *ESC*:

1. "*Measure-only (requires measurement of a building's emissions without reductions, and is intended to build knowledge and capacity);*
2. *Medium carbon (in most cases, will require decarbonization of either space heating or domestic hot water systems);*
3. *Low carbon (in most cases, will require decarbonization of both space heating and domestic hot water systems); and*
4. *Zero-carbon*."

With regard to the final step, we are still not sure it is necessary. It is doubtful that Fortis would hook up natural gas to a building for gas cook tops. Also, is it "*Zero-carbon*", or "*Zero-carbon ready*" (as noted in the slide deck)?

We agree with CHBA BC that the proposed *GHGI Roadmap* for Provincial requirements (noted above) be included in the *Best Practices Guide* to provide more context for local governments.

On page 3, it is stated that "*Local governments may apply different tiers of GHG reduction, which establishes maximum modeled emissions levels for new construction for different building types*." Are we assuming they can go to Zero Carbon immediately? Can we say, they "… *will be able to eventually apply* …"? **If this is the *Best Practices Guide*, much more advice is needed regarding when and how far local governments should proceed with regard to mandating the different steps of the**

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GHGI reductions in new construction, and how this relates to their implementation of the higher steps of the *ESC*. This needs to include the timing of the changes, whether they are community-wide and the types of incentives that should be offered as well as potential changes to design guidelines.

UDI supports the general approach proposed for Part 3 under the section, *How It Works: Part 3 Buildings*. However, the GHGI targets for MURBs have been reduced. UDI has not signed off on this, but we are willing to discuss it further. We note that for Office, the metrics were reduced and the initial capital costs are high.

UDI, would accept the proposed Peer Network changes to the GHGIs being put in the Regulation this summer with a key caveat. If it is found through the more detailed *Metrics Report* work that the new targets will be difficult or costly to achieve in some climate zones, then there may have to be additional time limits on when the Low and Zero Carbon targets should be utilized by local governments through the *Best Practices Guide*; or the targets themselves may have to be adjusted – as was done several times with the *ESC*.

UDI supports the proposed approach under *How It Works: Part 9 Buildings*. We agree with the plan to offer a prescriptive approach for Part 9 buildings (as long as it remains an option for builders) to manage issues such as the Fort Nelson high carbon emitting power grid. However, will you be specifying how builders can "*Decarbonize both heat and hot water*"? It would not help to fully electrify their buildings and we are unclear if they can access RNG.

On page 6, under *Monitoring*, it is stated that "*The Local Government Peer Network will monitor uptake of the GHG reduction targets, and provide regular updates to the Province and the Energy Step Code Council*." This is an appropriate and balanced approach. However, what if a municipality does not follow Provincial, Local Government Peer Network and ESCC advice or the guidance in the *Bulletin* or *Best Practices Guide*?

We would also ask that the Peer Network create a webpage (maybe on energystepcode.ca) that includes the updates on municipal actions regarding GHGI adoption as well as the *ESC*. This would make it easier for industry associations to notify their members of municipalities starting the process to adopt GHGI targets as well as update them as local governments move forward with adoption. Ideally, this information would include potential adoption dates.

Under the first bullet point on page 6, in the *How to Implement* section, we would consider specifically noting the upcoming *Best Practices Guide* if it is coming.

With regard to the thermal conditioning permitting, it is very important that this not lead to longer processing times. Also, are municipalities allowed to use these permits now? We

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are asking because if this is a new power, it could applied to existing buildings. If this is the case, we need to include owners of existing buildings in the discussion.

It is not clear why the language for the sub-bullet point, "*Local governments **may wish** to use common forms across jurisdictions to improve consistency for industry*," is weaker than the main bullet – "*These permitting processes **should** be coordinated with other local governments and simple to follow and administer*."

On page 7, in the *Relationship to the BC Energy Step Code* section, it is noted that the Province will be increasing energy efficiency requirements in the *BCBC* this year. Can we put in the actual date, as the December date is noted in the Bulletin already?

We are hoping the third paragraph on the page will not be necessary, as Step 3 for Part 9 and Step 2 for Part 3 will already be in place (see recommendation above) when the Provincial energy efficiency requirements are in the *BCBC*. For the same reason, we are concerned about municipalities introducing requirements "… ***on** or after December 2022* …". As noted above, we do not believe decisions should be made until after December 2022.

UDI is very pleased that the Province is recommending the current approach of relaxing the *ESC* step for lower carbon outcomes under the *Recommended Approaches for Step Code Communities* section, but there is no advice limiting what GHGI level municipalities can mandate in the initial stages – as was done with the *ESC Best Practices Guide*.

We do not understand the need for the *Recommended Approaches for Non-Step Code communities* section. This sounds like we are unnecessarily rushing forward to the point where you are going to confuse the industry with changing requirements – potentially three changes in a short period of time.

It is not clear under the *Minimum timelines* section on page 8, what is meant by "*When local governments introduce new GHG targets for buildings, local governments are advised to notify industry that they will be enforcing them at least 6 months prior to requirements coming into effect.*" Does the six-month period begin after councils adopt the GHGIs in by-laws? We ask that it does.

There is also no information provided on how long the consultation period should be with industry before councils adopt the GHGI bylaws. This is important, especially if you are asking municipalities to "*Take a regional approach and coordinate*?" In addition, under the *In-stream Requirements* section, "… *a lengthy consultation process prior to the adoption of a bylaw referencing the GHG targets*," is referenced as a reason to reduce the in-stream protection timeframe. However, it is not clear by how much or what a "*lengthy process*" would be. It is also not clear why the 12 month period would be

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reduced if you met the first test of having a permit application into the municipality within the initial six-month period after adoption.

With regard to the regional approach, there needs to be some discussion regarding how this would work with consultations with local industry associations. For example, it is not clear whether the consultations would be done at a regional level – or by municipalities individually?

In terms of the *In-stream Requirements*, more clarity is needed regarding how they would be applied. A diagram would likely help. In fact, we should consider a diagram for the entire process – consultation to Council decision through to instream protection.

We are pleased that there is a discussion on *Electrical Extension Fees*. However, the three solutions offered are not feasible – including allowing for the use RNG because, as noted in the *Metrics Report*, "*… there is no mechanism available … to ensure low-carbon fuels will be used for the life of the building …," so it "… is not a compliance path at this time*;" hence our recommendation to delay any council decisions regarding the GHGI targets until these issues are resolved.

Again, we are pleased that the *Bulletin* addresses *District Energy Systems* (DESs), and we support the option of allowing the municipalities and utilities to provide the emissions factors for the modelling of GHGIs as well as the recommendation for local governments to "*Not establish GHG targets for buildings that cannot reasonably be achieved by buildings compelled to connect to district energy systems*." This should resolve any potential issues when local governments mandate DES connections. However, the overall issues still needs to be addressed when the Province institutes its own GHGI regulations later this decade.

Part 9 Buildings

With regard to Part 9 buildings, we defer to CHBA BC, which has had a technical committee review the documents. We support their recommendations regarding:

- Supplemental heat;
- The need to "*Clarify that all Part 9 compliance paths are acceptable*"; and
- Revising the "… *Part 9 GHG Base Allowance*."

In conclusion, UDI does not have any issue with local governments proceeding with consultations this summer regarding the GHGI targets, but we have concerns about decisions being made about them in a short timeframe when the information is

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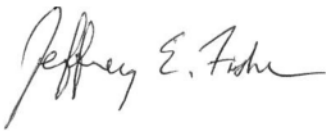
incomplete. We also recommend that the Province remain in a leadership role with regard to the ongoing work with the *Metrics Report* and *Best Practices Guide*. If you have any questions regarding our comments, please do not hesitate to contact me.

Yours sincerely,



Jeff Fisher
Vice President & Senior Policy Advisor

FW: Ministers' meeting

From: Corpe, Cimarron OHCS:EX
To: Susan Low (Susan.Low@gov.bc.ca) <Susan.Low@gov.bc.ca>
Sent: March 14, 2022 3:15:16 PM PDT
Attachments: image001.png, image003.png

Hi Susan,

I spoke with Doug about what Teri is looking for and will schedule a call to discuss.

Essentially, we need to prepare two things: 1) a template tracker for EDs to complete with info for their in-year items and 2) a corresponding summary document Teri can take to the minister meeting in a couple of weeks (possibly sooner). We don't need to prepare anything for tomorrow.

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Director, Housing Secretariat

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Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: Monday, March 14, 2022 2:26 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: FW: Ministers' meeting
Importance: High

Cimarron, I'll call you about this—hoping you can coordinate. It's starting to feel like the Secretariat again, I bet!

Doug

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: Monday, March 14, 2022 1:57 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: Ministers' meeting
Importance: High

Sorry for not being clear. No documents needed for me today.

Yes, one document to report back to the Minister's table.

The only thing I need today is you to reach out to the other EDs to advise we are working up a template and will have to

them asap (or even better, if we sent the template today).

I will cover verbal update tomorrow and we can connect on timelines after that.

From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: Monday, March 14, 2022 1:55 PM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: Ministers' meeting

Hi Teri,
Just so I'm clear, do we need
1) a revised placemat and narrative document today for the 8am DMs' meeting tomorrow, and
2) the status update/scoping document for all the in year deliverables for the next Ministers' meeting?

And are the other ministries to report back through us, i.e., in one master document?

Doug

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: Monday, March 14, 2022 1:19 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: Ministers' meeting
Importance: High

Hi Doug,
Thanks again to you and the team for the work to prep for Ministers' meeting. It was a great discussion, with more meetings to come over the next two to three weeks.

A couple of immediate points of feedback/edits to our material, and after the upcoming DMs discussion there will be more.

s.13

STATUS UPDATE: this is the key deliverable back to the next Minister meeting (2 weeks) and the DMs are meeting tomorrow morning so I will give this update and advise of anything else that comes out of it.

- **For all the in year deliverables**, we need to put together a scoping document that outlines the status of policy work to date (would suggest both context and % complete); remaining policy work to be done (and suggested timeline); and any impacts to other work (ie, deferred work) that would happen if this work were prioritized.
    - Could you perhaps put together a template and begin discussions asap with FIN/MUNI/TRAN etc.

Thanks Doug, T
Teri Collins, MA
Assistant Deputy Minister
Housing and Construction Standards
Ministry of Attorney General and Ministry Responsible for Housing
Ph: 250-952-2569/Mobile: 250-216-2218

FW: For action: updates to Placemat and Descriptions

From: Corpe, Cimarron OHCS:EX
To: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: March 17, 2022 4:13:04 PM PDT
Attachments: image005.wmz, image004.png, image003.png, image006.png

Looks like it is just the placemat.

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From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: Wednesday, March 16, 2022 1:50 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>; Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Subject: For action: updates to Placemat and Descriptions

Teri would like updated versions for Monday as well. Changes I remember:

s.13

Let me know if you remember any others.

Doug Page, (RI)
A/Executive Director

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
PO Box 9844, Stn Prov Govt, Victoria BC V8W 1C8
Traditional territories of the Lekwungen speaking people
Cell: 250 380-8696
Email: doug.page@gov.bc.ca
Pronoun: he/him

FOR ACTION: DBN Options

From: Corpe, Cimarron OHCS:EX
To: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: March 23, 2022 12:09:16 PM PDT
Attachments: image001.png, image002.png

HI Susan,

Per my IM, DBN options in this order w/pros and cons. Recommended Option is #2. Preceding Options, note that the Options came out of the DM meeting March 23

s.13

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Director, Housing Secretariat

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RE: s.13

From:	Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>
To:	Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Cc:	Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>
Sent:	April 6, 2022 5:15:18 PM PDT
Attachments:	image001.png, image003.png

Hi,

Yes, will do! The UDI analysis is still in approvals – hoping I'll be able to send some time tomorrow.

Cheers,

Lesley

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: April 6, 2022 5:03 PM
To: Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>; Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Cc: Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>
Subject: RE: s.13

HI Lesley,

Thanks so much for sharing! This is really helpful.

Per our workshop discussion, Jessica mentioned the UDI analysis and Gentle Density paper are with OYM. Please share when you are able. Thanks!

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Director, Housing Secretariat

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Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

From: Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>
Sent: Wednesday, April 6, 2022 1:48 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>; Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Cc: Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>
Subject: RE: s.13

Hi Cimarron,

Please find attached the DAPR conceptual model that may be helpful to provide context s.13
s.13 It provides an overview on DAPR work, items being explored, and a preliminary conceptual model about how the various planning tools would hang/work together. This is very preliminary, so subject to change based on further detailed policy work. s.13
s.13

Providing this in the meantime – will get comments to you as soon as we can.

Cheers,

Lesley

Lesley Scowcroft, MA, MPA
Director, Planning and Land Use Policy | Planning and Land Use Management Branch
Ministry of Municipal Affairs
(778) 698-3469

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: April 5, 2022 5:16 PM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Cc: Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>; Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>
Subject: s.13

Hi Jessica,

Further to our IM, Doug was able to locate the attached draft s.13 document. Steve H. recalled that Doug Foster was one of the key people involved in the work, which makes sense as it looks like it was led by then MCSCD's Infrastructure and Finance Branch.

I haven't had a deep dive, but let's plan to discuss the feasibility of making this an option in the Cab Sub once you folks have had a look.

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Director, Housing Secretariat

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Email: Cimarron.Corpe@gov.bc.ca

RE: Housing Targets Cab Sub Outline 2022 04 04

From: Corpe, Cimarron OHCS:EX
To: Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>
Cc: Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>, Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>, Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>, Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: April 7, 2022 9:27:14 AM PDT
Attachments: image001.png, image003.png

Hi Lesley,

Thank you and Eric for the input! We greatly appreciate the thoughtful analysis and factors to take into consideration as we explore options.

I'll be looking to schedule weekly touch base meetings to discuss this item specifically and the strategy pieces collectively with the four partner ministries (being mindful of schedules/time commitments, of course).

Regarding the cab sub, things are constantly evolving s.13 s.13 . We will keep you informed as we gain clarity on the plan and process.

Doug and Sue, I've filed the MUNI comments version including Lesley's bullets below on the HPB LAN.

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From: Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>
Sent: Wednesday, April 6, 2022 5:33 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Cc: Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>; Brooks, Jessica MUNI:EX

<Jessica.Brooks@gov.bc.ca>
Subject: RE: Housing Targets Cab Sub Outline 2022 04 04

Hi Cimarron,

Thanks so much for sharing the Cab sub outline and for the opportunity to comment. Please find our comments attached.

s.13

We hope these are helpful, and are happy to discuss, so please let us know if a conversation would be helpful.

Can you please also remind us of your timelines for the Cab Sub/drafts?

Many thanks again,

Lesley

Lesley Scowcroft, MA, MPA
Director, Planning and Land Use Policy | Planning and Land Use Management Branch
Ministry of Municipal Affairs
(778) 698-3469

From: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Sent: April 5, 2022 4:04 PM
To: Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>; Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>
Cc: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: Housing Targets Cab Sub Outline 2022 04 04

Hi Eric and Lesley, Cimarron has put together a draft annotated outline – can you review and provide comments back to him as soon as possible? Wondering if we want to save the draft in a common spot and use a single version so we're not sending back three different versions?

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Agenda – April 13, 2022

1. Hon. David Eby, Attorney General, Minister Responsible for Housing

1.1. Provincial Changes to the *Transportation Act – Bill 16*

1.2. UBCM Position Paper

- UDI Memo

1.3. CMHC Rental Market Report 2021

- UDI Memo

1.4. Broadway Plan

- UDI Letter to the City of Vancouver

1.5. Other Barriers to Rental

- *RTA* Income-testing requirements

1.6. Next Steps

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To: **The Hon. David Eby, Q.C., Attorney General and Minister of Housing**
From: **Anne McMullin, President & CEO, Urban Development Institute (UDI)**
Date: **April 13, 2022**
Re: **UDI Commentary on the UBCM Building BC: Housing Completions & Population Growth 2016-2021 Paper**

Purpose

On March 23, 2022, the Union of British Columbia Municipalities (UBCM) released a *Discussion Paper* entitled *Building BC: Housing Completions & Population Growth 2016-2021*, in which they argue that municipalities have stepped up to the plate with regard to providing housing supply. Instead of just focusing on supply, they recommend that the Province and others focus on further demand management measures and delivering the "right supply" of housing. While there are a few points that UDI would agree with in the *Paper*, we have concerns with many of their arguments, analysis and recommendations, which do not reflect the experiences of residents of builders.

Background/Discussion

Housing Supply and Population

One of the key contentions of UBCM is that municipalities are already approving adequate supply. The main argument is that population growth is matching the growth units being completed. Many observers have noted the problems with linking these two statistics to ascertain if we have enough supply. However, even using this comparison, **we would still have a scarcity of housing because of household formation and the need to ensure there is much more supply than demand.**

Household Formation

In their Report, UBCM notes that "… *household size in B.C. will not be available until later this year* …," but this is critical information. The size of households has been declining for decades, so the number of households (and therefore needed homes) is increasing faster than population growth. The key segments of our population driving the formation of new households are growing. As Andrew Ramlo, Vice President, Advisory of Rennie and former President of the Planning Institute of British Columbia, points out **between 2016 and 2021, the number of people between 25 and 34 grew by 10% and those between 35 and 39 grew 20%, while the total population growth was 7.6%.**

This household formation is driving our growing need for new homes, and it is why for decades the number of units we build has increased far faster than population growth. As Andrew Ramlo adds, "*From 1971 to 1976, the provinces' occupied housing stock grew by 24% while its total population grew by almost half that rate (13%). Similarly, between 1976 and 1981, housing expanded by 20% in the face of a population that grew by only 11%*."

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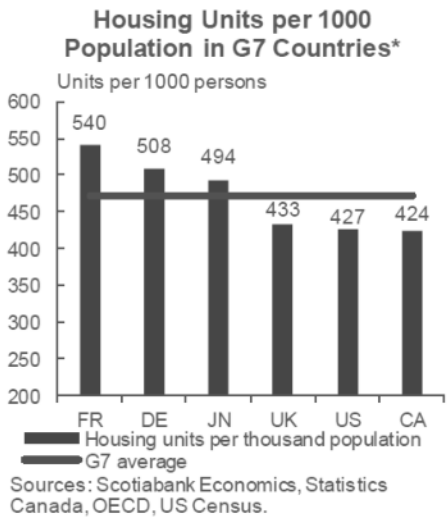
There is also the potential that the lack of supply that is leading to higher housing prices and rents is itself dampening household formation, **as younger generations are staying home longer with their parents, or sharing homes instead of renting/purchasing units.**

Chronic Under-Supply of Homes

We also need to build more housing than the demand due to undersupply of units in previous years. UBCM argues, "*More housing has been built in British Columbia over the past three years than in any three years in the past 20.*" **This does not mean we have enough housing now unless there is an assumption that we built enough housing the past.** For example, between 2010 and 2015, the Province was building far less than 30,000 units per year.

UBCM also states that between 2016 and 2021, British Columbia had the second highest increase in the percentage growth of total private dwellings in Canada. However, British Columbia also had the third highest percentage population growth rate in the country – after the Yukon and Prince Edward Island. British Columbia is also not doing as well as it has in the past. As Andrew Ramlo states, "*… the 1970s decade saw roughly 318,000 housing units completed in B.C., levels of housing development that have not been seen in the province since.* ***Even with the growing levels of housing starts over the past decade (and a much larger population), the most recent decade (2012-2021 at 310,000 completions) still falls short of what was added during the 1970s.***"

This chronic under supply of housing to the market has left British Columbia with a structural deficit, which Ramlo estimates at approximately 75,000 homes. If we continue to under-build for the growing demand in many markets, that deficit will grow.



In addition, even if British Columbia is fairing better than the rest of Canada, that is not saying much because Canada is not doing well in delivering housing relative to other G7 countries. According to Scotiabank, "*Canada has the lowest number of housing units per 1,000 residents of any G7 country.*" To catch up to the G7 average, "*… it would take an additional 1.8 million homes in Canada to achieve this level of supply of housing relative to population*," and "*To put these gaps in perspective, we have averaged 188,000 home completions in the last 10 years.*"

Immigration and Interprovincial Migration

British Columbia also has to accommodate future demand. Domestic purchasers primarily drove the high-growth in pre-sales in 2021 because the COVID-19 pandemic severely restricted immigration. With the pandemic waning, immigration is rapidly increasing and the newcomers need housing. The Federal government is targeting an average of 435,000 immigrants per year

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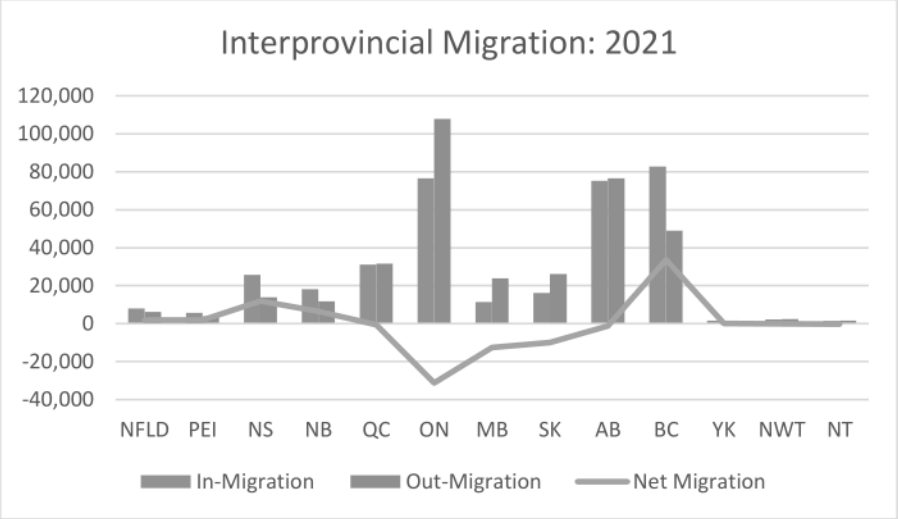
between 2021 and 2024. This is substantially more than the 341,000 immigrants that came to the country in 2019 and the 321,000 that came in 2018, and these were record years. The only other time Canada brought in more than 300,000 immigrants per year was between 1911 and 1913. With 15% of the immigrants coming to B.C., this equates to over 65,000 people arriving per year. This could be even higher because in 2021, 17% of immigrants came to British Columbia.

These estimates do not account for interprovincial migration. According to Statscan, **B.C. added an additional 33,656 net new residents from other parts of Canada in 2021, nearly three times more than any other province gained.**



Source: Statistics Canada. Table 17-10-0020-01 Estimates of the components of interprovincial migration, quarterly

Allowing Mobility within the Market

As Jens von Bergman and Nathan Lauster, highlight there also "… *needs to be some extra fluff in the housing market for people to move. (And the more differentiated the housing market is, the more vacant units are needed).*" **If there is not enough fluff and supply is just equating with demand growth, prices will rise and/or people will live in homes that do not meet their needs.** This is why local government staff have constantly raised concerns when rental vacancy rates are below 3% to 5%; there are too few units available for tenants, so rents increase and housing supply is not meeting demand of households. If the vacancy rate were 0%, no tenants could move. The more supply versus demand, the more competition, which drives down prices and rents for new and existing homes. This why high growth areas such as Houston, Atlanta, Dallas and Phoenix have relatively low prices.

Despite the substantial population growth experiences by many communities in British Columbia, some municipalities were constrained by their notable lack of housing availability. Between 2016 and 2021, Port Moody, which was connected to the Millennium Line via the $1.4 billion Evergreen Extension, lost 16 people.

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The "Singular Focus" on Supply Side Measures

UBCM is concerned that there is "*A narrow focus on local government development approval processes or a poorly defined notion of the supply that is needed, without addressing other elements and participants in the housing system ...*" It is not fair to say that housing supply has been the only focus of the housing debate or the only approach taken by the current Provincial Government, the previous one, and the Federal Government. There have been numerous demand side and "*right-supply*" measures applied to the housing sector by senior governments, including federal restrictions on mortgage lending, provincial and municipal tax measures, and assignment and transparency registries (full list included in Appendix 1).

UBCM also acknowledges that many of the proposals in their 2018 *A Home for Everyone: A Housing Strategy for British Columbians* "*... were reflected in the B.C. Government's housing plan ...*" These proposals included demand and "*right supply*" measures, so it is not fair to say that there has been an exclusive focus on simple supply side measures by senior governments.

Targeting Real Estate Investment Trusts (REITs) and Housing Investors

UBCM identified market activity by REITs and investors as a key source of concern, the basis for which remains unclear. Many REITs include pension funds serving employees – including public sector employees. They also have well maintained buildings compared to other landlords and face fewer barriers to reinvest in their buildings because they are well capitalized. **The Province has already introduced measures that would restrict actions from REITs and other landlords through regulatory measures to restrict rent increases and renovictions.** This is in addition to the corporate accountability inherent to being a public traded company.

REITs are also not as significant a player in British Columbia where the PBR buildings are usually owned by smaller investors. For example, in the first half of 2020, on 7% of sales were to REITs. That figure has fluctuated slightly since then but overall, REITs do not represent a significant portion of the rental market in British Columbia.

UBCM also raises concerns "*… that just over 20% of new home purchases across Canada are made by investors*." With the *EHT* and the *SVT* noted above, these units will be rented out in urban centres; **the *2021 CMHC Rental Market Report*, shows that nearly 30% of new condominium units were rented out in Vancouver CMA.** Without these rentals being available, vacancy rates would drop and rents would likely increase. UBCM raises the concern that the secondary rental market is, *"more precarious than purpose-built rental housing."* PBR buildings are a critical element in our housing system, but the secondary rental market plays an important role as well. Many municipalities are encouraging or requiring the construction of secondary suites in detached or semidetached homes, or laneway housing, these would all form a component of the secondary rental market.
There is also a concern raised about an increasing number of assignment sales with dramatic increases cited in Langley and Chilliwack between 2019 and 2021. Notably, because of the changing market, sales were very slow in 2019 and fully rebounded in 2021. For example, new condominium pre-sales in Cloverdale/Langley increased from 497 units in 2019 to 2,353 units in

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2021. In addition, assignment changes include circumstances when there are no sales (e.g. a spouse or family member being added to the pre-sale contract).

Supply Chain Constraints and Labour Shortages

UBCM states "*The development sector currently faces significant trades shortages and supply chain issues and all signs point towards a system at capacity*," and they quote two building industry leaders regarding these concerns. **We agree that we are currently facing dramatic supply chain and labour issues.** The industry is facing a hot market due to pent-up demand from the COVID-19 pandemic. The pandemic also caused supply chain issues. While the industry is currently at capacity, this is not always the case, so improvements to municipal approval times will address supply constraints – especially during a normalized market.

In addition, during the initial stages of the pandemic, the market was slow, but several projects were held up in Burnaby and Vancouver due to protracted Community Amenity Contribution and Density Bonusing negotiations as well as other processing delays. There was an opportunity for the efficient delivery of housing that was lost, and now the market is has rebounded and we have capacity issues. We also need to take advantage of when there is overcapacity in the construction industry.

UDI continues to recommend that senior government fund more training programs to address the labour shortage, and allow more people to immigrate to the country to work in our construction industry. We are concerned, for example, that some trades programs have restricted capacities because of funding shortfalls - even though there are waiting lists.

Rural, Remote and Northern Regions

We agree with UBCM that there are real capacity constraints in rural, remote and northern regions in British Columbia for industry and local governments. Investing in building capacity in these regions needs to be a focus of Provincial policies.

Provincial Processes

UDI agrees, "*The Province could also take action to streamline and improve their own approvals as detailed in their Development Approvals Process Review Report.*" We have been advocating for improvements in processes at the ministries of Environment & Climate Change Strategy, Land, Water & Resource Stewardship, and Transportation & Infrastructure. **If the Province were to take actions like establishing housing targets for local governments, it will be critical that the timeframes for approvals for these ministries also improve.**

The alignment of local government and provincial requirements and processes is an ongoing problem. UDI members have had ongoing issues with Surrey and the Ministry of Land, Water & Resource Stewardship with regard to *Water Sustainability Act* Permits and riparian areas. One approach that the Province may want to consider is standardizing municipal processes like Ontario, so it is easier for ministries to incorporate their processes into municipal ones.

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Environmental Regulations

UDI is mystified by UBCM's concerns about Environmental regulations and the need to respond *"… to Federal and Provincial legislation*," as well as their concerns with the implementation of the *Energy Step Code* (*ESC*). It has been our experience that the municipal sector is often lobbying for additional environmental regulations. **Local governments and UBCM were partners in the development of the *ESC*, and they have been assisting in its implementation through the Energy Step Code Council. This includes incorporating Greenhouse Gas Intensity (GHGI) targets in the *ESC* as early as this year.** UDI has been advocating slowing this process down until there is more information regarding costs, how it would be implemented by local governments, and how the GHGI targets would work with the energy ones. **If UBCM is concerned about the *ESC*, UDI would support slowing down its adoption to ensure capacity is available to deliver these objectives.**

Recommendations/Conclusion

There are several challenges with the UBCM's *Position Paper*, most concerning is the lack of understanding that B.C. is still lagging significantly behind in the delivery of new housing. The chronic undersupply of housing in many markets has had significant impacts on affordability and even household formation because there are simply no options available. This will only become further strained with the historic levels of in-migration that B.C. is experiencing.

While there is no silver bullet that will solve this province's housing crisis, municipalities play a critical role in the delivery of housing, as they decide if and when new projects are approved. Beyond the use of housing targets, there are opportunities to create better alignment across all levels of government in collaboration with the building industry. Addressing supply chain and labour shortages, the development of a *National Housing Strategy* accounting for immigration targets, streamlining provincial permits and ensuring that environmental regulations remain in-step with industry capacity are all potential areas of improvement.

Arguing that there is adequate supply in the market does not reflect the reality that many British Columbians face when searching for a home to buy or rent. Builders also face challenges in delivering housing including lengthy approval processes. Some municipalities are leaders in the delivery of housing, while others lag behind, but partnerships across all levels of government with builders is necessary to affect change. We encourage governments to collaborate with and support the delivery of more new housing across B.C.

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Appendix 1

Demand management and "right supply" measures employed in B.C.

- Ongoing Federal restrictions on mortgage lending in 2008, 2010, 2011, 2012, 2016, and the "*Stress Test*" Regulation in 2018;
- The City of Vancouver's Empty Homes Tax (EHT), a 3% Luxury Property Transfer Tax (PTT), and 15% Foreign Buyers' Tax imposed by the previous B.C. Liberal Government;
- The *2018 B.C. Budget* Tax increases:
    - Increasing the Luxury PTT to 5%;
    - Increasing the Foreign Buyers' Tax to 20% and expanding the area it applies to;
    - The annual Additional School Tax for luxury homes; and
    - The Speculation & Vacancy Tax (SVT);
- Investing in Housing and Rental Supports in the *2018 B.C. Budget*, such as:
    - Rental Assistance Program (RAP) increase by $800 year;
    - Shelter-Aid for Elderly Renters (SAFER) increase $930 year;
    - $445 million over three years dedicated to the development of mixed-income social housing developments to address a broad spectrum of housing needs as well as to increase the rental affordability of existing housing projects currently planned;
    - $20 million over three years to expand the role of BC Housing through the creation of a new partnerships office, HousingHub;
    - Mirroring municipal property tax rebates for the Provincial portion of property taxes for new purpose built rental (PBR) projects.
- Reducing the annual increases in rent under the *Residential Tenancy Act* by 2%;
- Provincial regulations restricting renovictions;
- Allowing local governments to zone areas and units to residential rental tenure;
- The *Condo and Strata Assignment Integrity* (Pre-sale) *Register*;
- The Provincial *Land Owner Transparency Registry*;
- Upcoming Provincial legislation that will require "… *cooling off periods for resale properties and newly built homes*," and potentially other measures.
- A 1% annual tax on the value of non-resident, non-Canadian owned residential real estate that is considered to be vacant or unused, effective January 1, 2022;
- The recently released *Delivering for Canadians Now, A Supply and Confidence Agreement* between the Liberal Government and the NDP, which includes:
    - "*Extending the Rapid Housing Initiative for an additional year;*
    - *Re-focusing the Rental Construction Financing Initiative on affordable units (under 80% AMR) and use 80% AMR or below as definition of affordable housing;*
    - *Moving forward on launching a Housing Accelerator Fund;*
    - *Implementing a Homebuyer's Bill of Rights and tackling the financialization of the housing market by the end of 2023; and*
    - *Including a $500 one-time top-up to Canada Housing Benefit in 2022 which would be renewed in coming years if cost of living challenges remain.*"

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- Federal Budget 2022 introduced new measures including:
  - Applying the GST to all assignment sales;
  - A federal review of "*… large corporate players in the market and the impact on Canadian renters and homeowners,"* which may include potential changes to tax policy;
  - A prohibition on *"… foreign commercial enterprises and people who are not Canadian citizens or permanent residents from acquiring non-recreational, residential property in Canada for a period of two years;"* and
  - An anti-flipping tax that fully taxes the profits as business income for anyone (with some exemptions) who sells a property that they have held for less than 12 months.

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To: **The Hon. David Eby, Q.C., Attorney General and Minister of Housing**
From: **Anne McMullin, President & CEO, Urban Development Institute (UDI)**
Date: **April 13, 2022**
Re: **CMHC *Rental Market Report 2021* – Vancouver CMA: Data Gaps and Context**

Purpose

Earlier this year, The Canadian Mortgage and Housing Corporation (CMHC) released its *2021 Rental Market Report* and Data Tables, based on the CMHC's annual survey. The *Report* is viewed as a leading indicator on the health of the rental housing market and is often referenced by the building industry, various levels of governments and stakeholders. The data provided by these reports is important to inform municipal processes and recognize housing needs across communities.

The *2021 Report* provides some interesting findings regarding the changes to the rental universe in the Vancouver Census Metropolitan Area. This memo highlights key data points and identifies gaps related to rental growth in municipalities across the region.

Background/Discussion

The CMHC Rental Market Report provides valuable insights into the rental market across Canada. This includes reports on vacancy rates, rent levels, secondary rental usage and the size of the rental universe. The survey uses responses from landlords collected in October of the previous year to provide a snapshot of the market at that time and show year-over-year changes. The data is often referenced by governments and used to assess projects and make public policy decisions.

The *2021 Report* highlights several changes that have occurred in Vancouver, including the return to unhealthy, low vacancy rates as students and temporary residents return to the region. The *Report* also noted that the supply of purpose-built rental (PBR) apartments increased by 1,602 units (+1.4%). This reflects the rental housing starts from the past few years now reaching the market.[1]

Changes in the Rental Universe

To determine how much additional rental housing is being built, we typically review the data on changes to the rental universe (Data Tables 1.1.3 and 3.1.3). Both tables reflect the change in built rental stock across various submarkets. This is the gross number of units added, net of demolitions. For the purpose of this analysis, we will focus on Table 1.1.3 *Number of Private Apartment Units in the Universe, by Zone and Bedroom Type - Vancouver CMA.*

[1] https://assets.cmhc-schl.gc.ca/sites/cmhc/professional/housing-markets-data-and-research/market-reports/rental-market-report/rental-market-report-2021-en.pdf?rev=a5a0eaac-6f70-4058-8aa3-e6d307685910#page=14

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The 2021 data indicates that there is a substantial difference in the amount of rental housing being provided by various municipalities in Metro Vancouver:

Zone	Oct-20	Oct-21	Total Change: 2020-2021	Total Change: 2018-2021
City of Vancouver (Zones 1-10)	**59,453**	**60,333**	**880**	**2,519**
Zone 11 - University Endowment Lands	1,077	1,381	304	-197
Burnaby (Zones 12-14)	**11,879**	**11,277**	**-602**	**-588**
Zone 15 - New Westminster	9,549	9,678	129	975
Zone 16 - North Vancouver CY	6,320	6,192	-128	126
Zone 17 - North Vancouver DM	1,326	1,700	374	653
Zone 18 - West Vancouver	2,327	2,326	-1	0
Zone 19 - Richmond	3,033	2,992	-41	-105
Zone 20 - Delta	1,699	1,690	-9	-37
Zone 21 - Surrey	5,922	5,947	25	344
Zone 22 - White Rock	1,394	1,427	33	34
Zone 23 - Langley City and Langley DM	2,990	3,286	296	791
Zone 24 - Tri-Cities	4,429	4,718	289	711
Zone 25 - Maple Ridge/Pitt Meadows	1,743	1,796	53	228
Vancouver CMA	**113,141**	**114,743**	**1,602**	**5,454**

The City of Vancouver contributed over 50% of the total additions to the rental universe from 2020-2021, while several municipalities, including the City of Burnaby, City of North Vancouver (CNV), and the City of Richmond show a loss in rental housing. The data shows a similar trajectory when averaged over the past three years (with the exception of additions in the CNV).

This data does not seem to reflect the policy context or experiences of purpose-built projects in many municipalities. The incongruence can be explained through three gaps in the data.

Contextualizing the Data

There are three key gaps or areas in the CMHC *Rental Market Report* that require additional context.

Absence of Below Market Rental Data
The CMHC Rental Market Report only considers the rental universe to include privately initiated, purpose-built rental – or market rental. This would not include inclusionary rental units, provided at below-market rents as part of a larger strata condo or rental project. For example, the City of Richmond's *Low-End of Market Rental (LEMR) Policy*, requires that new residential projects provide up to 15% of the floor area at specified *LEMR* rates. The City of North Vancouver requires that projects seeking a density bonus provide units through their *Mid-Market Rental (MMR) Program*, and a similar measure is strongly encouraged under Coquitlam's *Housing*

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Affordability Strategy (HAS). All of these units would be provided at rents less than current market rates, and as such, would not be captured by the CMHC survey.

The same gap also applies to rental replacement units that are offered to returning tenants at below-market rents as part of the redevelopment of an older existing rental building. Many municipalities have a rental replacement policy in place, including Burnaby, which allows tenants to return at their previous rents. As discussed previously, Burnaby does not have a strong framework for the delivery of market rental housing, and housing is primarily delivered in the form of below-market rental and strata condominiums. In fact, they have an inclusionary zoning policy that 20% of units be below-market rental.

The gap shown in the data is further widened because many redevelopment projects require the demolition of an existing rental building, in order to construct denser housing. These existing rental units would have been considered part of the rental universe, because at the time they were built, they were market rental. When an existing rental building is redeveloped and units are replaced with below market rental, it will only be reflected as a loss in the rental universe, with no corresponding gain in the *CMHC Report*.

Units Under Construction
When a proponent is redeveloping an existing rental site, the initial phase of construction requires the building to be vacated and demolished – these units would be removed from the rental universe, often permanently as discussed above. However, even if the units are replaced with market PBR, there will still be a gap before this is reflected in the survey results.

Often projects take multiple years from the time units are vacated until new units can be occupied, this extends beyond the time horizon of the survey, and only the loss will be shown.

This reflects the situation in Burnaby, where after a moratorium on new development to put the city's new *Rental Use Zoning Policy (RUZP)* in place, projects only began to advance again in 2020-2021, and several have now reached the construction stage, but none have completed yet.

Project Timelines and Shifting Policy Context
Projects can take up to seven years from application intake to completion. This spans multiple rental market survey periods, and even in some cases Council terms. The policy context when a project was reviewed and approved may differ significantly from the context in which it is eventually occupied.

Several municipalities in Metro Vancouver have experienced major policy changes related to rental in the last three years. For example, the City of Vancouver previously provided incentives for market rental housing development through the *Rental 100 Program* (2012-2019) and prior to that the *Short-Term Incentives for Rental Housing (STIR)*. Both programs targeted market rental housing, and facilitated the approval of hundreds of units. Those programs no longer exist and were not replaced with equivalent incentives. Due to the time it takes to complete a project, units being occupied over the last three years would likely be the result of these programs.

The Cities of North Vancouver and Coquitlam also adopted rental housing incentives tied to density bonuses in 2018-2019, and we're only starting to see the results of those programs at scale today.

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Additional considerations

The City of Vancouver also has a unique position in the provision of rental housing across the region. Vancouver has a much larger rental universe; there are more rental units currently in the City of Vancouver (both new and existing) than all other metro Vancouver municipalities combined. In addition, Vancouver has the highest percentage of renter households, making up more than half of its population based on 2016 census data, and it's expected that this number will continue to rise. Other municipalities will continue to grow and increase their delivery of rental; however, we expect that the scale of Vancouver's market will remain a factor.

Conclusion/Recommendations

By providing additional context to the CMHC Rental Market Report and Data Tables, we have identified key gaps in the information. We recommend that the data be understood with this context when reviewing it.

We recognize that data gap for below-market rental may be the result of challenges in the collection of comprehensive data. However, the majority (79%) of "affordable" rental units are managed by various levels of government and non-profits.[2] This could be an area of future work for CMHC to better analyze these markets.

While we are continuing to build more rental housing, much more needs to be done to address chronically low vacancy rates, especially across B.C.'s urban centres B.C. has experienced significant population growth over the last thirty years, and this trend is expected to accelerate, however the rental market has not kept pace. It will be critical to support both current and future residents that the Province work with municipalities and builders to support the delivery of more rental homes.

[2] https://www.cmhc-schl.gc.ca/en/blog/2021/results-social-affordable-housing-survey-rental-structures

FW: UDI Meeting - April 13, 2022

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: April 11, 2022 9:23:12 PM PDT
Attachments: image004.jpg, image006.jpg, image007.jpg, image005.jpg, image008.png, image003.jpg, Agenda and Memos - April 13, 2022 UDI Meeting.pdf

For info etc.

From: Cassandra McColman <cmccolman@udi.org>
Sent: Monday, April 11, 2022 9:28 AM
To: Minister, AG AG:EX <AG.Minister@gov.bc.ca>
Cc: LynesFord, Adam AG:EX <Adam.LynesFord@gov.bc.ca>; Cooke, Angela AG:EX <Angela.Cooke@gov.bc.ca>; Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Michael Drummond <mdrummond@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Meeting - April 13, 2022

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Minister Eby,

Ahead of the meeting with UDI's Executive Committee on Wednesday, please find attached our suggested agenda and materials.

If there are any questions, please let us know.

Warm regards,
Cassandra

Cassandra McColman
Director, Policy and Public Affairs
Direct: 604.661.3032
Email: cmccolman@udi.org

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1100-1050 West Pender Street
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RE: DAPR Docs - CONFIDENTIAL

From: Faganello, Tara MUNI:EX <Tara.Faganello@gov.bc.ca>
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Galego, Ana MUNI:EX <Ana.Galego@gov.bc.ca>, Wilkins, Christina MUNI:EX <Christina.Wilkins@gov.bc.ca>, Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>, Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>, Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>, Yuma Morisho, Okenge MUNI:EX <Okenge.YumaMorisho@gov.bc.ca>
Sent: April 14, 2022 6:13:02 PM PDT
Attachments: Concept Paper Gentle Density MCM April 14.pdf, 269930_MIN IBN_UDIrecommendations_April 1 (002).pdf, DM Housing Working Group Speaking Notes_12 Apr 22.pdf, udi-presentation-implementing housing targets - 03.10.22.pdf

Hello Again,
Here are the documents as promised which I provide to you in confidence, please do not share beyond yourselves nor make reference to items publicly. Please consult with us first.
You should already have our DAPR PPT that we presented yesterday as it was circulated?
Pls note that these documents, the Concept Paper on Gentle Density and the IBN on UDI's proposal are still draft/not approved so please do not share beyond yourselves and we welcome your feedback. Understand we have a meeting booked for Tues.

Kind Regards,
Tara

From: Faganello, Tara MUNI:EX
Sent: April 14, 2022 12:55 PM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Galego, Ana MUNI:EX <Ana.Galego@gov.bc.ca>; Wilkins, Christina MUNI:EX <Christina.Wilkins@gov.bc.ca>; Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>; Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>; Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>; Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Subject: RE: Continuing our IM

Hi,
Its helpful for me to hear from you directly on what you need, for what purposes and by when so we can stay on the same page and keep our Ministers' needs connected, so thank you. Yes we have a lot of detail and information on all the good work we have been doing on DAPR over the last number of years. I know my team has been connecting with yours and appreciating you are new to the role, I will again offer to meet at the ADM level (with our staff) to get you all up to speed. I appreciate to date you may have been focused on deliverables as directed from your Minister, though I hope that yesterday reiterated our need to work together in partnership as we have a number of items moving forward that your Minister is likely most interested in. And we welcome your feedback.

On Gentle Density we will be going to P&P and it could be ready for Fall 2023 or Spring 2024 legislation only.

Also, on the Intentions Paper and the ppt presented yesterday, OYM and I feel that a lot more of our workplan on DAPR could be built in. Currently there is just one line item. Something else we should discuss.

I will have my office (Christina pls connect with Teri's assistant) to set up a time and walk you thru our items in more detail. I will forward you documentation that we can discuss in this meeting (as requested) as soon as I have a few minutes to pull them together.

Thanks,
Tara

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: April 14, 2022 11:31 AM
To: Faganello, Tara MUNI:EX <Tara.Faganello@gov.bc.ca>

Cc: Galego, Ana MUNI:EX <Ana.Galego@gov.bc.ca>; Wilkins, Christina MUNI:EX <Christina.Wilkins@gov.bc.ca>; Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>; Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>; Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>; Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Subject: RE: Continuing our IM

Great, thanks – I think our team is following up to get the concept paper and the BN on the UDI proposal to help us inform where there are synergies and potential overlap. The presentation yesterday had much more detail than I had heard in the past and myself and the team would like to come up to speed on it all s.22 s.22 . If you could send the materials over I'll get my office to set up some time to have a discussion about it?

Teri

From: Faganello, Tara MUNI:EX <Tara.Faganello@gov.bc.ca>
Sent: Thursday, April 14, 2022 10:40 AM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Galego, Ana MUNI:EX <Ana.Galego@gov.bc.ca>; Wilkins, Christina MUNI:EX <Christina.Wilkins@gov.bc.ca>; Nicholls, Eric MUNI:EX <Eric.Nicholls@gov.bc.ca>; Scowcroft, Lesley MUNI:EX <Lesley.Scowcroft@gov.bc.ca>; Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: RE: Continuing our IM

Hi
I'm happy to send you materials, sounds like there is a more fulsome list of items being requested from your office? We had to get MNC's ok to consider s.13

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: April 13, 2022 5:44 PM
To: Faganello, Tara MUNI:EX <Tara.Faganello@gov.bc.ca>
Subject: Continuing our IM

Hi sorry I missed your IM back…

I agree we should stay connected - s.13 s.13 You don't want to connect and include our perspective before going to MNC?

T
Get Outlook for iOS

Cabinet Concept Paper

Minister:	Honourable Nathan Cullen
Ministry:	Municipal Affairs
Date:	04/14/2022
Title:	**Provincial Intervention in Local Zoning to Allow More Homes (Gentle Density)**

Summary:

This paper explores the concept of and policy design work underway, with respect to provincial intervention in local government zoning to increase the allowable number of homes in single detached residential neighbourhoods (gentle density).

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Proposed concept:

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Policy Design Choices

s.12; s.13

Outcomes and Implications:

s.12; s.13

s.12; s.13

s.12; s.13

Concept development and next steps:

s.13

s.12; s.13

s.12; s.13

Attachments:

s.13

Signatures:

Contact:	Tara Faganello Assistant Deputy Minister (250) 356-6575	Okenge Yuma Morisho Deputy Minister April 7, 2022 Date Signed
		Honourable Nathan Cullen Date Signed

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s.12 ; s.13

BRITISH COLUMBIA | Ministry of Municipal Affairs

INFORMATION BRIEFING NOTE

Date: April 7, 2022

Prepared For: Honourable Nathan Cullen, Minister of Municipal Affairs (MUNI)

Topic: Urban Development Institute (UDI) recommendation for province to establish housing targets and apportion targets to municipalities.

Purpose: To set out considerations and potential implications for implementing housing targets as per UDI recommendations, and identify linkages to current policy work being undertaken to meet similar outcomes.

BACKGROUND:

The Urban Development Institute (UDI) is a non-profit association of the development industry in British Columbia (B.C.). Its mandate is to promote efficient urban growth, good planning and development practices, transit investment, affordable housing, and high quality commercial and industrial developments. UDI is often invited to participate in provincial consultations as representatives of B.C.'s development industry.

UDI has developed a proposal with an overall recommendation that the province implement performance-based targets for housing units for municipalities, with an initial focus on areas within walking distance of transit. As discussed below, there are several significant challenges with the proposal.

This note provides an overview of UDI's recommendations, along with considerations and potential implications that would need to be taken into account in considering such a proposal. The linkages between UDI's proposal and current policy work being undertaken by MUNI as part of the Development Approvals Process Review (DAPR) is also discussed.

DISCUSSION:

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BRITISH COLUMBIA | Ministry of Municipal Affairs

s.13

Current work being undertaken by MUNI:

As part of the DAPR work, MUNI staff are reviewing current planning and land use tools – such as Official Community Plans and Housing Needs Reports (see below) – and approaches to planning to consider what changes may be required to, in part, meet the same desired outcomes of UDI's proposals. This work considers issues raised as part of consultation undertaken with a variety of stakeholders, including UDI, developers, local government staff, and non-profit organizations, in the early phases of DAPR.

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BRITISH COLUMBIA | Ministry of Municipal Affairs

s.13

PREPARED BY:	APPROVED BY:	DATE APPROVED:
Lesley Scowcroft, Director Planning and Land Use Management Branch	Tara Faganello, ADM Local Government Division	April 11, 2022
	Okenge Yuma Morisho Deputy Minister	

BRITISH COLUMBIA | Ministry of Municipal Affairs

Overview of Work Related to Housing and the Development Approvals Process Review

Speaking Notes for
Okenge Yuma Morisho
Deputy Minister, Ministry of Municipal Affairs

Housing Working Group
April 13, 2022

Slide 1 – Title Slide

- Good afternoon.
- I am pleased to have the opportunity today to speak to MUNI's work related to housing, including the Development Approvals Process Review (DAPR).
- The following presentation is a high-level overview of the work MUNI has undertaken to date and work that is underway to support local governments and the Province to take action to address important housing-related issues.

Slide 2 – MUNI Housing Program – Strategic Approach

- As we are all aware, local governments in particular are at the frontlines of planning for housing in communities.
- MUNI's strategic approach to work related to housing focuses on:
    - Ensuring local governments – and the Province and other partners – understand the unique housing needs in each community;
    - Better understanding the challenges that exist in advancing new housing supply in their communities in a timely manner (such as through the development approvals process); and,
    - Exploring what changes or new tools may be needed to address these issues.
- To this end, MUNI has been building a foundation of knowledge to understand these issues, and has taken early action to respond to some of the identified needs.
- Work currently underway continues to build on this foundation, with a greater focus on exploring approaches that would enhance

the efficiency (or timeliness) and effectiveness of the development approvals process with the aim of increasing the supply of housing.

- A further aim of this work is exploring approaches that will reduce the number of site-by-site rezonings and lead to enhanced housing supply.
- This work will require a number of different policy levers to be used – such as legislative changes and supports like funding and best practices – to focus on both (a) the practical requirements and tools set out in the local government planning and land use framework, and (b) the 'cultural' shift that is required to "bring communities along" as the look and feel of communities change to reflect new realities and population projections.
- [Can turn over to Tara to present next slides if preferred]

Slide 3 – MUNI Housing Program – Work Completed

- As noted, MUNI has taken several early actions, including:
    - Requiring local governments to develop and make public housing needs reports every five years, detailing current and anticipated housing needs.

      A $5M program has supported local governments to meet this requirement, and as of April 2022, with funding fully committed, nearly every local government across BC has completed its first report. We know that these reports are driving important community conversations about specific local housing needs and actions to address them.
    - Enabling the authority to zone specifically for rental housing, a tool which a range of local governments are now using.

- Initiating DAPR – which included province-wide consultation with a broad range of stakeholders, summarized in a 2019 report.

- Developing "early" legislation (which was passed in Fall 2021) to enhance the efficiency of some land use decisions and processes – and to address needs resulting from the pandemic.

- Launching the Local Government Development Approvals Program, which provided $15M to help local governments implement best practices and develop innovative ways to support non-profit housing organizations, developers, and other stakeholders to build essential housing for people around the province.

  Forty-three projects have received funding and are underway.

Slide 4 – MUNI Housing Program – Major Initiatives Underway

- Initiatives currently underway under the umbrella of DAPR fall into four categories: (1) Streamlining Local Government Approvals, (2) Development Finance Tools, (3) Official Community Plans and zoning authorities, and (4) Public Hearings.

- First, work underway as part of Streamlining Local Government Approvals focuses on:

  - Exploring tools and supports that could be incorporated into an online portal to facilitate development approvals and provide consistency across local governments (a "single window portal");

  - Building a Peer Learning Network to foster engagement around best practices and innovative approaches to development approvals; and,

  - Measuring and monitoring the impacts of DAPR-related actions.

- Second, MUNI is reviewing and exploring changes related to Development Finance Tools – these are the tools that support local governments in paying for, and providing amenities to support, new growth and development.

- Significant considerations in this work include ensuring clarity, certainty, and transparency for local governments and developers respecting the potential costs and 'needs' required as communities grow – these include costs for 'hard' infrastructure (for example, through Development Cost Charges – which are legislated) and "soft infrastructure".

- In particular, I would like to note that staff are exploring developing a legislated framework for Community Amenity Contributions (or CACs) – which are currently negotiated at the time of a re-zoning and may include cash or in-kind contributions for facilities like libraries, and arts and cultural spaces. Careful work is required here to ensure affordable is a priority, local government service and infrastructure costs are not stranded, and developers are still incented to build density.

- Ensuring developers are aware of what amenities may be asked for "up front", and ensuring these amenities are considered within the context of planning for things like density are important considerations.

- Both internal (for example, with MOTI and Finance) and external consultation on potential policy approaches is anticipated soon, and the Fall 2023 legislature session is being targeted for amendments.

Slide 5 – MUNI Housing Program – Major Initiatives Underway & Pending

- The third "bucket" of DAPR work focuses on reviewing and exploring changes to the framework for Official Community Plans (or OCPs) and zoning authorities – two foundational planning and land use tools.

- To ensure that proposed solutions will produce the intended outcomes, an evaluation of OCPs and zoning authorities – and their relationship with potential changes to development finance tools and the public hearings framework – will form an important component of this work.

- Key work I would like to highlight includes:

    - Exploring approaches to implement "gentle density" requirements for local governments. MUNI is finalizing a concept paper for Cabinet consideration (likely later this spring).

    - Assessing the current approach to Housing Needs Reports and looking at ways to better connect OCPs and zoning to the findings of these reports.

s.13

    - Exploring implementing requirements for local governments to set transit-oriented development policies as part of their community planning – including considering density around transit corridors and hubs.

- Exploring requirements to update certain components of OCPs on a regular basis and/or mandating that all local governments must complete some OCP requirements – even if they do not have an OCP.

  [Note: While OCPs are not mandatory, most local governments have an OCP. There is no requirement to update OCPs.]

- Exploring specific requirements to update zoning bylaws to reflect OCP land use designations and density allocations across communities .

- Consultation on potential policy approaches is anticipated soon, and the Fall 2023 legislative session is being targeted for amendments.
- Finally, work on reviewing the Public Hearings process and exploring potential changes is pending, with legislation anticipated to be proposed for late 2024 or 2025.

Slide 6 – MUNI Housing Program – Other

- Initiatives related to housing (and local planning and land use more broadly) undoubtedly involve considering local government roles, responsibilities and authorities set out in the local government legislative framework.
- MUNI is supporting – or anticipates supporting – work being undertaken on a variety of initiatives, including:
  - The Integrated Transportation and Development Strategy
  - Supportive Policy Agreements
  - Various OHCS-led concept papers
  - The planned federal $4 billion Housing Accelerator Fund, which may end up being an important source of capacity and

financial supports for local governments working to boost housing supply (program still under development by CMHC)

- Setting Housing Targets (direct linkages to DAPR work and local planning tools)
- Transit Oriented Development (also direct linkages to DAPR work)

- Additional relevant initiatives include those related to CleanBC and policy work to better integrate consideration of natural hazard and climate change risks in local government land use planning– the latter of which considers whether it makes sense or is appropriate to build on hazardous lands.
- [Hand back to DM if applicable]

Slide 7 – Thank you

- I trust this has been a helpful overview of the variety of work MUNI is undertaking related to housing – and how this work connects to various other provincial initiatives and priorities.
- We will be taking our DAPR work plan forward to a Cabinet committee soon.
- We welcome your comments and questions.

Implementing Housing Targets

UDI Executive Committee

March 10, 2022

UDI
PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

Recommendations

Summary

1. Implement performance-based targets for housing units, initially focused on areas within walking distance of transit.
2. Set a global 10-year target with deliverables every 2 years, then apportion targets to municipalities.
3. Measure progress based on the number of units that receive a Building Permit and update targets bi-annually.
4. Track other key metrics including rezoning approvals and vacancy rates as a measure of progress.
5. Use a combination of incentives and penalties to enforce targets.

Why Targets?

Putting Housing First

UDI recommends that the Province adopt performance-based targets rather than attempt to micromanage how local governments administer the wide-ranging number of issues in the development review process.

Putting Housing First

1

Performance-based targets are easier to administer and less intrusive.

- Fights policy layering without needing to address every single municipal conflict;
- Avoids a one-size-fits-all approach;
- Allows municipalities to locate units in ways that preserves key areas and meets community priorities - **if targets are met;**
- Supports innovative collaboration with builders; and
- Requires municipalities to prioritize housing delivery.

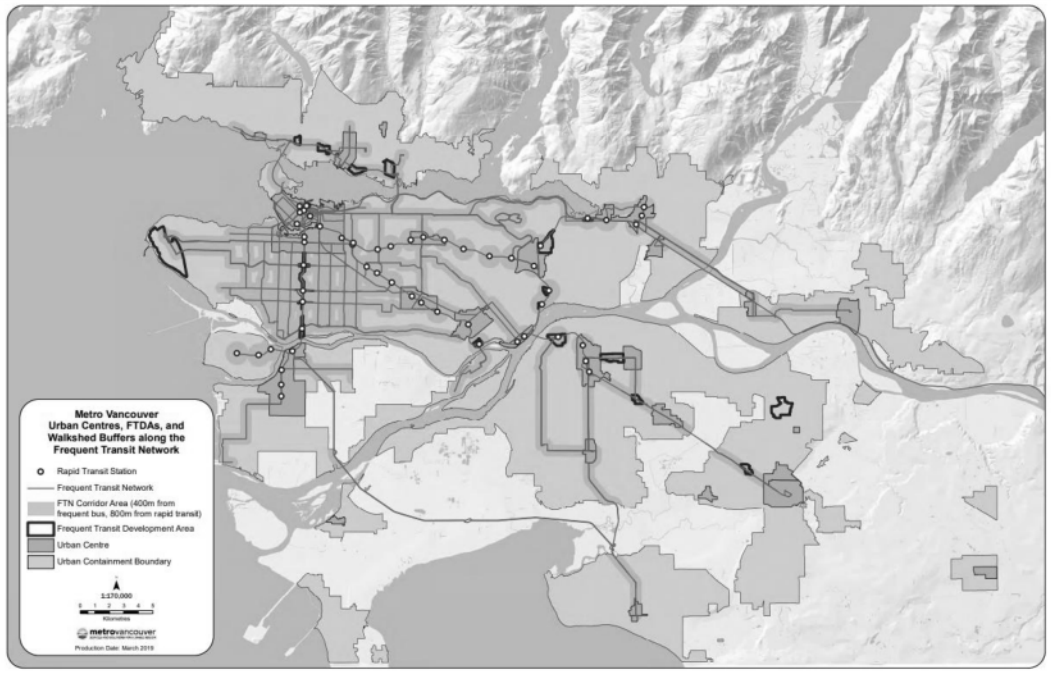
Implementing Housing Targets

Setting Global Targets

UDI recommends that any methodology adopted should account for the following factors:

- ***Projected immigration and inter/intra-provincial migration;***
- ***Foreign workers in emerging sectors/foreign students;***
- ***The current level of unaffordability in most B.C. markets and its impact on household formation; and***
- ***Demolitions and conversions of existing housing.***

Once a global target has been established, municipal targets can be set based on current/future transit & regional restrictions.



Implementing Housing Targets

Application Area

UDI recommends that for the initial phase, the housing targets apply within:

- ***400 metres of SkyTrain stations, LRT stations; and***
- ***200 metres of Bus Rapid Transit (BRT)/ RapidBus stops along Frequent Transit Corridors.***

Application Area

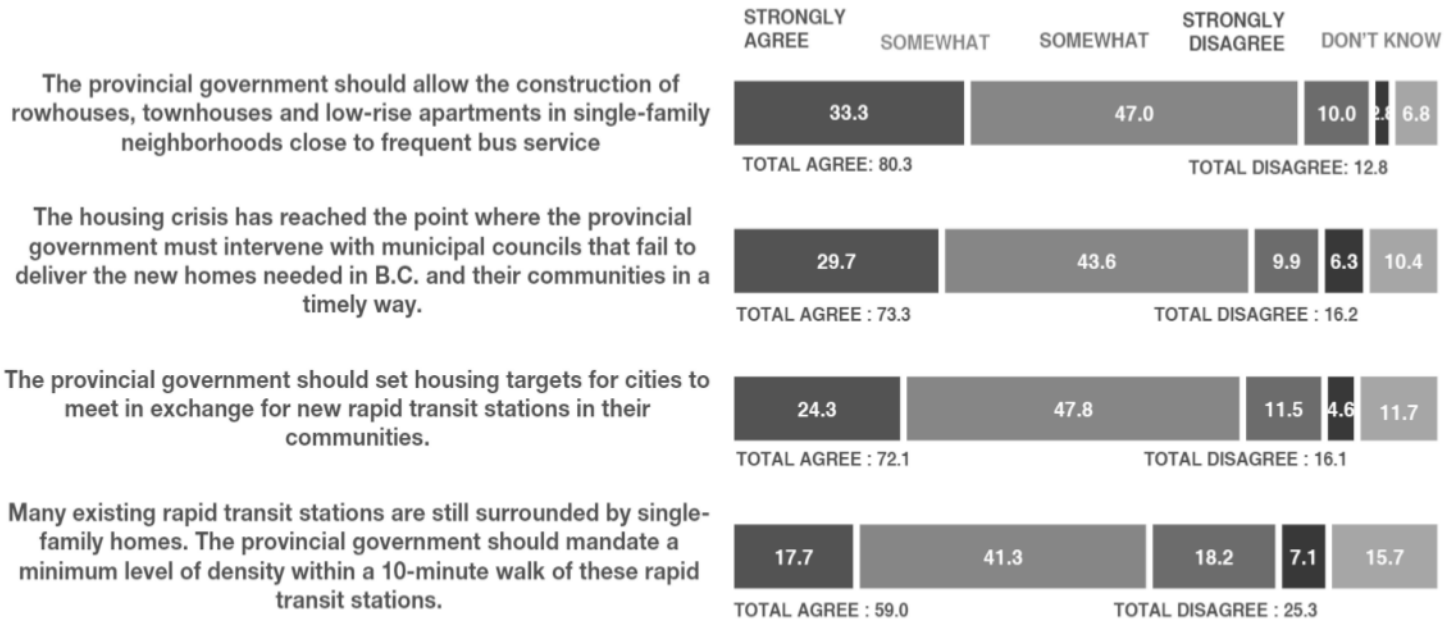
1

Locating density within walking distance of transit will:

- Fully leverage multi-billion dollar transit investments;
- Improve affordability for households who no longer need a car;
- GHG and energy use reductions from a mode shift to active transportation and transit;
- Increase vibrancy around stations; and
- Increase access to employment opportunities across the region.

Application Area

Implementing targets near transit is supported by communities across B.C.




Vancouver
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EAST VANCOUVER
Burnaby
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Annacis Island
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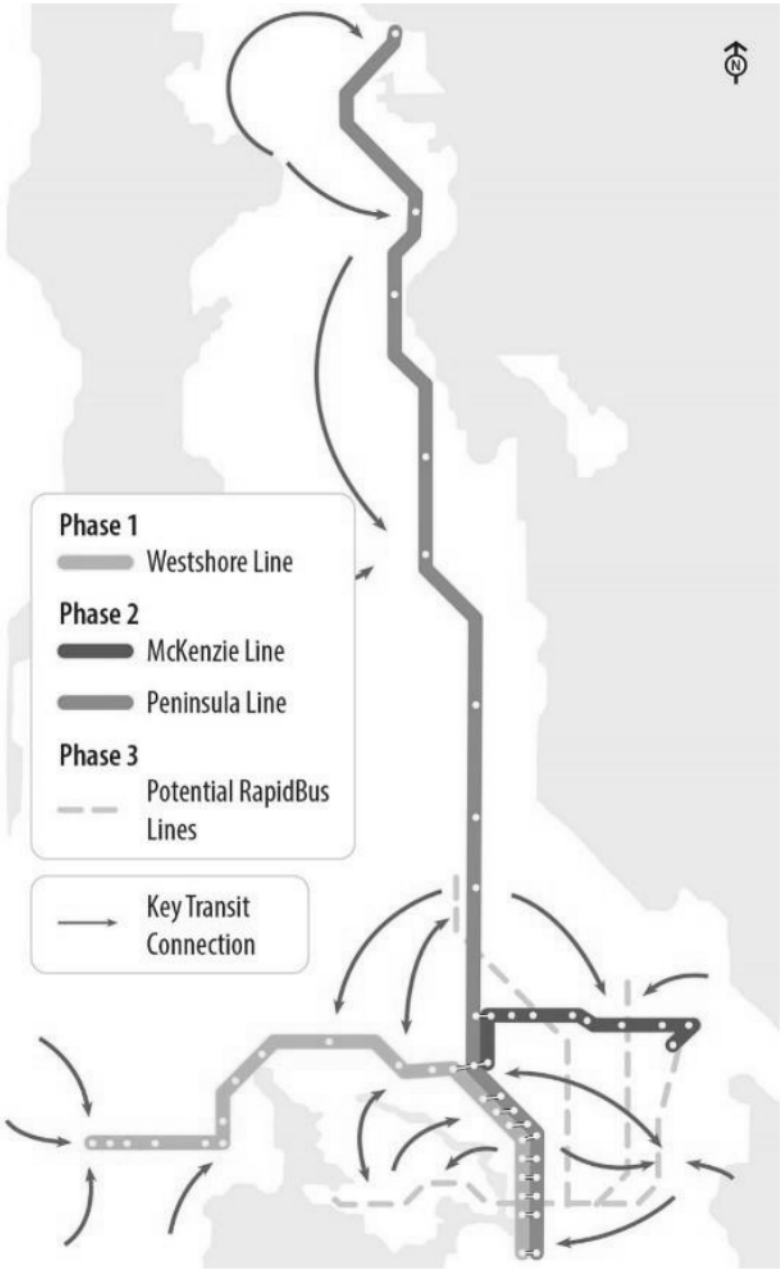
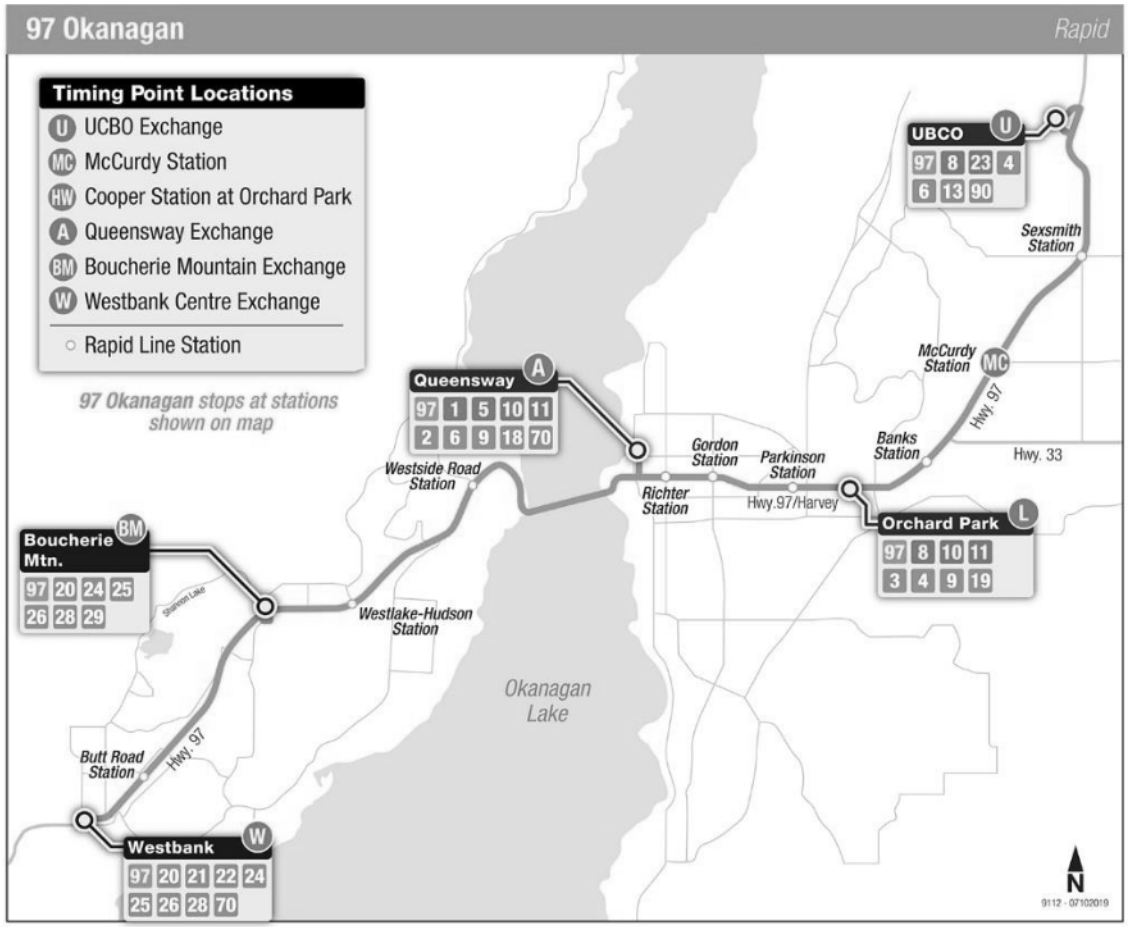
CLOVERDALE
Langley


Phase 1
Westshore Line
Phase 2
McKenzie Line
Peninsula Line
Phase 3
Potential RapidBus Lines
Key Transit Connection


97 Okanagan
Rapid
Timing Point Locations
U UCBO Exchange
MC McCurdy Station
HW Cooper Station at Orchard Park
A Queensway Exchange
BM Boucherie Mountain Exchange
W Westbank Centre Exchange
Rapid Line Station
97 Okanagan stops at stations shown on map
UBCO U
97 8 23 4 6 13 90
Sexsmith Station
McCurdy Station MC
Hwy. 97
Hwy. 33
Queensway A
97 1 5 10 11 2 6 9 18 70
Gordon Station
Parkinson Station
Banks Station
Westside Road Station
Richter Station
Hwy.97/Harvey
Orchard Park L
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Boucherie Mtn. BM
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Shannon Lake
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Implementing Housing Targets

Measuring Progress

UDI recommends that municipal progress towards targets be measured by the number of units that receive Building Permits (BPs), while tracking other key metrics.

New residents cannot live in an approval.

Measuring Progress

1

Measuring Building Permits is the most appropriate measure because:

- Units represent homes that new and existing residents can live in.
- It is very likely to be realized.
- It is the most consistent approval across all municipalities and housing types.
    - Some municipalities do not include Development Permits in their approval process.

Implementing Housing Targets

Target Timing

UDI recommends that the targets be set for a 10-year horizon with 2-year interim requirements.

These targets should be reviewed and updated in-line with the 2-year requirements.

Implementing Housing Targets

Enforcement

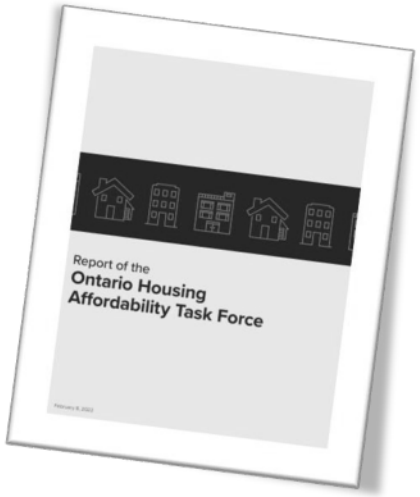
UDI recommends a wide range of incentives and penalties if local governments do not achieve their targets, and a review period prior to the application of penalties.

Enforcement

Provincial Funding Mechanisms

- Creation of a *Housing Delivery Fund*
- Increase funding for capacity upgrades and digitization

- Reduction of funding for infrastructure and community amenities
- Reduction of transit service levels



Enforcement

2

The Municipal Toolbox

- Enhance the tools available to municipalities that meet housing targets and curtailing the regulatory powers of those who do not.

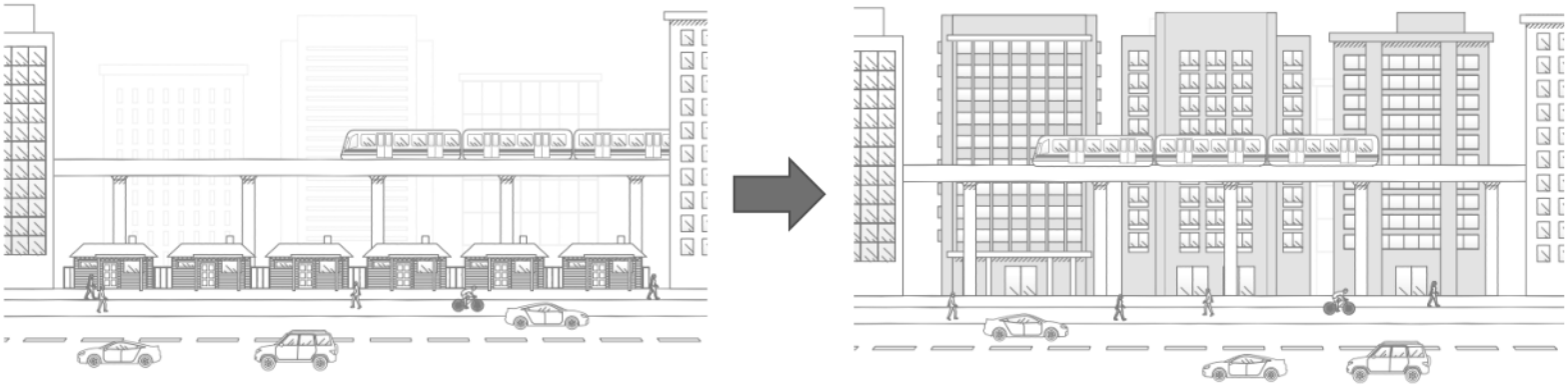
Example: regulation of GHGs in new and existing buildings or eliminating downzoning (unless life there is a safety issue)

Enforcement

3

Provincial Land-Use Decisions

- If housing targets are not met, the Province could assume the land-use decisions to pre-zone transit-oriented areas for housing.
- The intent is not to have to take these steps; it is to ensure that local governments themselves plan and allow an appropriate number of units.



Enforcement

4

Supportive Policies Agreements (SPAs)

Agreements used around new transit lines between TransLink and local governments receiving new lines.

SPAs need several improvements:

- Senior Government participation;
- Clarity in terms of density that needs to be delivered;
- Binding on future councils; and
- No loopholes.

Enforcement

5

Using Debt as an Incentive

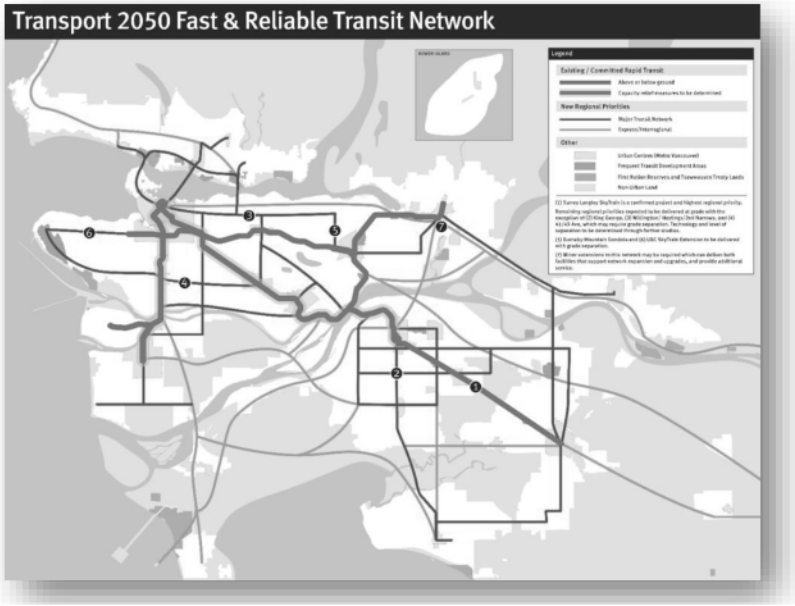
- Another approach that could be used is placing some of the debt of the new lines (e.g. costs of stations) onto municipalities.
- Municipalities could avoid interest charges and paying off the debt if they achieve their housing targets in a timely way. The Province could pay off the debt as housing is built near stations.



Enforcement

Prioritization of Transit Expansion through Housing Delivery

- The Province and the Mayors' Council could prioritize future transit lines, based on the amount of housing a local government commits to deliver at both new and current stations.



Implementing Housing Targets

Capacity Considerations

We encourage the Province to consider how capacities may need to be increased to meet housing targets in the future, including:

- ***Industry capacity to develop and construct housing***
- ***Municipal capacity to review and approve housing***
- ***Provincial capacity to review permits and align with municipal processes***
- ***Metro 2050 and limits on housing in employment areas near transit***

Questions?

RE: Comparison of AG and MUNI proposals

From: Corpe, Cimarron OHCS:EX
To: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Sent: April 21, 2022 11:59:23 AM PDT
Attachments: image001.png, image003.png, HPB Review of UDI Housing Targets PPT 2022 04 21.docx

Here's my one pager on the UDI deck (cross-referenced with MUNI IBN). I'll add to the Teams site as well.

Cimarron Corpé
Director, Housing Secretariat

Ministry of Attorney General and Minister Responsible for Housing
Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

From: ~~Low, Susan OHCS:EX <Susan~~.Low@gov.bc.ca>
Sent: Thursday, April 21, 2022 10:53 AM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: Comparison of AG and MUNI proposals

Here is the one pager, also saved to the Teams folder. I'm assuming you want to send up the responses together.

--Sue

HPB Summary of UDI Implementing Housing Targets Presentation - March 10, 2022

1. Phased approach, initially focussed on proximity to transit
   s.13

2. Global 10-year Target & Performance-based Targets
   s.13

3. Incentives, Penalties and Enforcement
   s.13

Federal Budget 2022 - Using Infrastructure Funding to Encourage More Home Construction

Every year, the federal government provides significant amounts of funding to provinces, territories, and municipalities to help them deliver important public infrastructure projects. At the same time, there is not enough housing being built to keep up with the needs of Canadians. A coordinated approach, involving all orders of government, is required to ensure public spending is working to build more of the homes Canadians need. To this end, Budget 2022 signals the government's intention to create flexibility within federal infrastructure programs to tie access to infrastructure funding to actions by provinces, territories, and municipalities to increase housing supply where it makes sense to do so. This flexibility would be included within the Canada Community-Building Fund, when its current administrative agreements with provinces and territories are renewed; and other future infrastructure programs.

UDI
CAPITAL REGION URBAN DEVELOPMENT INSTITUTE

April 22, 2022

Mayor and Council
The District of Oak Bay
2167 Oak Bay Avenue
Victoria BC V8R 1G2

Re: Housing Needs

Dear Mayor and Council –

As a "Partner in Community Building," The Urban Development Institute – Capital Region is committed to working with communities and governments to create and achieve the vision of balanced, well-planned, and sustainable communities. Through our membership, we promote wise and efficient urban growth, and good development practices – with an emphasis on housing across the spectrum, throughout the Capital Region.

On April 16, 2019, legislative requirements were put forward by the provincial government to require all local governments to collect and analyse data, producing a report that would help communities to better understand their current and future housing needs. The first Housing Needs Reports from Capital Region municipalities were released in 2020. It is a requirement by the provincial government that these reports be produced every 5 years going forward.

We have been facing a critical housing shortage across the Capital Region for several years, and the pandemic that we are slowly climbing out of, did not help the situation. Housing Needs Reports are a tool that municipalities can use to determine the number of housing units that need to be built in order to keep up with the population demand within each community. It is evident that while some municipalities in the Capital Region are hitting their targets laid out in the Housing Needs Reports, others are falling far behind the targets set out for them. Oak Bay is one of the municipalities that is far from meeting the expected target. During the five-year period from 2016 to 2021, the total number of additional housing units added to Oak Bay's inventory increased by only 46 units – 43 of which came from a single development. Oak Bay's Housing Needs Report states that as of February 2020 the current need of housings units was 349, and the municipality requires 130 units per year over the following 5-year period, leading to 2025 when the next needs report will be published. This reflects a substantive shortfall in housing units needing to be built.

The 2016 Census data states that the average age in Oak Bay is fifty-three. With this number on a steady rise, more housing options are needed to allow this older demographic to age in place - to be able to downsize and remain in their community. Long-time residents, whose children are aging out of their childhood home, need to be able to live on their own in the community that they grew up in. In addition, consideration must be taken for people who live outside of Oak Bay and want to move into the community.

UDI works collaboratively with other Capital Region municipalities to create and/or review policies that ensure that the creation of new housing can meet the needs of their community's population growth. We encourage Oak Bay council to take bold steps to ensure that development applications are successfully approved to fill the ever-growing housing need, ensuring a healthy, vibrant, and inclusive Oak Bay.

Oak Bay is currently not a member of UDI. We welcome Oak Bay to join our membership, like many other municipalities in the Capital Region who enjoy the benefits of our affiliation through a collaborative working relationship when addressing development related initiatives.

Kind Regards,



Kathy Whitcher (Executive Director)

RE: Session 1: Consultation on Development Approvals - Streamlining Approvals and Online Portal

From:	Development Approvals Process Review MUNI:EX <DAPR@gov.bc.ca>
To:	Development Approvals Process Review MUNI:EX <DAPR@gov.bc.ca>, Beena Ravi <Beena.Ravi@mnp.ca>, Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>, Burleson, Ron MUNI:EX <Ron.Burleson@gov.bc.ca>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, XT:Hardie, Lindsay LTSA:IN <Lindsay.Hardie@landsure.ca>, simon.daley@mnp.ca, Elizabeth Vannan <Elizabeth.Vannan@mnp.ca>, Bill Reid <Bill.Reid@mnp.ca>, Proctor, James MUNI:EX <James.Proctor@gov.bc.ca>, XT:Irg, Mike Alberni-Clyoquot Regional District EAO:IN <mirg@acrd.bc.ca>, adyer@acrd.bc.ca, cao@alertbay.ca, mmayers@bcrea.bc.ca, msakai@bcrea.bc.ca, johannes.schumann@burnaby.ca, amy@plannorth.ca, ian.buck@campbellriver.ca, dave.pady@campbellriver.ca, carmina@chbabc.org, cnewsom@gochetwynd.com, Corey Paiement <CPaiement@csrd.bc.ca>, Gerald Christie <gchristie@csrd.bc.ca>, amerrill@coquitlam.ca, sadamson@coquitlam.ca, ann.kjerulf@cvrd.bc.ca, michelle.pressman@cvrd.bc.ca, khenderson@dawsoncreek.ca, barry@thorsonmcauley.ca, mitchell@egbc.ca, gdaneluz@fvrd.ca, kjonkman@rdffg.bc.ca, mark@hollandplan.com, cao@kaslo.ca, rsmith@kelowna.ca, tpollock@kimberley.ca, davidh@landlordbc.ca, ekaehn@districtofmackenzie.ca, lthorne@districtofmackenzie.ca, bmclean@makoladev.com, Evanoff, Ryan TRAN:EX <Ryan.Evanoff@gov.bc.ca>, jlocke@sms.bc.ca, cgarrish@rdos.bc.ca, mandy.stanker@princegeorge.ca, tturner@quesnel.ca, ssmith3@richmond.ca, Shari.Holmes-Saltzman@saanich.ca, carie.liefke@spallumcheentwp.bc.ca, psorfleet@sparwood.ca, bdollevoet@summerland.ca, jvanloon@ubcm.ca, gbrown@ubcm.ca, gord.lovegrove@ubc.ca, jfisher@udi.org, ameyer@victoria.ca, amy.vilis@vancouver.ca, RWard@delta.ca, lsteele@egbc.ca, afehr@egbc.ca, muirgraeme@portcoquitlam.ca, jkassel@lakecountry.bc.ca, Lstaats@gibsons.ca, srorison@bchousing.org, cassidy@3rdgenhomes.com, Emily.Dixon@cvrd.bc.ca, cthorn@stranddev.com, palbrecht@langleycity.ca
Cc:	Lahtinen, Eleanor MUNI:EX <Eleanor.Lahtinen@gov.bc.ca>, Brandt, Katherine MUNI:EX <Katherine.Brandt@gov.bc.ca>, Yee, Holly MUNI:EX <Holly.Yee@gov.bc.ca>, Desirée LeBlanc <DLeBlanc@gochetwynd.com>, Metelkin, Elena <EMetelkin@coquitlam.ca>, tyler.wightman@boabc.org, Sandy Mackay <smackay@makoladev.com>, Amy Anaka <aanaka@acrd.bc.ca>, brittany.nichols@rdco.com, Faganello, Tara MUNI:EX <Tara.Faganello@gov.bc.ca>, Matt Grazier <MGrazier@delta.ca>, molly.vanleusden@cranbrook.ca, rob.veg@cranbrook.ca, Yvette Ostrovsky <YOstrovsky@delta.ca>, gary@penwayconsulting.ca, Tammy Payne <officeclerk1@alertbay.ca>, Luke Thorne <luke@districtofmackenzie.ca>, Barry Thorson <barry@tccp.ca>, Deanne Ennis <DEnnis@gochetwynd.com>
Sent:	April 28, 2022 8:27:46 AM PDT
Attachments:	image001.jpg, DAPR Portal Presentation_Session_Apr_27_2022.pdf

Good morning everyone!

Thank you to all of you for your participation in the first consultation session on 'Development Approvals - Streamlining Approvals and Online Portal' and for contributing to a meaningful conversation. I understand that some of you may have had technical issues accessing the meeting. Our apologies for that. If you have not done so already, please reach out to me and we will ensure that we hear from those of you that missed the meeting.

For your reference, please see below the questions that were discussed in yesterday's session and attached the PowerPoint presentation slides.

Questions for breakout sessions:

- In your experience, what do you see as the key barriers to streamlining local government development permitting and approvals processes and procedures specifically related to technology and information?

- Are these barriers best addressed by improved processes/procedures or by technology (or both)?

- Can you provide examples of what your local government or agency undertaking to increase the efficiency of it's development approvals? How could these intersect with today's discussions?

- How can the province best support local governments in streamlining their development approval processes via technological improvements?

- To what degree could elements of development approvals be standardized or centralized? What elements would those be?

Next Virtual Engagement Sessions:

- Session 2: Thursday, May 5, 1:00pm - 3:30pm
- Session 3: Thursday, May 12, 1:00pm - 3:30pm
- Session 4: Thursday, May 19, 1:00pm – 3:30pm

Meeting invitation will be send closer to the next meeting.

We are looking forward to your continued participation in this engagement process.

Thank you again on behalf of the DAPR Team

Heike Schmidt

BRITISH COLUMBIA
BC Public Service

Heike (hlE-kuh) Schmidt
RPP MCIP DIPL.ING.
Senior Planner, Planning & Land Use
Management Branch
Local Government Division

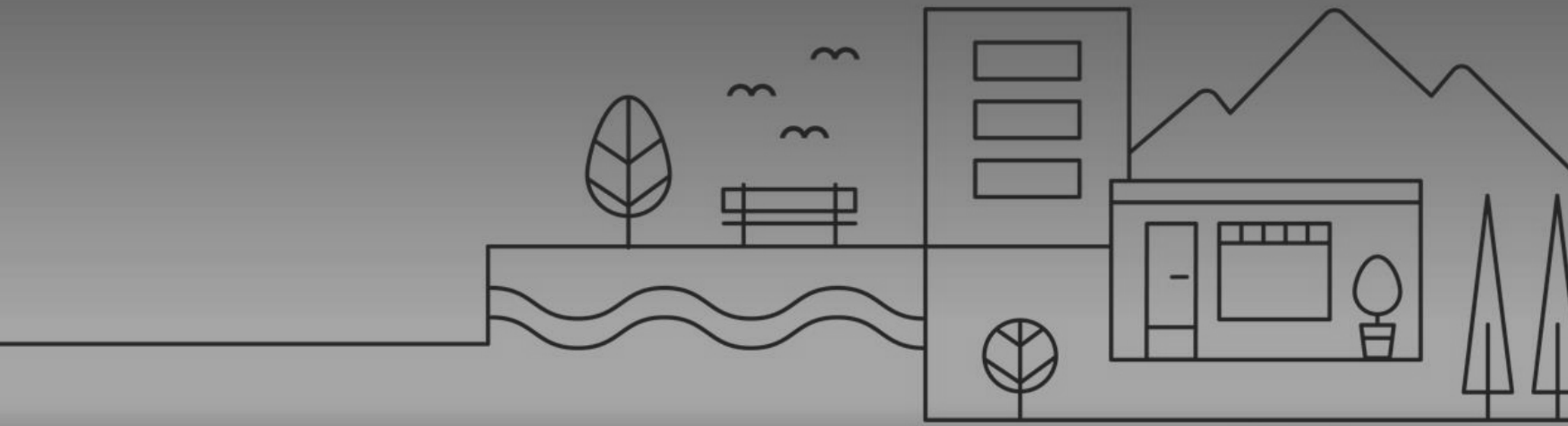
Phone : 778-698-5367
Email : heike.schmidt@gov.bc.ca

6th Floor - 800 Johnson Street
Victoria, BC, V8W 1N3

Ministry of Municipal Affairs

Acknowledgement in respect of the Lekwungen speaking peoples, Songhees and Esquimalt First Nations, traditional keepers of the land which is now known as the City of Victoria on southern Vancouver Island, British Columbia.

Development Approvals Process Review – Streamlining Approvals



SPRING 2022 DAPR INITIATVE CONSULTATION SESSION #1: April 27, 1:00 p.m. – 3:30 p.m.

BRITISH COLUMBIA | Ministry of Municipal Affairs

Development Approvals Process Review (DAPR) – Stakeholder Engagement Session #1

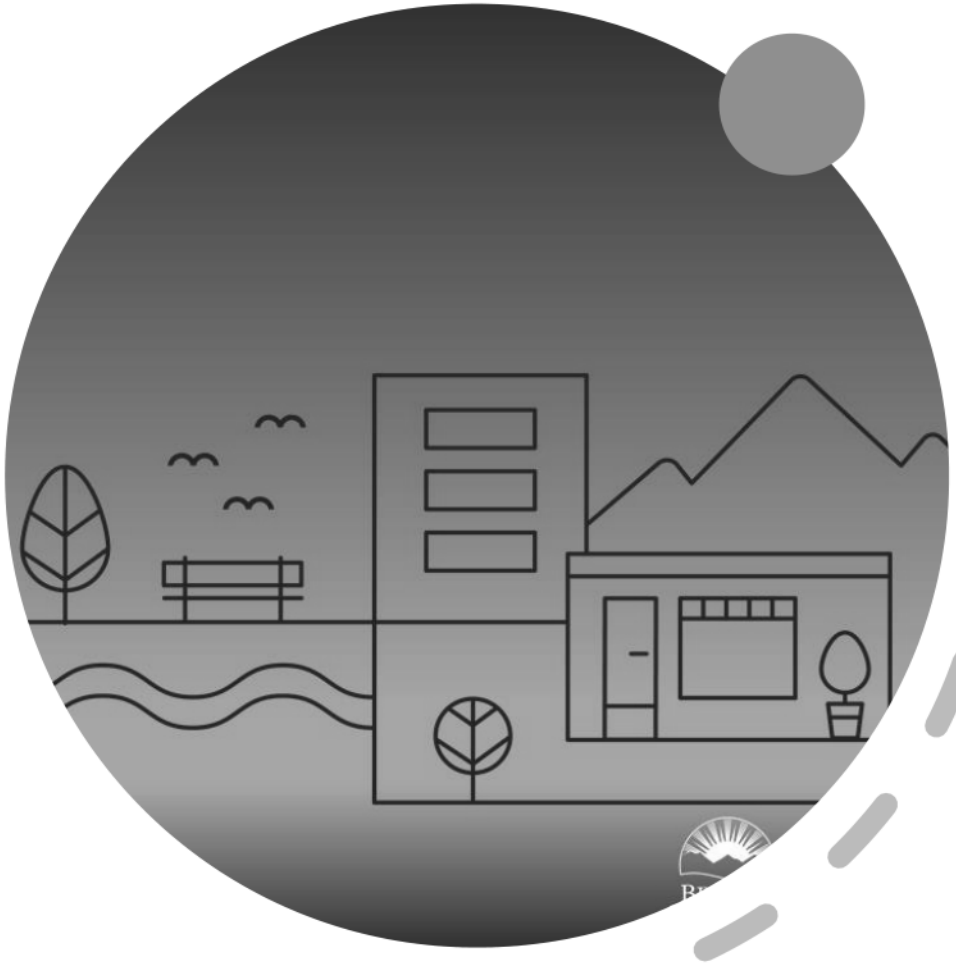


Agenda

1:00 p.m. – 1:30 p.m.	**Welcome & Introductions**
1:30 p.m. – 2:00 p.m.	**DAPR Presentation, Q & A**
2:00 p.m. – 3:00 p.m.	**Facilitated Breakout Discussions**
3:00 p.m. – 3:25 p.m.	**Plenary Report Out**
3:25 p.m. – 3:30 p.m.	**Closing of the Session**

Development Approvals Process Review (DAPR)

"To support local governments to eliminate barriers to affordable housing and to accelerate construction of new homes in their community through making the approval process more ***effective*** and ***efficient.***"



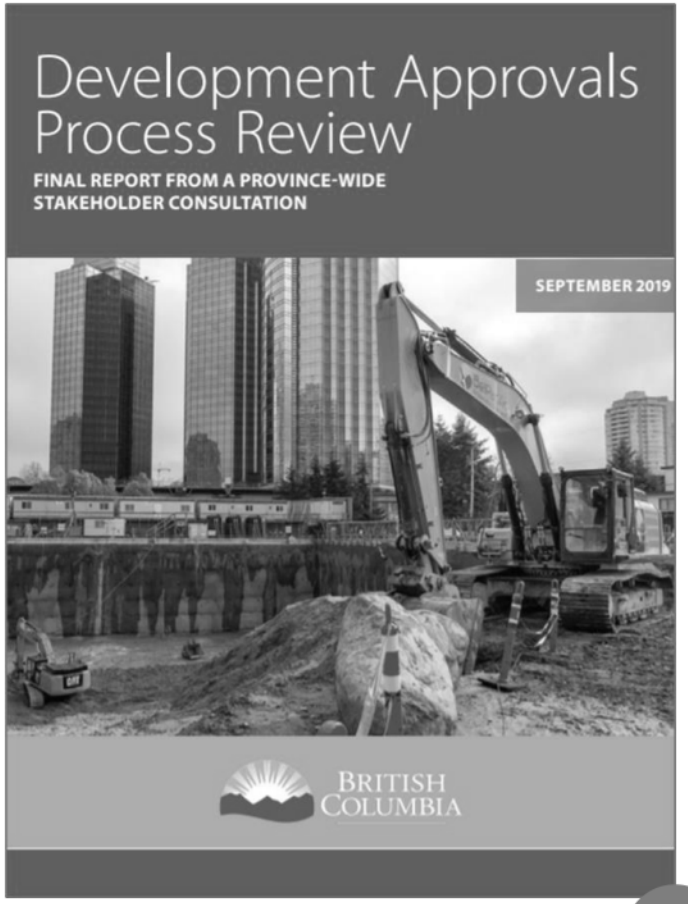
DAPR Consultation

Consultation conducted from December 2018 to May 2019

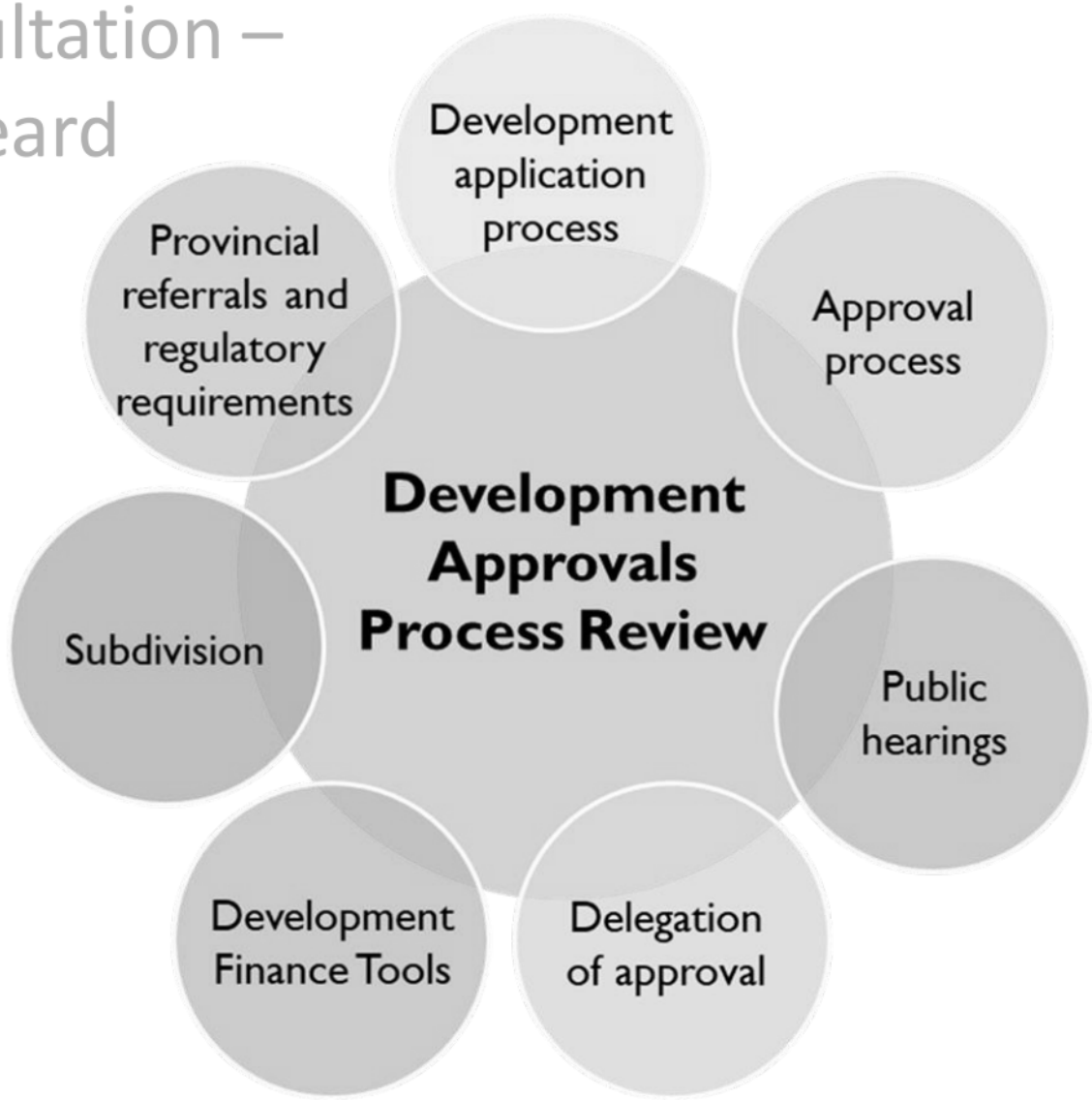
Engagement with wide range of stakeholders in robust conversation

Challenges in approvals process & Ideas for their resolution

Consultation report released September 2019



DAPR Consultation – What we Heard



DAPR's Early Initiatives

Bill 10 – *Municipal Affairs Statutes Amendment Act - Royal Assent*

- permanently authorizes local governments to conduct meetings and public hearings electronically

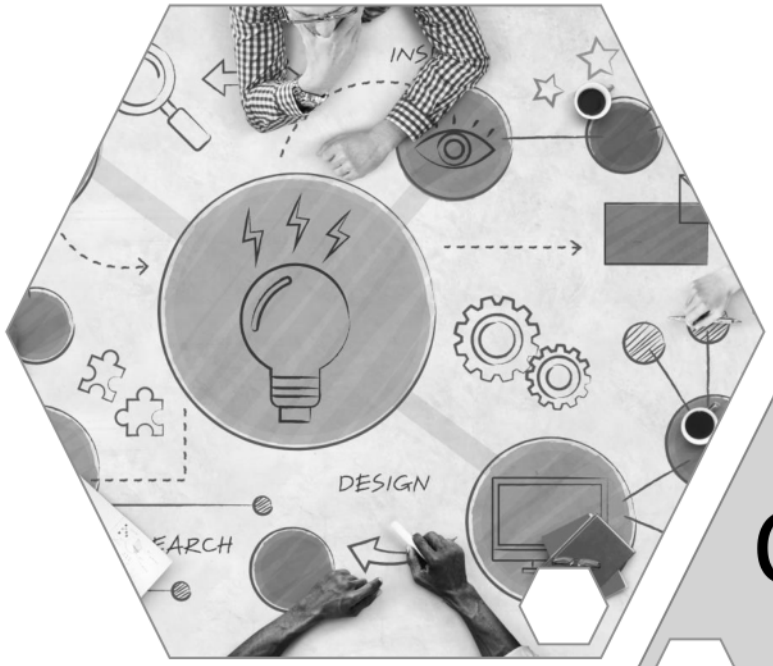
Bill 26 – *Municipal Affairs Statutes Amendment Act – No. 2*

- removed default requirement for public hearings on zoning bylaws consistent with Official Community Plans
- enables local governments to delegate minor development variance permit decisions to staff

Local Government Development Approvals Program (LGDAP)

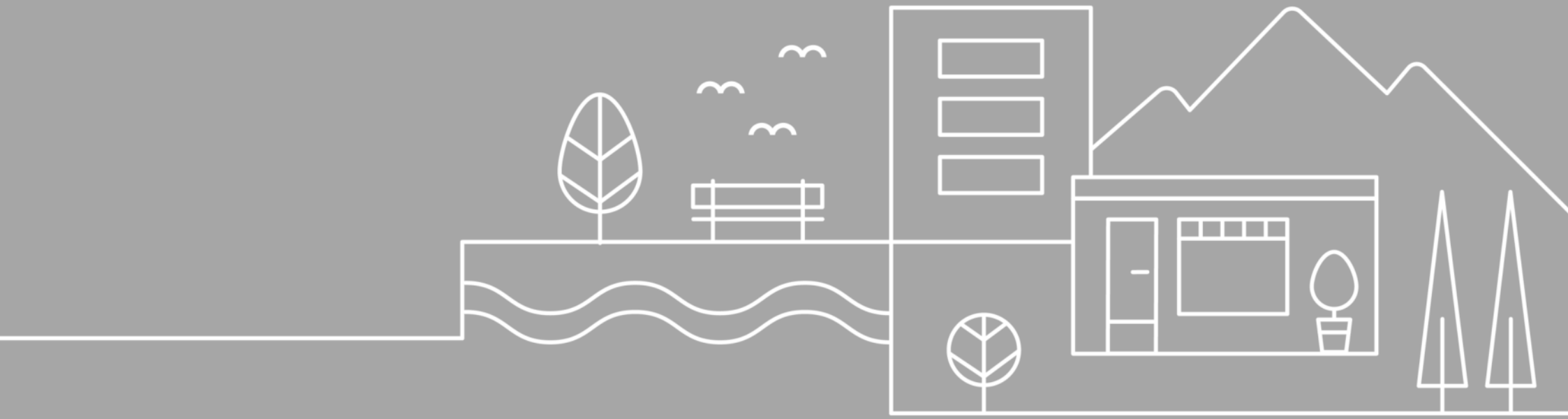
- $15 million; administered by UBCM
- Forty-three local government projects were approved and are underway

DAPR Streamlining Approvals – Online Portal Engagement



Centralized Technical Supports

Questions?



Meeting Agenda
(Pacific Standard Time)

1:00 p.m. – 1:45 p.m. DAPR Overview & Summary of ‘What we Heard’

1:45 p.m. – 3:00 p.m. Facilitated Group Discussion & Mural Prioritization Exercise:

Characterizing identified solutions for DA process improvements

Confirming understanding of user groups and specific needs

Setting the scope of essential features (next & later phases)

3:00 p.m. – 3:25 p.m. Next steps, what we heard report, next project phase

3:25 p.m. – 3:30 p.m. Closing of the session

Microsoft Teams meeting

Join on your computer or mobile app
Please ensure you are using the latest version

of MS Teams

s.15

Page 117 of 403

Withheld pursuant to/removed as

s.15

RE: Code Question Service Delivery Discussion Summary

From: Chase, Andy OHCS:EX
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: May 11, 2022 6:21:56 PM PDT
Attachments: image001.png

I've peeled back to a one-pager (using margins to my advantage) as speaking points for you when you meet with Teri. It focuses on Code questions and sets aside CCRA. Please use this link for the Code Question Service Delivery Discussions_Brief.

Regarding the summary (linked below) to be sent to the associations met with as a follow up, are you okay with the light CCRA implications weaved in with it? I do consider the connection between BSSB exec and association exec to be both a service model redesign (taking place of code questions) while also a CCRA strategy. Would it suffice to send the summary (linked below) out with a message that more on CCRA to follow (as it comes available)?

Andy

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Tuesday, May 10, 2022 6:09 PM
To: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: Code Question Service Delivery Discussion Summary

Yes-something high level and I can brief Teri as well before we flip the off switch. Yes, let's send the CQ summary separate from a CCRA summary and note the latter is coming?

Jun'ichi Jensen
Executive Director (Acting)
Building and Safety Standards
Office of Housing and Construction Standards
Province of BC
(250) 858-1325

From: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: Tuesday, May 10, 2022 5:58 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: Code Question Service Delivery Discussion Summary

This all sounds good and apparently there are some very nasty follow up emails in the Codequestion inbox which are making this more of a priority.

I do recommend we (you) email back those we met with and share the discussion summary linked below. We can offer in that email availability to reconnect sooner than the regularly scheduled meetings at their request.

We did update the website to direct code users through the appropriate channels quite recently and it would not be too hard to add a quick 'how to' to those directions. What we will need to pull down very soon is the 'what we can answer' content. We may also need to respond with a stock response to all those inquiries in the inbox with a 'where to go for info'-type response.

My goal is to have a full enough webpage with where and what supports are available for Code users would highlight that there isn't a gap (certainly not one that our opinions fill).

We did capture in the discussion summary the confusion caused when people misinterpret our opinions as authoritative. I'd like to offer comment to that directly on our website to respect statutory interpretation and also the authority and autonomy of local authorities.

Regarding how to use the Code specifically… we should stay high level. BCIT and others already provide this service. (The Province makes rules for road safety but does not teach people how to operate their cars.)

…to be continued… it's getting late

Regards,

Andy

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, May 5, 2022 7:15 PM
To: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: Code Question Service Delivery Discussion Summary

Thanks, this is great. A couple additional thoughts requested follow ups/next steps:

We promised to circle back before moving ahead. Is the plan to circulate this and offer further discussion/meetings? Or perhaps just follow up when we have our next regular check ins?

One thought I continue to have is a "how to use the BCBC" type document. Nothing too comprehensive, just a short introduction to help people help themselves. Long term goal… no need to promise this.

UBCM expressed concern about the impacts on LG's. We don't have regular check in's with them and they may not be necessary, but we should circle back with them as well. The person we met with has gone.

We should brief up on this before moving ahead with shutting down the service. We also need to follow up specifically on previous direction – I think this may be why we paused:

	Code Inquiry Service	Technical staff respond directly to >1600 code inquiries annually from industry and the general public	[Nov 19 - Letters introducing review of service model and invite for discussion sent Nov 17th to the following: AIBC, ASTTBC, BOABC, CHBABC, EGBC, LGMA, UBCM, UDI. Follow up ED meetings being scheduled for weeks of Nov 22 and 29. Dec 1 - meetings under way, some concerns expressed and some support (BPAC support also…)] Met with AIBC, CHBABC, BOABC, LGMA & UDI. General agreement that there systems in place for people with questions and that the code inquiry service (1800 responses) is larger than the actual need. Support for BPAC-like committee(s). Shared about RACC -> CCRA and changes to national code development system and different opportunities for partnerships/relationships. Intent to follow up in new year with 'what we heard' discussions regarding code inquiries and also to follow up on RACC -> CCRA (public messaging expected in new year). No update other than BSSB continues to meet with valued partners (met with ASTTBC, Step Code Council) to discuss	How do we move forward and continue to support citizens. Contract out a DIY how to use the code- around town from island health infographic- model? propose a solution to how we continue to serve citizens well.

			CCRA and code inquiries. TC feedback on this? CM supported.	

s.13; s.14

Jun'ichi Jensen
Executive Director (Acting)
Building and Safety Standards
Office of Housing and Construction Standards
Province of BC
(250) 858-1325

From: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: Thursday, May 5, 2022 3:56 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: Code Question Service Delivery Discussion Summary

Doh! And I can't remember what revisions I was to do. Terrible.

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, May 5, 2022 3:52 PM
To: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: Code Question Service Delivery Discussion Summary

No, this is fine. I do remember you sent it a while back but something in the back of my mind says we discussed some revisions and you were going to update. But I never did review, so I can't remember what prompted that.

Jun'ichi Jensen
Executive Director (Acting)
Building and Safety Standards
Office of Housing and Construction Standards
Province of BC
(250) 858-1325

From: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: Thursday, May 5, 2022 11:40 AM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: Code Question Service Delivery Discussion Summary

Hello Juni,

Happy find when I turned my mind to summarizing the discussions we had with industry on the ideas around Code question service delivery redesign… I already did it! I believe I already tried to sent it to you but then dropped the ball.

Here's a link to a summary of our Code Question Service Delivery Discussions. With your review and approval, I recommend we send out this summary to the representatives we met with and invite them to a follow up discussion should they have any additional comments or questions. (We could be so bold as to invite them all to the same meeting and have a meeting of the minds…) Would you prefer this in eApps?

Regards,

Andy Chase | A/Director, Building Codes & Standards

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-677-0944
Email: andy.chase@gov.bc.ca
Website: www.gov.bc.ca/buildingcodes

Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live, work and play.

RE: Confidentiality Undertaking - Strata Insurance - Draft Regulations

From: Baker, Joscelyn <jbaker@polyhomes.com>
To: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Sent: May 16, 2022 3:00:33 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Veronica –

To confirm our discussion, I confirm UDI can say that:

UDI has been involved in consultation, which is ongoing, and the Province understands that financial implications for strata lot owners are a primary consideration in proposed changes to the *Strata Property Act*.

Thank you very much – Best regards, Joscelyn.

From: Baker, Joscelyn
Sent: Monday, May 16, 2022 2:43 PM
To: 'Barlee, Veronica OHCS:EX' <Veronica.Barlee@gov.bc.ca>
Subject: Confidentiality Undertaking - Strata Insurance - Draft Regulations

Hi Veronica – I had an inquiry on Friday from Jeff Fisher at UDI re an inquiry he got from a member of UDI asking about whether UDI has been involved in consultation.

Could you please give me a quick call?

UDI would like to be able to say that we are aware of the issues, and that consultation is ongoing. However, based on the wording of the attached Confidentiality Undertaking, we don't think we have permission at this point to say that. From the url below, I can see that government has already publicly stated that consultation will be made on the same issues that the UDI member raised, although the web page refers to consultation with the "strata community and insurance industry" and doesn't specifically include the real estate development community. I have copy pasted the url as well a the relevant text below.

I am at s.22 this afternoon and tomorrow afternoon between 1-5 pm, if you can spare a few minutes to give some direction on what disclosure around consultation UDI can give to its members.

Thank you in advance – Joscelyn.

https://www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing/operating-a-strata/finances-and-insurance/insurance#cost

> Insurance for strata corporations and insurance for strata owners and renters
> Strata owners can purchase insurance for: personal property, e.g., household contents such as furniture, clothing, household goods, electronics, etc.; personal liability for any bodily injury or property damage unintentionally caused to others; improvements ("betterments") to the strata lot made by the current and previous owners, up to a stated limit
> www2.gov.bc.ca

Future changes

Other changes included in the bill require further consultation with the strata community and the insurance industry and may be brought into force by regulation at a later date. These issues include:

- clarifying what strata corporations are required to insure, to help strata councils and owners make informed decisions on strata corporation, strata owner and tenant insurance policies
- considering which party pays for the strata corporation insurance deductible if the strata owner or owner was legally responsible for a loss or damage, but it occurred through no fault of their own
- identifying the circumstances, if any, when strata corporations are not required to get full replacement value insurance coverage
- strengthening depreciation reporting requirements, including limiting the ability of strata corporations to avoid completing depreciation reports
- changing the minimum required contributions made by strata unit owners and developers to a strata corporation's contingency reserve fund

Joscelyn Baker
General Counsel
Polygon Homes Ltd.

email: jbaker@polyhomes.com

tel: 604.871.4244 fax: 604.871.4280

polyhomes.com
900 - 1333 West Broadway,
Vancouver, BC V6H 4C2

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From: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Sent: January 20, 2022 4:47 PM
To: Baker, Joscelyn <jbaker@polyhomes.com>
Subject: RE: Strata Insurance - Draft Regulations

Hi Joscelyn
Please consider it approved! I will touch base with Roxanne on Monday.

kind regards,
Veronica
cell: 778.679.9655
strata housing website or search for "BC strata housing"

From: Baker, Joscelyn <jbaker@polyhomes.com>
Sent: Thursday, January 20, 2022 4:45 PM
To: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Subject: Fw: Strata Insurance - Draft Regulations

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Veronica - I got an out of office message from Roxanne that she is away until the 24th. Should I wait for her return or is there someone else I can ask? Thanks so much - Joscelyn.

From: Baker, Joscelyn <jbaker@polyhomes.com>
Sent: January 20, 2022 4:43 PM
To: DeSouza, Roxanne OHCS:EX <Roxanne.DeSouza@gov.bc.ca>
Subject: Re: Strata Insurance - Draft Regulations

Good afternoon Roxanne - Thank you for your email below.

I would technically not be permitted to advise my employer that I am working on this consultation without amending it. I consult during work hours, and I would like to advise my employer of the fact that I'm participating and that I am signing an undertaking that precludes me from disclosing anything about it.

Are you able to allow me to except out that I may notify my employer of the fact of my participation but not the details? It could be along the lines:

> ...not to disclose that consultation about the Draft Regulations has taken place except as provided below, and except that she may advise her employer she is participating in the consultation, and of the existence of this undertaking

I'm trying to recall why I didn't raise this some years ago when working on REDMA consultations, but I believe it was because Neil also was part of the consultation, so he was aware of my participation.

Thanks in advance for your consideration of my request - Joscelyn.

Joscelyn Baker
General Counsel
Polygon Homes Ltd.

email: jbaker@polyhomes.com

tel: 604.871.4244 fax: 604.871.4280

polyhomes.com
900 - 1333 West Broadway,
Vancouver, BC V6H 4C2

From: DeSouza, Roxanne OHCS:EX <Roxanne.DeSouza@gov.bc.ca>
Sent: January 20, 2022 3:02 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Subject: Strata Insurance - Draft Regulations

Good afternoon,

Thank you for participating in the Housing Policy Branch's engagement sessions regarding strata insurance. The feedback gathered during the consultation process has been instrumental in moving this issue forward.

At this stage, we are asking a small group of community partners that have expertise with strata legislation to review and provide feedback on a draft of amendments to the Strata Property Regulation. If you would like to participate in the review process, please sign and return the attached Confidentiality Undertaking by **Wednesday, January 26, 2022.**

We are aiming to circulate the draft regulations by the end of next week, and will be seeking written feedback on the proposal within one week of sending out the documents. Please note that the current proposal does not include any potential changes related to depreciation reports, as those consultations are still underway.

Feel free to contact me if you have any questions.

Have a great weekend,
Roxanne

Roxanne De Souza
(she/her)
Senior Policy Analyst
Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
roxanne.desouza@gov.bc.ca | 236-478-1387

Offering gratitude to the Lekwungen peoples, traditional keepers of the lands on which I live, work and play.

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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www.udi.bc.ca

Agenda – May 19, 2022

Hon. David Eby, Attorney General, Minister Responsible for Housing

1. Follow-up from previous meeting

1.1. Income-testing by private developers of required below-market units

1.2. CMHC/BCH alignment

1.3. Paramountcy – Rick Ilich

2. Capacity Constraints

2.1. Issues Note

2.2. Provincial Approvals Memo

3. City of Vancouver

3.1. Broadway Plan

3.2. Commercial Vacancy tax

4. Next Meeting

Thursday, June 9, 2022 (in-person)

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To: **The Hon. David Eby, Q.C., Attorney General & Minister Responsible for Housing**
From: **Anne McMullin, President & CEO, Urban Development Institute (UDI)**
Date: **May 19, 2022**
Re: **Capacity Constraints**

Purpose

The introduction of municipal housing targets or other senior government measures may address the political nature of approvals and offer an environment for local governments to approve more housing faster, however, the next challenge will be to ensure the homes are built. Beyond the restrictive bylaws and political headwinds facing housing delivery, there are capacity constraints facing the industry that will need to be addressed in order to see widespread increases in housing delivery over the coming years.

In the memo below, we describe several of the key limitations on housing delivery which both slow the development process and increase costs. Many of these challenges have developed or increased over the past 18 months and are already present in the market, which remains constrained by a lack of approvals. This has not incentivized the industry to expand its capacity. If there is any kind of substantial increase in development volumes – as is required – these constraints are likely to intensify. There will not likely be an instantaneous increase in capacity, however addressing the constraints identified below and addressing delays in development review processes will accelerate the ability for the building industry to deliver the housing that is desperately needed.

Background/Discussion

Interest Rates

As the Bank of Canada is expected to continue to raise interest rates over the next year, there will be implication for development financing, in particular for rental housing. These changes, along with bond yield volatility, have an impact on capitalization rates (cap rates), which are a key part of rental pro formas.

As shown In Table 1, for a hypothetical project in Burnaby, changes in interest rate and cap rate assumptions result in the project requiring additional density to remain feasible or charging higher rents or a combination of the two. The density required to offset an increase in the cap rate above 0.25% exceeds an achievable Floor Space Ratio (FSR), which is often accommodated through additional height. Assuming a height constraint, additional rent would need to be charged to offset an increase in the cap rate. Both of these changes will ultimately impact viability, especially if the densities are not permitted by the municipality or the rents exceed what the market can bear at completion. Senior governments could also provide additional incentives to support rental delivery.

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Table 1: Cap rate sensitivity analysis – Development Site Burnaby

Central Burnaby SkyTrain Station Sensitivity Analysis			
Sensitivity (to maintain 15% Profit on Cost)	**Cap Rate**	**FSR Required to Maintain $3.35 Rent/SF**	**Cumulative FSR Increase**
Base Case	4.00%	9.0 FSR	
+ 25 BPS Cap	4.25%	25.0 FSR	+16.0 FSR
+ 50 BPS Cap	4.50%	N/A	N/A
+ 75 BPS Cap	4.75%	N/A	N/A
*N/A denotes that unachievable density is required to offset the increase to the cap rate			
Sensitivity (to maintain 15% Profit on Cost)	**Cap Rate**	**Rent/SF Required to Maintain 9.0 FSR**	**Cumulative % Increase**
Base Case	4.00%	$3.35	
+ 25 BPS Cap	4.25%	$3.59	+7.2%
+ 50 BPS Cap	4.50%	$3.79	+13.1%
+ 75 BPS Cap	4.75%	$4.00	+19.4%

Interest rate changes also impact financing, increasing development costs. Land carrying costs will become significantly more expensive, which is compounded by the lengthy approval process for new housing. With higher interest rates construction financing costs increase; at project completion take out financing becomes more expensive resulting in a decrease in the amount of debt a project can service. This means the rental developer now needs more equity to build the same project, has a higher mortgage cost, and needs to accept a lower return while simultaneously experiencing a loss in value because of the cap rate increases.

Rising interest rates and mortgage costs have the potential to jeopardize rental development, even for those participating in CMHC financing programs. For example, one rental project was recently required to supply an additional $14 million in equity to maintain its place in the CMHC Rental Construction Financing Initiative program. Very few developers would have the financial capability to provide a $14 million cash injection to a project that is at the start line for construction. Most developers would no longer be able to continue with rental projects if leverage requirements increased significantly thus limiting the number of entrants building Purpose Built Rental (PBR) housing.

These changes are occurring at the same time as CMHC RCFI affordability targets are set to double, requiring 40% of units to be offered at below-market rents. These changes make the programs less attractive given the rising costs in other aspects of rental projects.

Concurrent with rising rates, some banks have also increased the spread that they are charging for mortgages. After a period of limited five and ten-year market spreads, 2022 has seen spreads increasing, with the expectation that this trend will continue. Lenders are pricing the instability in the markets into mortgage rates, compounding the higher borrowing costs incurred for developments. This trajectory could erode the ability to finance new housing, in particular rental, causing developments to be paused, delayed or canceled all together.

Potential Solutions

- Ensure that senior government funding programs for rental housing provide options for interest rate protections that allow projects to fix financing rates earlier in the process. This will provide certainty and protection from future rate increases.

- Encourage government funding programs allow a fast and consistent process for term loan assumption in the event of a sale of a completed rental project at occupancy or within the initial term of the loan.
- Encourage increases in density/heights for rental housing projects.
- Improve accessibility of government funding programs for rental housing through increased funding with more flexible provisions.
- Tailor funding requirements to local markets, to ensure that those areas with high land and development costs are not excluded by onerous requirements.

Labour

Builders are facing a shortage of labour and trades throughout the development process. Labour shortages are also affecting other sectors across British Columbia. Census data released in May shows that, across all industries, the portion of workers approaching retirement age is increasing. The labour market is expected to continue to tighten, and unemployment in B.C.'s construction sector has already reached historic lows at 4.6%.[1] If residential construction volumes increase over the coming years, we expect to see shortages persist due to the lack of new entrants into the industry. BuildForce Canada projects that nearly 25,000 construction workers are expected to retire in the next five years in B.C.

This will make it difficult to increase development volumes if there is limited access to more skilled tradespeople, consultants, lawyers and qualified professionals, among others. This shortage will be exacerbated by the advancement of large government-led infrastructure projects, such as the Site C Dam, which draws on the same labour pool.

This strong demand for construction and development related positions paired with a shrinking labour pool will put upward pressure on wages, further increasing project costs.

Municipalities and the Province are also subject to this labour shortage. Developers often face delays related to slow response times by government staff, who are experiencing high volumes of applications. Further delays may occur due to staff turnover, which happens regularly as staff retire or move to other positions or other regions. It is in our experience that they are not typically being replaced by enough new staff entering critical fields. In Metro Vancouver, we understand that this may partially be attributed to a regional salary framework, and this is resulting in significant processing delays.

Potential Solutions

- Evaluate labour demand of infrastructure projects alongside increased development activity.
- Increase training capacity for skilled trades in B.C. through more funding for existing educational facilities and investments in new facilities focusing on underserved markets.
- Explore options to allocate portions of PTT funding towards education initiatives for skilled trades.
- Work with post-secondary institutions to increase scholarships and bursaries for students pursuing education in the trades, as well as professions involved in development applications and construction.
- Work with the construction industry to attract high school students into the sector and review including trades training in high schools.

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- Create a more robust equivalency framework to accredit non-B.C. or Canada trained professionals quickly.
- Advocate for increased immigration targets to include incentives for more skilled tradespeople and professions that could support the building industry.
- Support B.C.-led innovation in the modular and pre-fabrication construction sector as a form of less labour-intensive construction. Including funding for research, new facilities and training, and utilizing these products in Broader Public Sector projects – especially developments funded by BC Housing.[2]
- Increase salaries of government workers in key fields that process development applications to attract new entrants as well as review regional salary framework in Metro Vancouver. As noted in our memo on *Commentary on Improving Processing Times by Provincial Organizations*, our members would be willing to pay more in fees if the government development review timeframes are reduced.

Materials

Many of the construction materials needed to deliver new housing have been impacted by supply chain issues, and availability limitations as evidenced by the last 18 months. Inconsistent availability has resulted in much higher prices, affecting overall project costs, and in many cases, timelines. Statscan reports that nationally, the costs of key building materials including lumber, metal construction materials such as structural steel, windows, doors and other architectural metal products, electric wire, glass and concrete have all increased by varying degrees. Table 2 illustrates some of these increases.

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Table 2: North American Product Classification System (NAPCS) Cost Change – Construction Materials

	Annual Change (%) Q1 2021-Q1 2022	Quarterly Change (%) Q4 2021-Q1 2022
Total, Industrial product price index (IPPI)	*20.2*	*11.3*
Plastic and foam building and construction materials	25.6	-0.2
Lumber and other sawmill products	**29.4**	**55**
Hardwood lumber	30.3	11.2
Softwood lumber	**51.7**	**71.4**
Wood trusses and engineered wood members	**43.4**	**36.7**
Motor gasoline	**57.4**	**41.9**
Diesel and biodiesel fuels	**71.2**	**57.8**
Asphalt and asphalt products	34	16.1
Metal building and construction materials	**40.2**	**2.8**
Fabricated steel plate and other fabricated structural metal	27.7	5.3
Metal valves and pipe fittings and enamelled metal sanitary ware	9.6	9.4
Metal windows and doors	29.3	3.6
Other architectural metal products	62.1	-0.7
Electrical components	**39.1**	**12.4**
Communication and electric wire and cable	**84.1**	**29.7**
Concrete products	3.7	-2.7
Glass and glass products	10	0.7
Cement	4.8	1
Ready-mixed concrete	9.8	6.9

Source: Statistics Canada. Table 18-10-0266-01 Industrial product price index, by product, monthly

Fuel prices are also impacting overall construction costs, as contractors surveyed by Statscan indicated they were charging higher prices to account for the increased costs of transporting material to sites. Year-over-year these costs are increasing steadily, Statscan's recent report notes that across the country, *"Building construction costs for residential construction in the 11-CMA composite rose 22.6% year over year in the first quarter of 2022, surpassing the high (+21.9%) registered in the previous quarter."*
Not all projects are able to absorb these higher costs once their land cost, hard costs and soft costs are fixed and/ or pre-sales are secured. Continued cost escalation will result in decreased project viability for some sites, slowing the ability of the sector to deliver new housing.

In addition, the limited availability of specific materials (i.e., triple glazed windows, low-carbon cement, and heat pumps) may make meeting energy efficiency/low carbon requirements cost prohibitive. "Green" building policies (i.e., higher steps of and changes to the *B.C. Energy Step*

Code and upcoming embodied carbon regulations) are adding further complications to projects and limiting which materials can be used, until there is widespread market adoption, there will continue to be a premium payable for many of these materials.

Potential Solutions

- Reduce PST burden on construction materials that are necessary for housing construction.
- Increase local manufacturing capacity for building materials/equipment (e.g., heat pumps) through an industrial strategy.
- Develop government-led procurement programs to bulk-source certain products that are in high demand but may have inconsistent availability (e.g., heat pumps).
- Incorporate innovative materials (mass timber, low-carbon cement) into modular construction facilities and training.
- Apply a housing affordability lens to the development and timing of emerging provincial and municipal green building requirements, to ensure a balanced approach is adopted that achieves the key climate and housing goals of the Government.

Provincial approvals

Several ministries have permits or approval processes that interact with development applications, including the Ministry of the Environment and Climate Change Strategy, Lands, Waters, & Resource Stewardship, and the Ministry of Transportation and Infrastructure. These three ministries have chronically delayed applications, resulting in added cost and complexity for housing and employment generating developments.

UDI makes several recommendations in our accompanying memo *Commentary on Improving Processing Times by Provincial Organizations.*

What does this mean for housing costs?

These constraints will ultimately increase costs for builders to deliver housing once approved. Some of these costs may be passed on to buyers and renters, but housing prices are set by the market, and there is a ceiling with respect to what can be paid as projects become unviable. For affordable housing delivered as part of housing covenants with municipalities, rents/prices are further capped by the terms of the covenant and held below market putting more strain on projects unless there are density offsets and other potential mechanisms such as fixing or eliminating operating costs and / or taxes.

Prices for inputs required to build housing – land, materials, labour and financing – are also set by their respective markets. Builders are price-takers, meaning that as costs escalate, margins for builders are compressed and a project will become unviable when these margins are no longer sufficient to cover the risk anticipated to take on the development process.

Smaller margins and higher equity requirements will also result in fewer developers being able to participate in the delivery of housing. Larger companies with extensive portfolios will have enough equity, however, smaller developers who cannot afford higher wages or rely on the completion of one project to finance subsequent investments may be priced out. In a market already constrained in its ability to deliver housing, it is critical that these higher costs not become barriers, further limiting the amount of housing that can be delivered. We expect that some costs,

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like wages, will increase to attract more workers to the industry, however ensuring those increases are more predictable will benefit housing delivery.

We expect that this will be most difficult during a transitionary period as municipalities adjust to new, and higher, housing expectations, but have not yet streamlined their processes.

Recommendations and Conclusion

We have identified several key constraints that have the potential to limit the development sector's ability to deliver the increased housing that is desperately needed in B.C. Many of these issues will require solutions that involve multiple levels of government as well as other sectors. While UDI has outlined several detailed solutions in the accompanying memo on Provincial processes, more work is needed to develop solutions addressing many of the issues raised above.

We would be pleased to continue to work with the Province on these issues, however we recommend that there be engagement with other sectors and associations, who are knowledgeable and more directly involved in current and future constraints in the areas of skilled trades shortage, material availability, and innovative construction.

[1] BuildForce Construction and Maintenance Looking Forward, 2022-2027, Highlights, British Columbia

[2] For example – Companies like Intelligent City and ACQbuilt are developing new construction methods that will increase the speed of housing delivery.

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To: **The Hon. David Eby, Q.C., Attorney General & Minister Responsible for Housing**
From: **Anne McMullin, President & CEO, Urban Development Institute (UDI)**
Date: **May 19, 2022**
Re: **Commentary on Improving Processing Times by Provincial Organizations**

Purpose

Several ministries and organizations have permits or approval processes that interact with development applications, and have chronically delayed applications, resulting in added cost and complexity for housing and employment generating developments. Sometimes Provincial processes exceed the timeframes of municipal ones.

If the Province were to impose targets or mandates for improved processing timeframes on municipalities, it would be critical that the development review timelines of these ministries and organizations also improve in lockstep as these organizations are a critical path for the overall timeframes of municipal approvals. In response to communications from the Province regarding the need for (and potentially mandating) faster development review timeframes, the Union of British Columbia Municipalities and local government officials have already indicated that Provincial application reviews are also taking much longer.

UDI has several recommendations to assist the Province with its review of its processes that can improve development processing timelines for the Ministry of Environment & Climate Change Strategy (ENV), Ministry of Forestry, the Ministry of Transportation & Infrastructure (MOTI), and B.C. Hydro as well as other Provincial ministries and organizations.

Background/Discussion

UDI recommendations include adding more resources; utilizing professional reliance and technology; improving the development of requirements and processes and consultations with industry; and better integrating Provincial and local government processes.

Increasing Resources

Departments tasked with reviewing and evaluating applications are often chronically understaffed. As such, **UDI recommends that the ministries involved in implementing provincial regulations on development retain more staff to process applications**. Staffing levels have not caught up to the increased development activity or the added Provincial regulations on development. For example, new regulations have in part led to a 60-80% increase in applications/reports for ENV approvals on brownfield sites that are also taking longer for the Ministry to review - resulting in our members facing up to 15–17-month delays.

Our members would be willing to pay additional fees to have faster processing times because holding costs and risks increase the longer projects are stalled from moving forward to the construction stage. In 2020, Altus found in a study they conducted for the Building Industry & Land Development Association in Toronto that delays increased the cost for high-rise projects by $2.21 per square foot/month. While our members would be willing to pay more in Provincial fees, it is critical that the additional monies going towards processing improvements and are not diverted to other areas. This would also need to be demonstrated through the digital tracking/transparency measures noted below.

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Another UDI recommendation is to increase professional reliance – especially for issues that are not critical to human health or have potential significant environmental impacts. Even in instances in which professional reliance is allowed, some ministries are reviewing the materials submitted by professionals, instead of fully utilizing randomized audits, which is creating unnecessary delays.
As Attorney General, we understand that you have and are taking steps to improve the oversight of qualified professionals by regulatory bodies through the *Professional Governance Act*. With this enhanced review and enforcement of professional standards, the Province needs to consider the option of allowing more work to be completed by qualified professionals (especially for minor issues) and when this is allowed, having ministries audit some submissions – not all of them. If there are issues that arise, these matters should quickly be reported to the governing bodies of those specific professions.

For contaminated sites, the ENV helped established the Contaminated Sites Approved Professionals Society (CSAP Society), which is an independent professional organization mandated to review environmental certification applications under the *Contaminated Sites Regulation* (*CSR*). CSAP professionals manage non-high-risk sites. This model potentially could be used as a model for other Ministries to employ. For the ENV, the scope of CSAP services could be expanded to other technical services the Ministry conducts in-house, for which there are currently long waits.

UDI recognizes that there is still an overarching problem regarding the lack of professionals available to the Province and the private sector to hire, and this issue is addressed in our accompanying memo on *Capacity Constraints*.

Digitization, Tracking and Transparency

UDI was very supportive of the Ministry of Municipal Affairs' $15 million *Local Government Development Approvals Program* to assist municipalities in their efforts to improve their approval timeframes. We even supported individual local government applications. Many used the Provincial funding to digitize their development review processes to improve transparency (i.e., applicants can see where their projects are in the process) and to better track where, when and why delays are occurring. Common problems and bottlenecks in development reviews can then be identified and fixed. This includes potential issues with submissions by applicants/consultants or delays in their responses.

UDI recommends that the Province make similar investments in digitization and tracking software for ministries that review development applications to help identify roadblocks in the processes of Provincial agencies and ministries as well as the number of and reasons for applications being rejected. Ideally, Provincial ministries would utilize the same systems, or have systems that can share information as there are overlapping regulations for some sites.

Digitization may also solve another problem that both UDI members and local governments share – the inability to reach Provincial staff regarding applications in some ministries. As noted above, these software programs have the ability to provide information on where applications are in the process and which staff are reviewing them that would assist both proponents and local governments. The latter issue is critical as often there can be multiple file managers for a project

when there are extended timeframes. However, ministries would need to be more transparent and allow better access to their employees.

Regulatory Changes

Many Provincial processing issues arise because of how regulatory changes are developed. There is usually little understanding by provincial regulators and the building sector about how new requirements will impact housing development and application reviews. As noted above, part of the reason the ENV has seen an 80% increase in applications is related to this issue. Our members were surprised by the *WSA* changes and their impacts on projects because there was little consultation with our industry when the former ministry of Forests, Lands, Resource Operations and Rural Development (FLNRORD) took over the implementation. The Ministry was surprised as well, and this led to backlogs of 18 to 24 months for applicants and continue to have extended review times.

There have been instances when there has been very little consultation with industry on substantial changes to policies, processes and testing protocols. For example, the ENV released ten draft protocols for soil remediation on November 27, 2020 and asked for comments by January 11, 2021, and the protocols came-into-force on February 1, 2021. This is not the first time this has happened with the Ministry, and they have indicated in the past that documents being "… *posted for 30 to 60 days … is common practice across government*." This may be reasonable if it were one or two documents – however ten technical draft protocols being released for a 45-day review during a pandemic and over the December Holiday periods is not appropriate consultation, or enough time for the sector to understand the cost implications. Nor is it appropriate notice when they come-into-force three weeks later. Due to the short timeframes for notice of these changes, there were significant cost and scheduling implications for our sector and the Ministry which led to the backlog noted above.

In addition, little information is provided by ministries regarding the regulatory impacts of their proposals – or the potential delays for development applications. We understand that some of this information may be shared with Government, but there is little consultation with our sector on these critical impacts to housing costs and timelines.

UDI has recommended in the past that ministries consult with key stakeholders before draft documents are issued and that they stagger the consultations if there are many technical protocols requiring review. The ENV had extensive and early consultations with the key stakeholders on the soil relocation policy, which allowed for substantial improvements to it as well as providing our membership with early notice.

Alternatively, we also supported the idea of having them all be addressed (i.e., omnibus changes) through larger consultation processes – with timeframes that are much longer than thirty to sixty days. In 2015, the Ministry of Environment proposed updating the *CSR* every five years, and UDI endorsed this approach. Having these set times for regulatory updates would allow the industry to prepare for and contribute meaningfully to proposed changes. However**, this also needs to include guidelines, protocols, and other documentation.**

Ministries should also share information during their consultations about the regulatory impact (both in costs and timeframes) of their proposals, so the full extent of the changes are

understood and can be discussed. For example, ministries need to be asked how application review times will change as a result of the proposals, and if they are longer, how they need to be resourced to maintain current review timeframes. **This needs to be tracked after the regulatory changes come-into-force** (see above). In some instances, there would be a benefit to piloting proposed changes to regulations using real-world projects such as those in the broader public sector and B.C. Housing. The unintended consequences of regulatory changes are difficult to predict, especially when they are tied to other variable processes (e.g., municipal permits).

It is difficult for builders and the whole industry to adjust financial arrangements after land is purchased early in the development process. If new costs or risks are introduced afterward, projects can become unviable, or rents and house prices have to increase; both would undermine housing supply and affordability. The above approach addresses this by providing regulatory stability and reducing risks. Proponents could be certain that the rules would not change substantially until the next cycle. Longer consultation periods would also increase the notice period of upcoming changes, so builders could prepare for the changes, and adjust their bids on development sites. **Including grandparenting provisions would be helpful to the industry, and would protect projects from significant mid-process regulatory changes, which result in proponents incurring additional costs, testing and delays.**

UDI recognizes that there may be instances when new information arises that demonstrates potentially significant impacts on life safety, human health and environmental protection. In these instances, regulations should be adjusted. However, appropriate consultation is still needed.

Ongoing Consultation

In addition, UDI also recommends ongoing meeting between ministries that regulate housing development and industry (and in some cases local governments) to address any ongoing implementation issues. The Ministry of Municipal Affairs has established an ongoing *Development Approvals Process Review* (*DAPR*) initiative that includes municipal officials, builders, consultants, and other stakeholders. ***DAPR* could be utilized to assist ministries to improve their approval timeframes and the coordination between municipalities and the housing sector – including the issues noted in the next section.**

In the absence of this, we ask that the Ministry of Housing convene a quarterly standing committee with relevant ministries, municipal officials and industry stakeholders to address ongoing issues with Provincial processes. Ministries such as Forestry are not as familiar with urban issues, so having this dialogue would be helpful. We recognize that these meetings should not be one-way conversations about industry complaints. They can also allow ministries to outline their issues with municipalities and applicants (e.g., common mistakes on submissions). The Ministry can also receive market updates from our members and local governments, so Provincial officials understand future workloads.

Better Integration of Municipal and Provincial Processes

There may also be benefits with better integrating municipal and provincial processes in two different ways. Provincial ministries and organizations should be more involved in municipal area plans – especially in high growth urban areas – as these establish where substantial growth will be occurring. Last year, Surrey developed an Area Plan for Dart Hill, but did not consult BC Hydro, even though the plan included incentives to fully electrify buildings. If BC Hydro is

unaware of changes that could impact their current and future infrastructure, development delays can occur, and costs can increase. **We recommend that BC Hydro be involved in municipal area planning processes especially with new housing projects requiring more power for electric vehicle charging and building electrification.**

It may also be worth exploring other ministries being involved in area planning. For example, additional background soil assessments could be conducted that may make it easier for proponents to obtain ENV approvals for brownfield sites as well as help with upcoming soil relocation regulations. Perhaps, some *WSA* and riparian area issues such as streamside setbacks and classifications could be resolved or understood to speed up approvals.

The Province may want to potentially review providing funding for studies when critical Area Plans occur that would support these efforts. If it can be demonstrated that Provincial (or municipal) review timeframes can be reduced, builders may also be willing to cost share some of these studies through higher planning fees.

UDI would also like to explore the benefits of a standardized municipal planning process as is the case in Ontario. We have heard from some Provincial officials that it is difficult to integrate their requirements in widely divergent municipal processes where local government requirements occur at different stages, and some key steps such as Development Permit or Occupancy Permit do not occur in all communities. A standardized municipal planning process would address this concern as well as make it easier for builders, consultants and municipal staff to understand and navigate each municipalities development review process as well as compare the processing metrics of local governments. Please note that municipal policies should be allowed to vary, but the processes could be standardized.

In the past, **UDI has recommended that the Province establish growth projections for British Columbia and its regions**, which could then be used to establish growth projections for municipal *Housing Needs Reports* and housing targets. **This information would be equally useful for Government ministries/organizations involved in development applications**, so they understand future workloads and can plan for them. It is also critical that the information ministries use is consistent with what municipalities and the industry expect. Contradictory information will lead to confusion – especially for the public – who are being asked to be more accepting of growth.

Recommendations and Conclusion

In order to address the issues involving Provincial processing times by Provincial organizations, UDI recommends that:

- The ministries involved in implementing provincial regulations on development retain additional qualified staff to process applications;
- Ministries increase professional reliance;
- The Province make similar investments in digitization and tracking software for ministries that review development applications;
- Ministries consult with key stakeholders before draft documents are issued and that they stagger the consultations if there are many technical protocols requiring review;
- Changes be addressed (i.e., omnibus changes) through larger consultation processes – with timeframes that are much longer than thirty to sixty days;

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- Ministries share information during their consultations about the regulatory impact (both in costs and timeframes) of their proposals;
- Grandparenting provisions are included, as they would be helpful to the industry, and would protect projects from significant mid-process regulatory changes, which result in proponents incurring additional costs, testing and delays;
- Ongoing meetings occur between ministries that regulate housing development and industry (and in some cases local governments) to address any ongoing implementation issues;
- The Ministry of Housing convene a quarterly standing committee with relevant ministries, municipal officials and industry stakeholders to address ongoing issues with Provincial processes;
- That B.C. Hydro be involved in municipal area planning processes especially with new housing projects requiring more power for electric vehicle charging and building electrification; and
- The Province establish growth projections for British Columbia and its regions for both local governments and Government ministries/organizations.

RE: Energy Step Code Council Meeting follow-up questions

From:	Jeff Fisher <jfisher@udi.org>
To:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc:	Verna Yu <vyu@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>, Cassandra McColman <cmccolman@udi.org>
Sent:	May 19, 2022 4:39:38 PM PDT
Attachments:	image001.png, image003.jpg, image005.jpg, image006.jpg, image002.jpg, image004.jpg

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Thank you

Also, I would be interested in participating in the Best Practices Guide Committee.

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: May 19, 2022 4:27 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Verna Yu <vyu@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra McColman <cmccolman@udi.org>
Subject: RE: Energy Step Code Council Meeting follow-up questions

The slides I sent yesterday can be shared with the building code committee. Tiffany, Scott and I are meeting at 4:30 and we can discuss sending the technical slides along, too. I think it should be OK.

I'll ask about the webinar. We've got some requests from the LGPN, too. I hope we can make it.

Thanks for coming today. Really appreciate it.

H

From: Jeff Fisher <jfisher@udi.org>
Sent: Thursday, May 19, 2022 4:25 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra McColman <cmccolman@udi.org>
Subject: Energy Step Code Council Meeting follow-up questions

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Hugo, will you be sharing the slides from today's presentations? If you are, can I share them with our Building Code Committee?

Also, UDI would be interested in hosting a webinar with BSSB after the consultation begins in June. We are no longer holding Breakfast Seminars due to COVID-19, so it would be a webinar. We would invite our Fraser Valley, Okanagan and CRD Chapter members to participate in it as well.

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RE: Energy Step Code agenda and PPT

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: May 27, 2022 1:40:03 PM PDT

Jeff is referring to the revised Step 2 TEUI metrics for commercial and office occupancies. There is now increased stringency based on analysis done in comparison with NECB 2020.
Should these come into force for December of 2022 and if BP is submitted prior to the effective date then the applicant would follow the current requirements, if submitted after, then they would be required to follow the new requirements. This is mainly a concern for projects where design is underway and they are designing to current code requirements, but may not be able to submit for BP prior to the effective date.
Not much we can do here except broadcast the changes in advance. It would be best if we were able to have sign-off from the Minister months in advance for December 2022 so that everyone has a clear understanding of what is expected when it comes into effect.
At this stage, best case scenario is September/October sign-off.

From: Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
Sent: Friday, May 27, 2022 11:41 AM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: RE: Energy Step Code agenda and PPT

Hi There:

Regarding this comment from Jeff:

> *We will also have to figure out what happens with in-stream applications. It is hard to adjust designs and financial commitments late in the process, and this change may impact Part 3 commercial/mixed use builders of Step 2 buildings if in the middle of their development review process, the target changes. I think we may have to consider grandparenting provisions for development applications (e.g., rezoning, DP, and BP).*

I suspect that this is something beyond our control. Once the BCBC amendments come into force, they are the law. Local government that adopt the Carbon Pollution Standard could say it doesn't apply to in-stream applications since it is voluntary. For the energy efficiency amendments, I think that the local government would have to decide to not enforce the BCBC in that regard. Also, wouldn't it only affect Part 3 builders of Step 1 buildings (and prescriptive?) as Part 3 is only shifting to Step 2.

Tracy

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Thursday, May 26, 2022 6:17 PM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
Subject: FW: Energy Step Code agenda and PPT

FYI. Will read in more detail on Mon.

From: Jeff Fisher <jfisher@udi.org>
Sent: Thursday, May 26, 2022 5:23 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: Energy Step Code agenda and PPT

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Hugo, regarding the proposed changes, we have several comments.

We generally support the approach being adopted to increase the TEUI numbers for office and retail. However, as part of the consultation package, it will be important to identify what the cost changes will be, so our membership can provide commentary as this could be a concern.

We will also have to figure out what happens with in-stream applications. It is hard to adjust designs and financial commitments late in the process, and this change may impact Part 3 commercial/mixed use builders of Step 2 buildings if in the middle of their development review process, the target changes. I think we may have to consider grandparenting provisions for development applications (e.g., rezoning, DP, and BP).

Information on the costs of the various GHGi steps also has to be shared in the consultation. This is critical now because of rising construction costs. In addition, the BC Hydro issues that have raised need to be addressed in the consultation:

- The Tier 2 Rate Structure;
- The connection fee issue in which the builder whose project passes the BC Hydro capacity threshold has to pay for electrical infrastructure upgrades for their project and future ones (this will become more prevalent with EV charging requirements being added to building electrification);
- The need for BC Hydro to be more involved in Area Plans because the importance of their infrastructure;
- The need for BC Hydro to support solar options; and
- Supply chain issues for heat pumps, VRFs, HRVs, etc..

The timing of the changes is also critical as some of my members want to ensure that the industry (especially trades/materials) is ready and local governments who will need to train staff about the new requirements. This will be an even larger issue outside of Urban Centres. One of my members pointed out that education will be critical as "*One of the biggest issues with the step code is urban design & planning staff, along with Councils asking for complex urban forms, stepping buildings, etc. all of which work against the intent of the policy*."

I understand the angst that some of the members of the Energy Step Code Council had towards allowing prescriptive standards to meet the *ESC* requirements and the GHGi requirements. However, there are legitimate issues for Northern and remote communities that need to be addressed. My members do not build in these areas, but I am concerned about how the *ESC* may be viewed in areas if we force requirements that do not work.

For the *ESC*, prescriptive requirements should be allowed in areas where there are no AHJs for now. Have you identified the communities without modellers or airtightness testers? If you have, these communities should likely be allowed to use the prescriptive requirements for the *ESC*, until modellers/testers are available. If you don't know, we should allow communities to request the ability to utilize prescriptive requirements. However, the criteria for BSSB saying yes to the request should be linked to the number of modellers/testers in the community, and if the number improves, the prescriptive requirements could then be eliminated.

Regarding GHGi in Northeastern BC where the electrical utility has a high emissions factor, it is not clear to me that Part 3 builders (although there may not be any Part 3 buildings there), and Part 9 builders (even with the prescriptive option) would be able to meet the requirements. The Province may have to focus on improving the emissions factor for the electrical utility or utilize RNG to lower GHGi.

Can we defer the decision on the RNG until the BCUC decision is handed down, or message that the recommendation to allow local governments to determine whether RNG can be used may be amended after the BCUC decision is released? I understand that RNG cannot be used now because there is no mechanism to tie the use of RNG to the life of the building (unless electricity is used instead). However, if this changes, I think further discussion is needed – especially when the Province begins establishing its own targets. This discussion would need to include the future supply levels of RNG as this is another municipal concern.

With regard to DE, having utilities establish their own carbon intensities is a well established practice. Until there is more integrated GHGi accounting/reporting this should remain the case. However, the Best Practices Guide will need to reflect municipal policies on GHGi will have to align with those emission factors. As noted above, the requirements must work. Builders cannot be expected to build a low carbon home if the energy being used has a high emissions factor.

If you have any questions, please do not hesitate to contact me.

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: May 18, 2022 5:27 PM
To: bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; Jeff Fisher <jfisher@udi.org>; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; Maxwell.Sykes@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; mark@bernhardtcontracting.com
Cc: Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>; lise.townsend@surrey.ca; Grass, William OHCS:EX <William.Grass@gov.bc.ca>; Remi Charron <rcharron@bchousing.org>; Cuttler, Rebecca <Rebecca.Cuttler@bchydro.com>; Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>; Rebecca Cuttler <rcuttler@communityenergy.bc.ca>; Li, Charling <charling.li@vancouver.ca>
Subject: Energy Step Code agenda and PPT

Hello, attendees for tomorrow's Energy Step Code Council meeting:

Attached is a PowerPoint and agenda. Looking forward to it!

Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
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Email: hugo.wong@gov.bc.ca

Energy Step Code Council Meeting
Notes

Date and Time of Meeting: Thursday May 19, 2022 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Acting Chair: Tiffany Warkentin, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

1. Bea Bains, FortisBC
2. Patrick Caraher, Aboriginal Housing Management Association
3. Madeline Dams, Ministry of Municipal Affairs
4. Maya Chorobik, Community Energy Association and Local Government Peer Network Co-chair
5. Norm Connolly, City of Richmond, Planning Institute of BC rep, Part 3 Subco Co-chair
6. Madeline Dams, Ministry of Municipal Affairs
7. Patrick Enright, City of Vancouver
8. Catherine Ernst, Building Officials' Association of B.C.
9. Jeff Fisher, UDI
10. Maura Gatensby, AIBC
11. Chris Higgins, City of Vancouver
12. Pete Koepfgen, FortisBC
13. Toby Lau, BC Hydro and P3 Subco Co-chair
14. Wilma Leung, BC Housing
15. Megan Lohmann, CEA and UBCM rep
16. Richard Mathews, Part 9 subco co-chair
17. Mary McWilliam, BCIT & CBC Subcommittee Co-chair
18. Katherine Muncaster for Nat Gosman, Ministry of Energy, Mines and Low Carbon Innovation
19. Roberto Pecora, ZEBx at ZEIC
20. Harshan Radhakrishnan, EGBC
21. Kelly Reid, HKR Builders/CHBA BC
22. Ron Rapp, HAVAN and P9 subco co-chair
23. Pauline Rupp, CHBA-BC
24. Joe Hart, CHBA-BC
25. Lise Towsend for Maxwell Sykes, City of Surrey/UBCM Rep
26. Ralph Wells for John Madden, University of British Columbia
27. BSSB: William Grass, Aura McRae, Hugo Wong, Senior Policy Analysts; Scott Williams, Senior Codes Engineer
28. **Guests**: Tom Berkhout, BC Hydro; Mark Bernhardt, Bernhardt Contracting; Remi Charron, BC Housing; Nicholas Heap, City of Richmond, Charling Li, City of Vancouver, Adrian Mohareb, CAS;
29. **Regrets**: Dale Andersson, CBC Subcommittee Co-chair; Ian Cullis, BCNPHA; Katy Fairley, BCCA; Jason Jung, ASTTBC; Lisa Mak, BC Hydro; Richard Mathews, Squamish and Part 9 Subco co-chair; Sean Pander, City of Vancouver; Tyler Wightman, BOABC; Guido Wimmers, UNBC

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
1 p.m.	Welcome, introductions and opening remarks	Tiffany Warkentin, Acting ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Approval of agenda
1:10 pm.	Subcommittee report out	Co-chairs	▪ Part 3 and Part 9 Non-Residential ▪ Part 9 Residential ▪ Local Government Peer Network ▪ Communications and Capacity Building Sub-committee
1:30 p.m.	20%-better for Part 9 and Part 3 buildings	Hugo Wong, Tiffany Warkentin, Scott Williams, BSSB	▪ Policy and technical overview of 20%-better energy efficiency
2:30 p.m.	Break		
2:40 p.m.	GHGs for Part 9 and Part 3 buildings	Hugo Wong, Tiffany Warkentin, Scott Williams, BSSB	▪ Policy and technical overview of carbon pollution standard
3:25 p.m.	Best practices guide topics	Hugo Wong, BSSB	▪ Establishing a working group, collecting feedback

3:30 p.m.	Roundtable	All	▪ Open discussion of Energy Step Code implementation in your area
4 p.m.	Adjournment	All	

Welcome, Introductions, and Opening Remarks (Tiffany Warkentin)

20%-better for Part 9 and Part 3 buildings

Policy discussion

- Opening PowerPoint by Hugo Wong, attached.
- CHBA: Some building science concerns with prescriptive approach. U-values for windows are too low. Could see moisture problems with inexperienced builders looking to up R-values for walls. Also might give free pass to homes for large, highly articulated homes with lots of glass. Suggest having energy model only and AHJ inspecting as best they can, with no air test, so builders can at least get close.
- In response to UDI question about amount of information sessions about new code language, BSSB will do large multi-sector group events online.
- BC Housing: Introducing prescriptive code requires numerous last-minute changes to our builder education. Also concern that while there is no plan to include prescriptive backstop for Step 4, we may be at this point again in 2027 when Code steps up again.
    - BSSB: Federal funding and mandatory licensing will help education and capacity. Pushing the market in some other ways.
- Mark B: Advocate for higher prescriptive values so builders would actually choose an EA over this. In urban areas where EA market is flooded, they might choose this still instead of an EA. Agree that requiring higher U-value windows, HRVs, sub-slab insulation is low-risk, but more insulated walls are risky if builder is not educated.
- Joe: In CZ6 we're already doing what you suggest in the prescriptive. Maybe need a few hundred dollars more attic insulation. Not enough incentive. Builders want reassurances that Step 3 is not scary and cost-effective. Suggest prescriptive code option should cost the average builder $5k more as an effective deterrent.
- CoV: Also agree with improving transparent envelope first. VBBL minimum is U1.2 for all projects, U-1 for over 30% glazing in homes. Prescriptive and performance path exist in Vancouver, but prescriptive is full electric.
- Comment: Clarify whether LGs have option to go prescriptive or performance, or is it developers/builders who choose. Include in implementation guide.
- BSSB: Wanted to balance having an onerous enough prescriptive option to dissuade builders with EAs close by. Was written to make it more onerous in warmer climate zones so they default to performance.
- ZEBx: Consider keeping energy modelling but no blower door test. Could subcontract?
- BSSB: Remote energy modelling would not follow EnerGuide Rating System without in-person blower door test or verifying model is as constructed.
- Building inspector, City of North Van: Concerned local governments that have already adopted the Step Code and done training on the performance path will be negatively affected by

prescriptive path. Step Code has reduced building inspection due to EAs taking up some of that work, and sped up permit processing. LGs rely on EAs and their reports. This is a step backwards.

Technical discussion, Scott Williams

- PowerPoint by Scott Williams, see attached.
- Point taken on unintended durability consequences of increased RSI-value of walls.
- Question on how "final" these Code tables are. Still open for discussion
- Consider a certain perm rate, something a building inspector could oversee. Exterior insulation does increase cost, which may be desirable if wanting to incent builders to choose the performance path.
- CHBA: Can we consider the VBBL as the baseline for CZ4? That's higher than what BSSB proposed, but for a starting point, try that.
- Kelly: Agree; windows are low-risk with significant costs but big benefits. Unheated floors, having that as a requirement/ Low-risk, high benefit.
- CHBA: A TRC member said you shouldn't be able to opt out of having an HRV on the prescriptive path if you choose heat pump.
- BC Housing: Can a muni opt-out of prescriptive if they've worked hard to build it up in their area?
- TW: Will compile that feedback for the Minister's consideration.
- Richmond: Huge step back if we have prescriptive backstop. Don't want to turn our backs on airtightness and modelling as we agreed that's where industry needed to go.
- AIBC: Disturbed by this. Very regressive to move away from the performance path we agreed on. We do not support the prescriptive option.
- Mark B: Also agree with Richmond. VBBL base code is still higher than this, which creates a $5-10k increase that might dissuade someone who has access to EAs from going the prescriptive route.
- CAS: Could we just have Step 3 as an option but no airtightness testing?
- Joe: I appreciate it's hard to do one size fits all for the Province. I worry by helping out very few builders in the far north who need it, you've opened the door to everyone unnecessarily. Can we not regionalize this?
- TW: Not just for builders in far north, but Gabriola, Haida Gwaii, etc.
- Questions on whether local governments could opt in or out. Hard to maintain or administer. Builders still obligated to comply enforcement or not.
- Richmond opposes the current prescriptive proposal.

BREAK

20%-better for Part 3 buildings

Technical presentation and discussion, Scott Williams

- PowerPoint by Scott Williams, see attached.
    - Overheating, future of ASHRAE 90.1 and 62.1 to be discussed in 2023.

- “Reserved” is a code convention to retain existing numbering.
- Toby and Adrian like that work plan.
- Questions on GHGs:
    - The proposal to date would mean all columns of the GHG table would open to all builders. Performance or prescriptive.
- Surrey: Appreciate GHGI and carbon cap. GHGIs seem aligned with what LGs were asking for. Curious about the 1.8 instead of the 1.5, but minor overall. LGs recommended an electrification approach. Having seen the fuel neutral approach, and seeing tables like this for a decade, disappointed that this is still limiting our ability to respond on a scientific basis to the climate crisis. I understand the political issues of this. Given that, I suggest prescriptive decarbonization approach to just be eliminated. Regarding the prescriptive approach for efficiency, I have concerns on how it can be enforced, and if it is defensible as a true decarbonization approach to meet climate targets.
- ZEBx: Question on emissions factors: If you decarbonize, what emissions factor would you use? Does it reflect the molecules in the pipe or the ratio you pay for?
- BSSB: The amount you pay for. Modelling ruleset will have guidance. Wanted something readily usable by industry, hence CoV Energy Modelling Guidelines. The GGIRCA figure is still settling, and the national figure is also fluctuating. We need something for right now, a familiar figure, acknowledging that shifts will come.
- LGPN GHG working group agrees on an electric-only prescriptive path. It’s simpler to check and confirm compliance. Current decarbonization approach is fuzzy.
- CoV: Emissions factor from CoV is from 2018 PSO methodology, with slight correction for natural gas. Don’t have a figure for RNG specifically. A mention of purchased renewable energy that could be treated as zero. Could have further discussions on this.
- Richmond: Part 9 prescriptive GHG option was based on LG request for electrification pathway that was easy to regulate. What we see doesn’t fit the bill. Let’s just drop it again, back to where we started, performance options, which is fine.
- LGPN: Does a fuel neutral code mean every path has to be fuel neutral? RNG could meet the performance path. If we have a pure electric path, could that not be counted as fuel neutrality provided RNG could still use the performance path? Electric-only is straightforward, easy for LGs to enforce.
- BC Housing and Surrey: Agree.
- Kelly Reid: I actually like the proposal as written.
- FortisBC: At end of the day, ultimate objective is to achieve provincial emissions target, and the only way to do that is with all options on the table. That means decarbonizing the gas supply.
- LGPN: RNG would modelling would be onerous on the AHJ to understand whether the requirement is met. Not a compliance aspect within scope in stretched building departments. Smaller LGs seeking to lead are most interested in electric pathway. RNG could be included in the performance pathway, because another entity does the check. On prescriptive, its fully on building officials.
- FortisBC: Understand that compliance checking is onerous today, but the BCUC decision could result in the RNG following the building, not the customer. We expect a decision on our proposal at the end of the year or Q1 2023.

- Robyn: I like the creative solutions and the frankness. Maybe opt-in only for municipalities under 5,000? Could be an elegant way to not make it a wide-scale regressive action. So great to see this concrete proposals. There will be a bunch of updates to training materials and guides that will need to happen. We can work with CBCSC group on later so we have training and information to builders, developers, architects.
- BCIT: Training providers will need to update their materials; changes discussed today will have big impacts. The sooner decisions are made the better.

Roundtable

- UBC: Glad GHGI is moving forward. Neighbourhood low-carbon strategy happening for Point Grey campus. No commitments yet, but hoping to do early adoption of the zero-carbon ready target for that neighbourhood. We are also involved in lots of work on future-shifted climate and overheating issue. Adopted some requirements both residentially and institutionally.
- Joe Hart: Good news story: At our event in Prince George last week, instructor of basic carpentry courses for first-year apprentices in Dawson Creek is including Step Code in training. We've been saying forever: tell apprentices from the start. Some people are doing that.
- TW: Terrace building official says they have an EA in their community now.
- Kelly: Capacity issue wasn't nearly as bad as we anticipated. Many concerns some years ago, but not as many as we expected now.
- CoV: Really excited on the GHG work provincially and glad the CoV GHGIs in Part 3 line up with your Low option exactly. Seems like we're almost there.
- EMLI: Better Homes new construction program is open again!
- TW: Thank you for your candor, respect, and passion. Send any pre-public review comments to TW.

Adjournment

Housing Supply Act

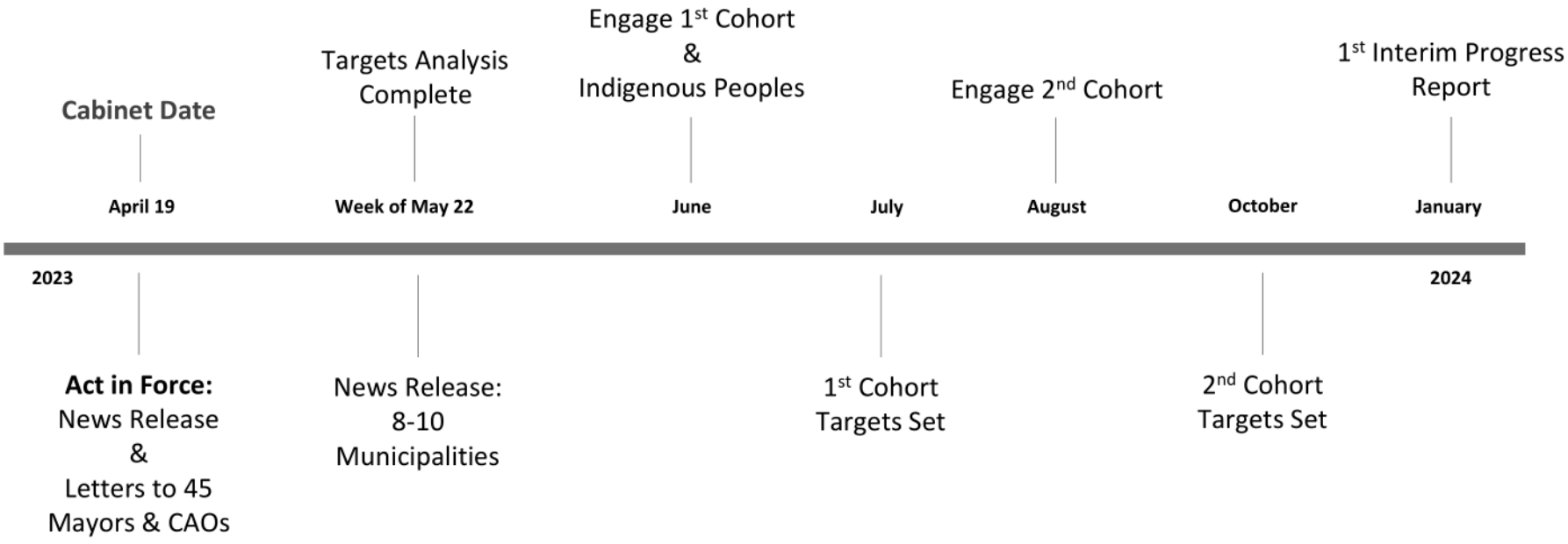
Implementation & Communication Plan

April 11, 2023
Ministry of Housing

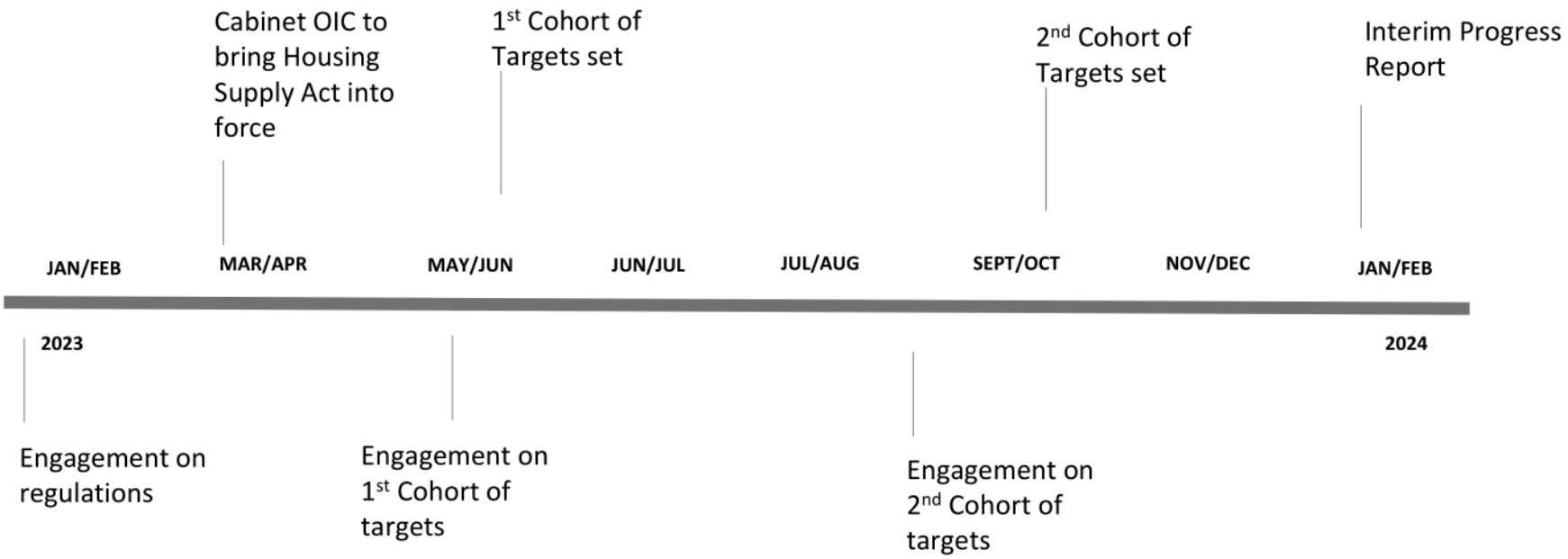
Consultation

- UBCM and representative municipalities
- Urban Development Institute
- BC Non-Profit Housing Association
- Indigenous Peoples
  - Treaty Nations
  - First Nations and Tribal Councils
  - Metis Nation BC
  - Aboriginal Housing Management Association
  - First Nations Leadership Council

Communication & Implementation Plan



Appendix: Timelines to Implement the *Housing Supply Act*



Housing Supply Act Regulations

Urban Development Institute

March 3, 2023

Ministry of Housing

Purpose and Agenda

Seeking feedback on the proposed regulations that are being developed to bring the *Housing Supply Act* into force this spring.

1. Context and Provincial Housing Measures
2. Housing Supply Act and Regulation Making Authorities
3. Regulation & Program Policy
4. Discussion and Next Steps

Context

- Growing demand is rapidly outpacing supply – more housing is urgently needed for renters and buyers.
- Government obligation to fulfill commitments on affordability and creating housing options while supporting current and future generations of British Columbians.
- Calls from the public, business community and housing advocates for the Province to address the housing crisis.

HSA Alignment with other Provincial Measures

- **Provincial Permitting Strategy** (Ministry of Water, Land and Resource Stewardship). 'Single window' for housing applications to support integration across ministries
- **Growing Communities Fund** (Ministry of Municipal Affairs). $1bn for all local governments to build infrastructure to meet population growth
- **Development Approvals Process Review** (Ministry of Housing)
- **Transit-Oriented Development** (Ministry of Transportation). Development of complete & connected communities along transit corridors

Housing Supply Act

- Enabling authority for the Province to set housing targets and timelines in collaboration with specified municipalities.
- Phased implementation in high growth areas with greatest current and forecasted housing demand.
- Municipalities encouraged to do all they can to create conditions for development.
- The Province will monitor progress and work with municipalities throughout the process to address any barriers to meeting housing targets.
- Regulations will bring the Act into force this Spring.

Housing Supply Act Regulations

1. Definitions
2. Prescribing municipalities that housing targets can apply (SVT areas)
3. Requirement that municipalities provide additional information for setting housing targets
4. Establish the classes of housing that targets apply to (e.g., rental units, shelters, apartments (condo/rental) and ground units)
5. Time for municipality to respond to a description of a proposed housing target order (45 days)
6. Time for municipal council to receive a progress report at conclusion of reporting period (60 days)
7. Time for municipality to respond before appointing an advisor or issuing a directive (60 days)

Housing Targets Program Policy

Step 1	Selecting Municipalities	Province applies benchmark measure
Step 2	Engagement & Data	Municipality submits required data and information to Province
Step 3	Validate Housing Estimates	Ministry validates municipal housing needs estimates
Step 4	Target Setting	Province applies standardized target setting methodology
Step 5	Target Consultation	Municipalities & Indigenous Peoples consulted on housing targets
Step 6	Order Issued	Municipality formally notified
Step 7	Order Published	Municipality publishes order on internet site
Step 8	Monitor Progress	Municipality prepares and submits progress report

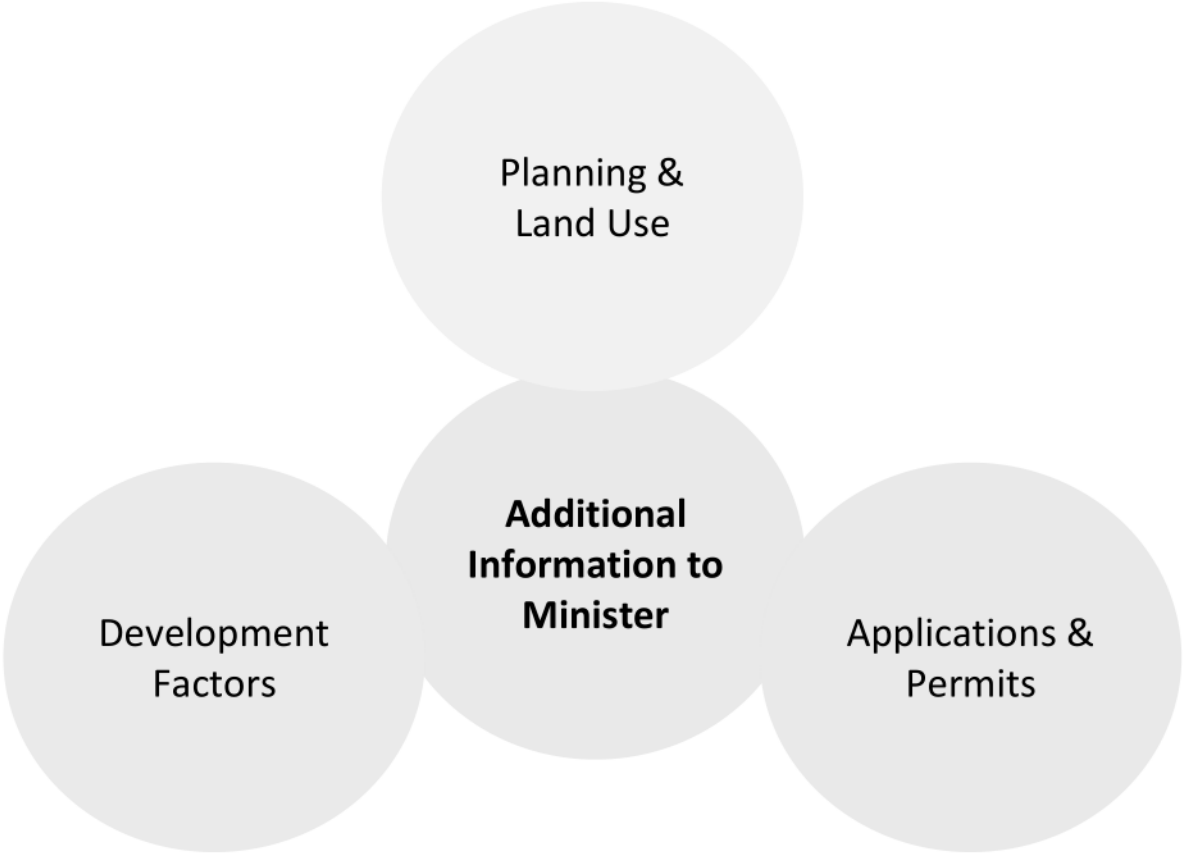
Discussion

1. Any other matters or potential unintended consequences to implementing targets as outlined?

Next Steps

- Compiling feedback for regulation drafting
- Regulations will bring the Act into force in Spring 2023

Section 13: Provision of information to the Minister



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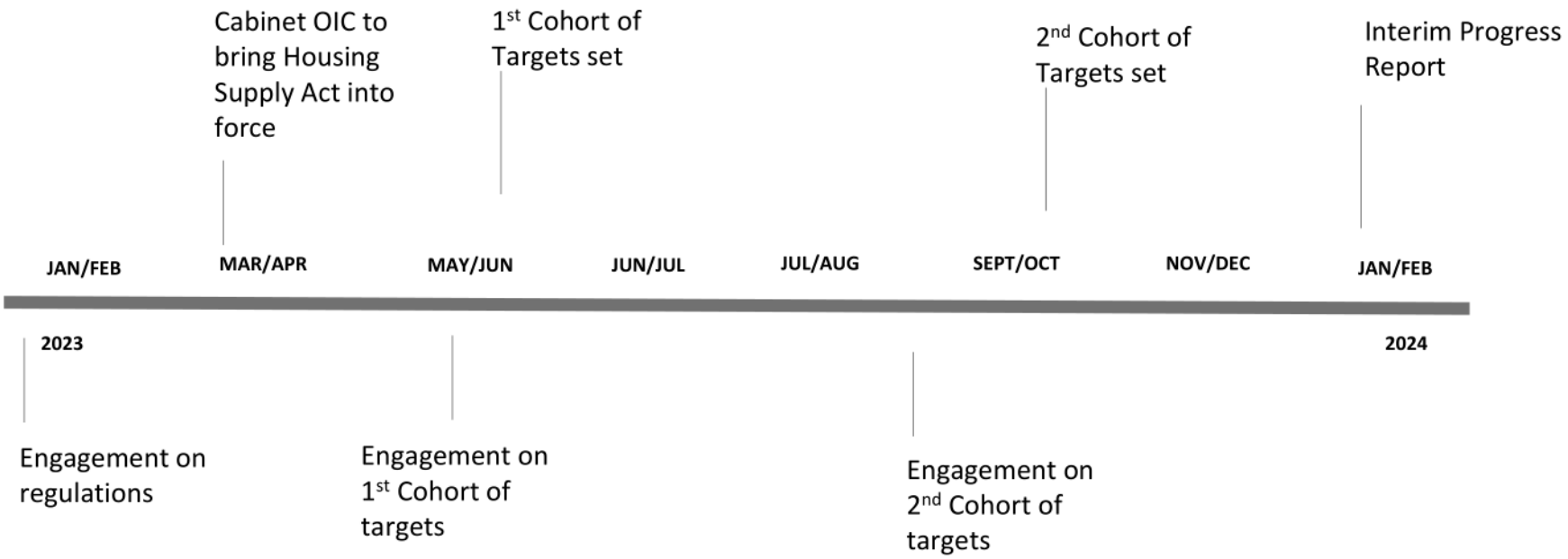

Appendix: Selecting Municipalities

163 Municipalities

- Focus on municipalities under the Speculation and Vacancy Tax

— Highest growth and demand, consistent with other Provincial initiatives

46 Municipalities

- Establish an empirical benchmark measure to rank municipalities using an index reflective of key dimensions of housing need

— Housing Needs Reports: review & validation against other data and info

— Other planning initiatives, i.e. Transit Oriented Development

8-10 Municipalities

- Opportunity to incorporate volunteer cities, and other considerations into final selection.

— Consider regional context

— Phased Implementation: gradually scale up; and possibly expand outside SVT areas

— Housing Target Order: 5 to 10-year timeframes

Regulation

Section of the Act	Regulation Making Authority
Section 20(2) (a)	prescribing municipalities as specified municipalities
Section 20(4) (c)	establish classes of housing targets
Section 4(3)	prescribed number of days after the end of the reporting period, by resolution, receive the housing target progress report at a meeting that is open to the public
Section 20(3) (b) (iii)	the time periods that must be met for the purposes of consultation
Section 3(3) (b) Section 7(3) (b)	provide, in accordance with the regulations, an opportunity for the specified municipality to provide comments to the minister [before making a housing target order, appointing an advisor, or issuing a directive]
Section 13	Provision of housing information to minister, any other prescribed information

Housing Targets Program
Branch *Housing Supply Act*

Municipality Engagement Plan - Session 1

May xx 2023

Ministry of Housing

Purpose and Agenda

Provide an overview of the *Housing Supply Act*, purpose, the verification/validation and methodology developed to create a ministry benchmark on housing targets.

1. Context and Provincial Housing Measures
2. Housing Supply Act and Regulation Making Authorities
3. Regulation & Program Policy
4. Validation process
5. Selection process
6. Required Data
7. Form
8. Q & A
9. Discussion and Next Steps

Context

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- **Development Approvals Process Review** (Ministry of Housing)
- **Transit-Oriented Development** (Ministry of Transportation). Development of complete & connected communities along transit corridors
- Align BC Housing and Federal funding and programs

Housing Supply Act - overview

- Enabling authority for the Province to set housing targets and timelines in collaboration with specified municipalities.
- Phased implementation in high growth areas with greatest current and forecasted housing demand.
- Municipalities encouraged to do all they can to create conditions for development.
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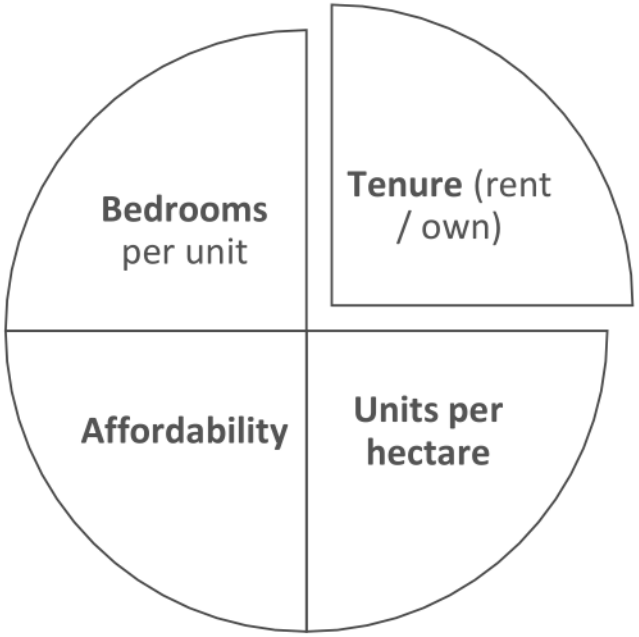
Classes of Housing Targets

Housing Types

1. Shelter Spaces
2. Social housing
3. Supportive housing
4. Apartments (ownership and rental units)
5. Ground-oriented housing (e.g., duplexes, rowhouses)



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Selecting Municipalities

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8-10 Municipalities

- Opportunity to incorporate volunteer cities, and other considerations into final selection.

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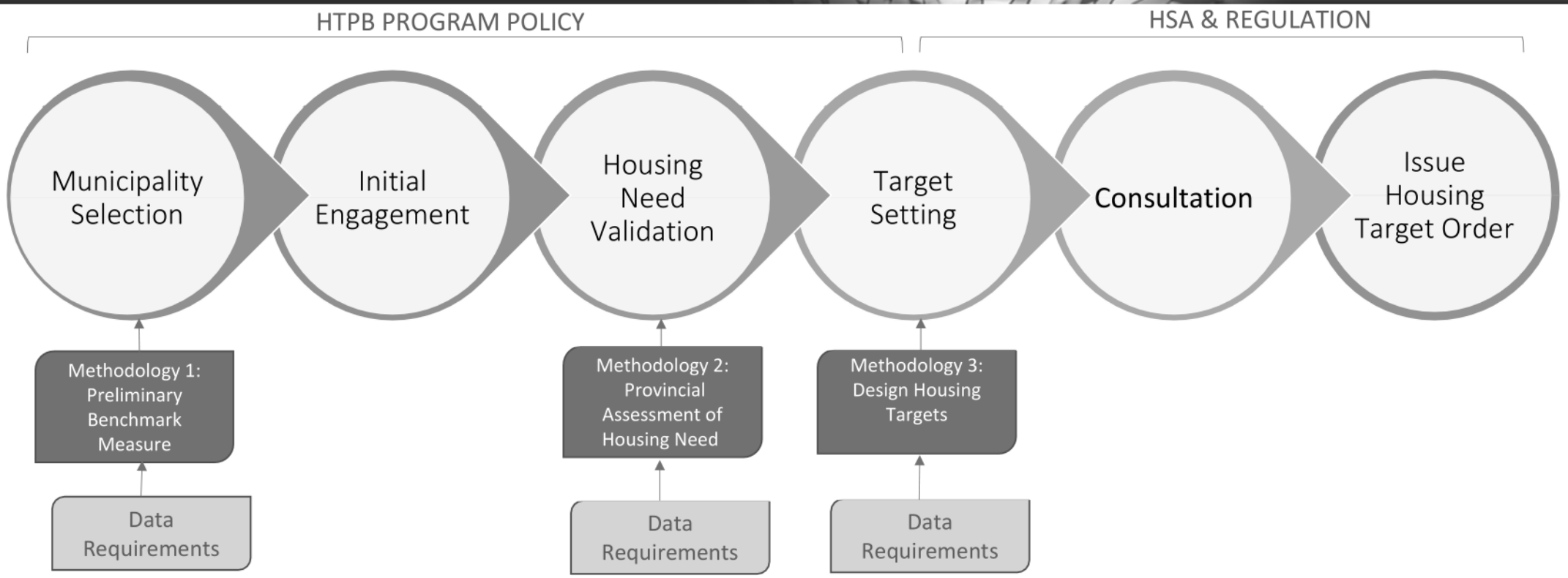
Validation Process



Additional Data Requirement

Data

Housing Targets information to consider:

* Align with BC Housing funding streams and programs
* Ensure flexibility: community needs and how they attract development
* Consider infrastructure including transit, BC Hydro

Housing Classes:

* simplify and clarify; encourage building across spectrum of housing types and tenure; population served: homelessness and social housing

Measures:

* units per acre, Floor Space Ratio or other indicators

Requirement for additional data

- Form (insert form)
- Timeline

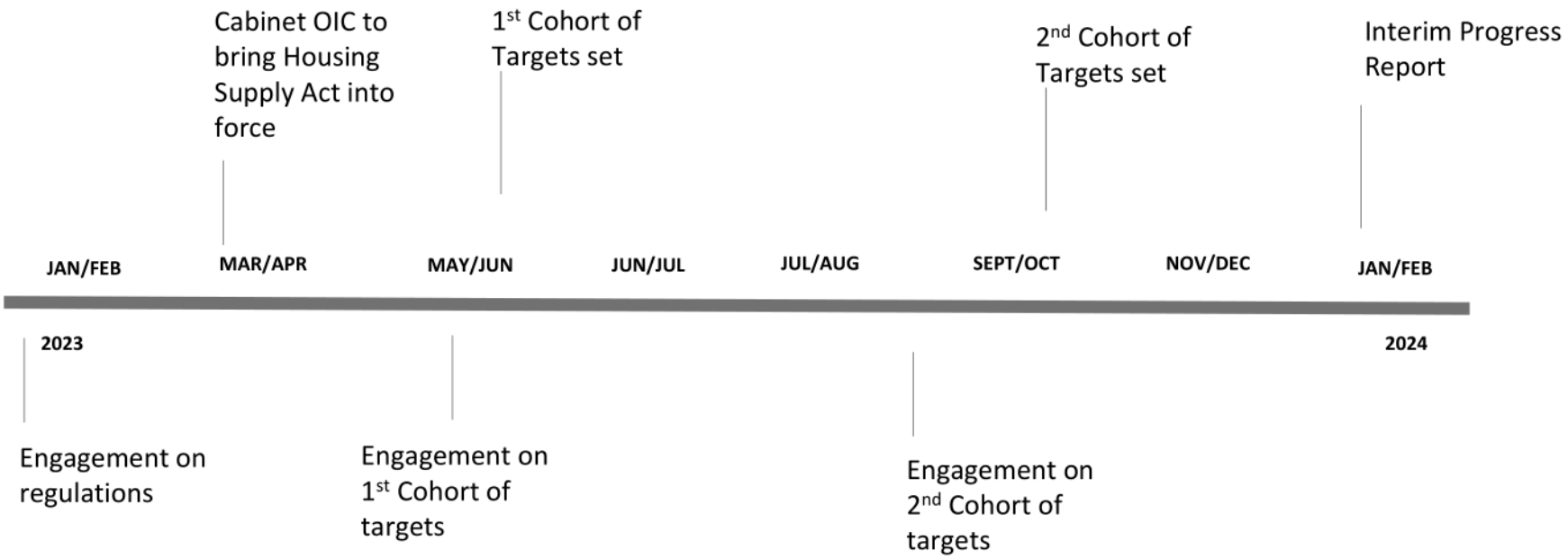
Review Questions

- Municpality questions and themes.

Discussion

- **Next Steps**
- Ministry forms will be emailed and required back within two weeks of this meeting
- Submit forms to: **HousingLegislation2022@gov.bc.ca**
- Email notifications will be sent with next meeting dates and details.

Appendix: Timelines to Implement the *Housing Supply Act*



Provincial Legislation

Ministry of Attorney General and Ministry Responsible for Housing

Meeting with

Representatives from UDI

August 4, 2022

Agenda

- Welcome & Introductions
- Context and Looking Forward
- UDI Preliminary Comments on Proposed Legislation
- Engagement / Consultation Pathways

Context

- Significant unmet need now and into future
- Many development projects do not get through local government approvals
- Increased calls from public/business community to take action
- UDI proposal

Objective – New Legislation

- Significant variability among local governments' actions promoting or inhibiting housing supply

- Legislative Objective: To provide Provincial leadership and hold local governments accountable to contribute to expanding housing supply, particularly affordable housing

Overview – New Legislation

New legislation to authorize Province to provide leadership and oversight to set housing targets and hold municipalities accountable.

- Builds on existing Housing Needs Reports – Minister to review HNRs and may set targets
- Requires annual reporting on metrics and actions taken or planned towards meeting targets
- Enables an authority for the Minister to express objections to local government matters that interfere with meeting targets and potentially recommend OICs to override municipal bylaws or land use decisions.

Applicability

- Phased approach to implementation across municipalities
  - Continuous improvement and learn from process
  - Begin with areas of highest housing need
- Will not apply to:
  - Regional Districts
  - Treaty and reserve lands

Process

- Legislation
- Regulations
  - Setting targets
  - Monitoring and Reporting
  - Enforcement

Engagement

- Plan and approach for engagement

- Next Steps

Check this out ⅜ Rental restriction bylaws in stratas

From:	Page, Doug OHCS:EX
To:	Jeff Fisher <jfisher@udi.org>
Sent:	June 9, 2022 5:19:11 PM PDT
Attachments:	image001.wmz, image003.png

Hi Jeff, see the “rentals allowed under Form J” link on the page below…

Rental restriction bylaws in stratas - Province of British Columbia
https://www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing/operating-a-strata/bylaws-and-rules/rental-restriction-bylaws

Cheers,

Doug Page, (RI)
Director of Policy and Legislation

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
PO Box 9844, Stn Prov Govt, Victoria BC V8W 1C8
Traditional territories of the Lekwungen speaking people
Cell: 250 380-8696
Email: doug.page@gov.bc.ca
Pronoun: he/him



Confidentiality Agreement

1. I, _____, agree that I will treat as confidential and not disclose or permit to be disclosed, at any time, any information identified by the Province of British Columbia as confidential that I obtain verbally, electronically or in writing, in relation to Cabinet or Cabinet Committee submissions, briefings or deliberations or otherwise relating to legislative or other projects ("Confidential Information") during the 2022 calendar year ("Engagement Period"). Confidential Information may include:
   - the contents of materials I receive, or presentations I attend, including but not limited to any material covered by public interest immunity, Cabinet confidentiality, solicitor-client privilege, or other privilege, brought to a meeting or otherwise provided;
   - the conversations and discussions held at meetings relating to Confidential Information, including the comments of persons at the meetings;
   - any part of the agenda of meetings relating to Confidential Information;
   - the conversations and discussions relating to Confidential Information, including those with Provincial government representatives or others that have also signed a confidentiality agreement; and
   - any feedback, comments or recommendations relating to Confidential Information provided to the Provincial government.

2. Section 1 of this Confidentiality Agreement does not apply insofar as:
   - the information in relation to or resulting from the collaboration and consultations was not identified by the representative of the Province of British Columbia responsible for conducting consultation in relation to the Confidential Information ("Provincial Government Representative") as Confidential Information before or at the time of transmission;
   - the disclosure of Confidential Information is expressly permitted in writing by the Provincial Government Representative;
   - the Confidential Information has become general public knowledge without my disclosure of such information;
   - the disclosure is to Provincial government staff or others that have also signed a confidentiality agreement if expressly permitted in writing by the Provincial Government Representative;
   - the disclosure of the Confidential Information is required by law; or
   - the Confidential Information is as described in section 12 (2) (a) to (c) of the *Freedom of Information and Protection of Privacy Act*.

3. I further agree to the following:
   - to use the Confidential Information only for consultation purposes and for no other purpose;

- not to discuss the Confidential Information or disclose the contents of the Confidential Information except as provided in this Confidentiality Agreement;
- to store the draft Confidential Information so that no other person has access to it;
- not to make copies of the Confidential Information;
- to return any Confidential Information provided to me upon request of the Provincial Government Representative; and
- destroy any materials at the request of the Provincial Government Representative and confirm the destruction in writing to that representative.

4. I understand that this Confidentiality Agreement does not preclude a public acknowledgement that engagement related specifically to the Confidential Information or this Confidentiality Agreement has taken place.

5. I agree to keep confidential any Confidential Information I receive and acknowledge that by providing that information to me, it is not the intention of the Province of British Columbia to waive solicitor-client privilege or to waive, defeat, or negate any privilege or confidence, or any other protection provided by law, that applies to the Confidential Information or the discussions relating to it.

6. The person signing this Confidentiality Agreement acknowledges and agrees that the obligations set out in this Confidentiality Agreement apply retroactively to any information received and discussions that the person signing this Confidentiality Agreement was involved in prior to the signing of this Confidentiality Agreement.

7. I acknowledge and agree that the confidentiality obligations set out in this Confidentiality Agreement are ongoing and remain in force indefinitely. For certainty, this Confidentiality Agreement survives the expiry of the Engagement Period in relation to any Confidential Information provided to the person signing this Confidentiality Agreement during the Engagement Period. I acknowledge and understand I may be asked to sign additional confidentiality agreements for specific matters. Where so asked, I acknowledge and understand that this Confidentiality Agreement remains in effect and is not replaced by any subsequent confidentiality agreements unless that subsequent confidentiality agreement expressly states it replaces this one.

8. I agree to immediately notify the Provincial Government Representative, if I receive a summons, subpoena, order or similar instrument or otherwise become subject to a legal obligation requiring disclosure of any Confidential Information I am required to keep confidential under this Confidentiality Agreement.

_____ _____

Print Name Date

_____

Signature

Re: Policy Consultation

From: Anne McMullin <s.22 >
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Cassandra McColman <cmccolman@udi.org>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Charania, Al-Nashir AG:EX <Al-Nashir.Charania@gov.bc.ca>, Andrea Nicholls <anicholls@udi.org>
Sent: July 16, 2022 9:25:53 AM PDT
Attachments: Confidentiality Agreement Template .docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thx Teri - we will get this done early next week.
Thank you so much.
Anne

On Jul 16, 2022, at 9:24 AM, Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca> wrote:

Hi Anne, sorry for the delay. (Also don't see Andrea copied……..)

I would think gaining the perspective of 5-6 people from your group would be great, but also open to expanding as you feel appropriate (there isn't really a limit, but more of an efficiency issue).

I have attached here the confidentiality agreement, if we could get these signed and back to our team, including a list of names and emails for the participants that would be great.

The email responses can go to: housinglegislation2022@gov.bc.ca, but please don't hesitate to reach out if I can help or if you'd like to discuss.

Teri

From: Anne McMullin <AMcMullin@udi.org>
Sent: Thursday, July 14, 2022 3:30 PM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Cassandra McColman <cmccolman@udi.org>
Subject: Re: Policy Consultation

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi again Teri – how many would be ideal for the group? Do you have a limit or preferred size of the group?
Anne

From: Anne McMullin <AMcMullin@udi.org>
Date: Thursday, July 14, 2022 at 2:31 PM
To: "Collins, Teri OHCS:EX" <Teri.Collins@gov.bc.ca>, Cassandra McColman <cmccolman@udi.org>
Subject: Re: Policy Consultation

Teri – yes absolutely!

I have cc'd Andrea in my office to help facilitate.
Anne

From: "Collins, Teri OHCS:EX" <Teri.Collins@gov.bc.ca>
Date: Thursday, July 14, 2022 at 11:36 AM
To: Anne McMullin <AMcMullin@udi.org>, Cassandra McColman <cmccolman@udi.org>
Cc: "Collins, Teri OHCS:EX" <Teri.Collins@gov.bc.ca>
Subject: Policy Consultation

Good morning Anne & Cassandra; I hope you're both well.

You may be aware we are working on some Legislation to be introduced this Fall – largely based on dialogue with UDI earlier this year around encouraging municipalities to focus on housing as an urgent priority. We would welcome engagement with a representative group of your members who would be able to give us feedback and advice on the policy approach.

Due to the nature of the material, we would ask for a signed confidentiality agreement from those wishing to participate, and would then forward documents through secure file transfer; which could then be followed up by a group dialogue or written submission of feedback to us. Our timelines are very tight and we would hope to get this underway asap and have a fairly quick turnaround.

I am wondering if you could firstly confirm interest, and secondly, would you be able to help facilitate this for us?

Thanks so much, Teri

Teri Collins, MA
Assistant Deputy Minister
Housing and Construction Standards
Ministry of Attorney General and Ministry Responsible for Housing
Ph: 250-952-2569/Mobile: 250-216-2218

From: Collins, Teri OHCS:EX
To: Ruscheinski, Bonnie OHCS:EX; Charania, Al-Nashir AG:EX
Cc: Page, Doug OHCS:EX; Barlee, Veronica OHCS:EX; Corpe, Cimarron OHCS:EX
Subject: RE: FOR ACTION: Legislation consultation TO DO list
Date: July 16, 2022 9:36:53 AM
Attachments: image001.jpg
image002.png
image003.png

Please see status update below in green.

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent: Thursday, July 14, 2022 12:03 PM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Charania, Al-Nashir AG:EX <Al-Nashir.Charania@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Subject: RE: FOR ACTION: Legislation consultation TO DO list
Please see below for most up to date documents.
Teri, the letter to anti-racism groups is linked now below. Al will be looking for your approval of the content.

Bonnie Ruscheinski, B.Comm., AACI, P.App.
Executive Director, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **| cell:** 250-882-6430 **| e:** bonnie.ruscheinski@gov.bc.ca

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

From: Ruscheinski, Bonnie OHCS:EX
Sent: Wednesday, July 13, 2022 7:16 PM
To: Teri OHCS:EX Collins (Teri.Collins@gov.bc.ca) <Teri.Collins@gov.bc.ca>; 'al-nashir.charania@gov.bc.ca' <Al-Nashir.Charania@gov.bc.ca>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Subject: FOR ACTION: Legislation consultation TO DO list
Please see some outstanding legislation engagement TO DOs:

Who	Step 1	Step 2	Documents	NOTES
UDI and Urban Mayors	Teri to contact each organization and request name, email and signed NDAs.	Al to receive and save NDAs and email documents via secure file transfer	Summary Documents CONFIDENTIAL Housing Supply Legislation Summary July 2022.pdf CONFIDENTIAL Strata Legislative	UDI email/agreement sent. Reached out to Urban Mayors have not heard back

			Amendments Summary July 2022.pdf Attachment - Interim legislative process CONFIDENTIAL.pdf 3-Col Documents Attachment Strata Property Act RFL Three-Col Doc CONFIDENTIAL.pdf Attachment Housing Targets RFL Three-Col Doc CONFIDENTIAL.pdf	
Anti-Racism stakeholders	Teri to approve letter	AI to send approved letter to 1000+ stakeholder list	Letter only Draft-Multicultural-update-ltr.docx	See attached email from Roland as confirmation on letter and distribution list. Approved to send. Please check email address before sending.
AHMA	Teri to ask for NDA	AI to receive and save NDAs and email document via secure file transfer	Summary Documents only (Housing Supply, Strata, and Interim leg process)	Sent email/agreement
Jill Atkey	Teri waiting for return call and NDA	AI to receive and save NDAs and email document via secure file transfer	Summary Documents only (Housing Supply, Strata, and Interim leg process)	Have not heard back, Jill on vacation
Treaty Nations	s.14; s.16	s.14; s.16	s.14; s.16	s.13; s.16

Bonnie Ruscheinski, B.Comm., AACI, P.App.
Executive Director, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **| cell:** 250-882-6430 **| e:** bonnie.ruscheinski@gov.bc.ca



I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

Confidentiality Agreement

1. I, Jeffrey Fisher, agree that I will treat as confidential and not disclose or permit to be disclosed, at any time, any information identified by the Province of British Columbia as confidential that I obtain verbally, electronically or in writing, in relation to Cabinet or Cabinet Committee submissions, briefings or deliberations or otherwise relating to legislative or other projects ("Confidential Information") during the 2022 calendar year ("Engagement Period"). Confidential Information may include:
   - the contents of materials I receive, or presentations I attend, including but not limited to any material covered by public interest immunity, Cabinet confidentiality, solicitor-client privilege, or other privilege, brought to a meeting or otherwise provided;
   - the conversations and discussions held at meetings relating to Confidential Information, including the comments of persons at the meetings;
   - any part of the agenda of meetings relating to Confidential Information;
   - the conversations and discussions relating to Confidential Information, including those with Provincial government representatives or others that have also signed a confidentiality agreement; and
   - any feedback, comments or recommendations relating to Confidential Information provided to the Provincial government.

2. Section 1 of this Confidentiality Agreement does not apply insofar as:
   - the information in relation to or resulting from the collaboration and consultations was not identified by the representative of the Province of British Columbia responsible for conducting consultation in relation to the Confidential Information ("Provincial Government Representative") as Confidential Information before or at the time of transmission;
   - the disclosure of Confidential Information is expressly permitted in writing by the Provincial Government Representative;
   - the Confidential Information has become general public knowledge without my disclosure of such information;
   - the disclosure is to Provincial government staff or others that have also signed a confidentiality agreement if expressly permitted in writing by the Provincial Government Representative;
   - the disclosure of the Confidential Information is required by law; or
   - the Confidential Information is as described in section 12 (2) (a) to (c) of the *Freedom of Information and Protection of Privacy Act*.

3. I further agree to the following:
   - to use the Confidential Information only for consultation purposes and for no other purpose;

- not to discuss the Confidential Information or disclose the contents of the Confidential Information except as provided in this Confidentiality Agreement;
- to store the draft Confidential Information so that no other person has access to it;
- not to make copies of the Confidential Information;
- to return any Confidential Information provided to me upon request of the Provincial Government Representative; and
- destroy any materials at the request of the Provincial Government Representative and confirm the destruction in writing to that representative.

4. I understand that this Confidentiality Agreement does not preclude a public acknowledgement that engagement related specifically to the Confidential Information or this Confidentiality Agreement has taken place.

5. I agree to keep confidential any Confidential Information I receive and acknowledge that by providing that information to me, it is not the intention of the Province of British Columbia to waive solicitor-client privilege or to waive, defeat, or negate any privilege or confidence, or any other protection provided by law, that applies to the Confidential Information or the discussions relating to it.

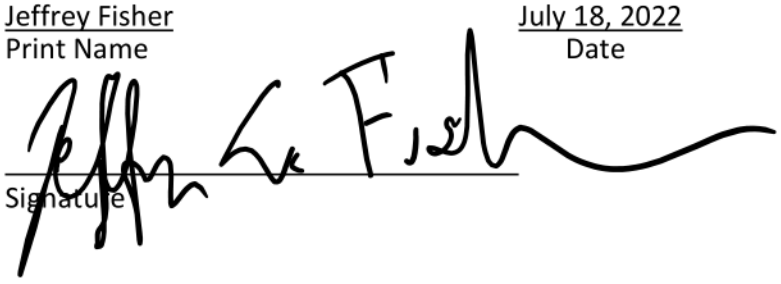
6. The person signing this Confidentiality Agreement acknowledges and agrees that the obligations set out in this Confidentiality Agreement apply retroactively to any information received and discussions that the person signing this Confidentiality Agreement was involved in prior to the signing of this Confidentiality Agreement.

7. I acknowledge and agree that the confidentiality obligations set out in this Confidentiality Agreement are ongoing and remain in force indefinitely. For certainty, this Confidentiality Agreement survives the expiry of the Engagement Period in relation to any Confidential Information provided to the person signing this Confidentiality Agreement during the Engagement Period. I acknowledge and understand I may be asked to sign additional confidentiality agreements for specific matters. Where so asked, I acknowledge and understand that this Confidentiality Agreement remains in effect and is not replaced by any subsequent confidentiality agreements unless that subsequent confidentiality agreement expressly states it replaces this one.

8. I agree to immediately notify the Provincial Government Representative, if I receive a summons, subpoena, order or similar instrument or otherwise become subject to a legal obligation requiring disclosure of any Confidential Information I am required to keep confidential under this Confidentiality Agreement.

Jeffrey Fisher
Print Name

July 18, 2022
Date



Signature

Confidentiality Agreement

1. I, Mary Anne McMullin, agree that I will treat as confidential and not disclose or permit to be disclosed, at any time, any information identified by the Province of British Columbia as confidential that I obtain verbally, electronically or in writing, in relation to Cabinet or Cabinet Committee submissions, briefings or deliberations or otherwise relating to legislative or other projects ("Confidential Information") during the 2022 calendar year ("Engagement Period"). Confidential Information may include:
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   - the disclosure of Confidential Information is expressly permitted in writing by the Provincial Government Representative;
   - the Confidential Information has become general public knowledge without my disclosure of such information;
   - the disclosure is to Provincial government staff or others that have also signed a confidentiality agreement if expressly permitted in writing by the Provincial Government Representative;
   - the disclosure of the Confidential Information is required by law; or
   - the Confidential Information is as described in section 12 (2) (a) to (c) of the *Freedom of Information and Protection of Privacy Act*.

3. I further agree to the following:
   - to use the Confidential Information only for consultation purposes and for no other purpose;

- not to discuss the Confidential Information or disclose the contents of the Confidential Information except as provided in this Confidentiality Agreement;
- to store the draft Confidential Information so that no other person has access to it;
- not to make copies of the Confidential Information;
- to return any Confidential Information provided to me upon request of the Provincial Government Representative; and
- destroy any materials at the request of the Provincial Government Representative and confirm the destruction in writing to that representative.

4. I understand that this Confidentiality Agreement does not preclude a public acknowledgement that engagement related specifically to the Confidential Information or this Confidentiality Agreement has taken place.

5. I agree to keep confidential any Confidential Information I receive and acknowledge that by providing that information to me, it is not the intention of the Province of British Columbia to waive solicitor-client privilege or to waive, defeat, or negate any privilege or confidence, or any other protection provided by law, that applies to the Confidential Information or the discussions relating to it.

6. The person signing this Confidentiality Agreement acknowledges and agrees that the obligations set out in this Confidentiality Agreement apply retroactively to any information received and discussions that the person signing this Confidentiality Agreement was involved in prior to the signing of this Confidentiality Agreement.

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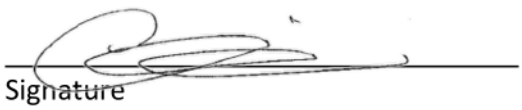
8. I agree to immediately notify the Provincial Government Representative, if I receive a summons, subpoena, order or similar instrument or otherwise become subject to a legal obligation requiring disclosure of any Confidential Information I am required to keep confidential under this Confidentiality Agreement.

Mary Anne McMullin
Print Name

July 19, 2022
Date


Signature

BRITISH COLUMBIA

Confidentiality Agreement

1. I, Michael Drummond agree that I will treat as confidential and not disclose or permit to be disclosed, at any time, any information identified by the Province of British Columbia as confidential that I obtain verbally, electronically or in writing, in relation to Cabinet or Cabinet Committee submissions, briefings or deliberations or otherwise relating to legislative or other projects ("Confidential Information") during the 2022 calendar year ("Engagement Period"). Confidential Information may include:
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   - any feedback, comments or recommendations relating to Confidential Information provided to the Provincial government.

2. Section 1 of this Confidentiality Agreement does not apply insofar as:
   - the information in relation to or resulting from the collaboration and consultations was not identified by the representative of the Province of British Columbia responsible for conducting consultation in relation to the Confidential Information ("Provincial Government Representative") as Confidential Information before or at the time of transmission;
   - the disclosure of Confidential Information is expressly permitted in writing by the Provincial Government Representative;
   - the Confidential Information has become general public knowledge without my disclosure of such information;
   - the disclosure is to Provincial government staff or others that have also signed a confidentiality agreement if expressly permitted in writing by the Provincial Government Representative;
   - the disclosure of the Confidential Information is required by law; or
   - the Confidential Information is as described in section 12 (2) (a) to (c) of the *Freedom of Information and Protection of Privacy Act*.

3. I further agree to the following:
   - to use the Confidential Information only for consultation purposes and for no other purpose;

- not to discuss the Confidential Information or disclose the contents of the Confidential Information except as provided in this Confidentiality Agreement;
- to store the draft Confidential Information so that no other person has access to it;
- not to make copies of the Confidential Information;
- to return any Confidential Information provided to me upon request of the Provincial Government Representative; and
- destroy any materials at the request of the Provincial Government Representative and confirm the destruction in writing to that representative.

4. I understand that this Confidentiality Agreement does not preclude a public acknowledgement that engagement related specifically to the Confidential Information or this Confidentiality Agreement has taken place.

5. I agree to keep confidential any Confidential Information I receive and acknowledge that by providing that information to me, it is not the intention of the Province of British Columbia to waive solicitor-client privilege or to waive, defeat, or negate any privilege or confidence, or any other protection provided by law, that applies to the Confidential Information or the discussions relating to it.

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8. I agree to immediately notify the Provincial Government Representative, if I receive a summons, subpoena, order or similar instrument or otherwise become subject to a legal obligation requiring disclosure of any Confidential Information I am required to keep confidential under this Confidentiality Agreement.

Michael Drummond
Print Name

July 19 2022
Date


Signature

Confidentiality Agreement

1. I, Andrea L. Nicholls, agree that I will treat as confidential and not disclose or permit to be disclosed, at any time, any information identified by the Province of British Columbia as confidential that I obtain verbally, electronically or in writing, in relation to Cabinet or Cabinet Committee submissions, briefings or deliberations or otherwise relating to legislative or other projects ("Confidential Information") during the 2022 calendar year ("Engagement Period"). Confidential Information may include:
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   - the disclosure is to Provincial government staff or others that have also signed a confidentiality agreement if expressly permitted in writing by the Provincial Government Representative;
   - the disclosure of the Confidential Information is required by law; or
   - the Confidential Information is as described in section 12 (2) (a) to (c) of the *Freedom of Information and Protection of Privacy Act*.

3. I further agree to the following:
   - to use the Confidential Information only for consultation purposes and for no other purpose;

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4. I understand that this Confidentiality Agreement does not preclude a public acknowledgement that engagement related specifically to the Confidential Information or this Confidentiality Agreement has taken place.

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8. I agree to immediately notify the Provincial Government Representative, if I receive a summons, subpoena, order or similar instrument or otherwise become subject to a legal obligation requiring disclosure of any Confidential Information I am required to keep confidential under this Confidentiality Agreement.

Andrea L. Nicholls
Print Name

July 19, 2022
Date


Signature

From: Charania, Al-Nashir AG:EX
To: Page, Doug OHCS:EX; Corpe, Cimarron OHCS:EX; Ruscheinski, Bonnie OHCS:EX
Cc: Barlee, Veronica OHCS:EX; DeSouza, Roxanne OHCS:EX; Teekah, Alyssa OHCS:EX; Olsen, Tracy OHCS:EX
Subject: Housing Legislation Engagement: Confirmation of Docs to be Sent
Date: July 22, 2022 2:22:14 PM
Attachments: image001.png

Hi everyone,

Sending out a note to confirm what was decided at yesterday's touch base (**Re**: **Documents to send out to Indigenous Partners and key stakeholders**). Please see table below.

Before the documents can be sent via SFTS (I will send as Yashar doesn't have an SFTS account), looking to all here for confirmation of the documents to be sent.

Thanks,

Al

Partner/ Key Stakeholder	Contact Person	Documents to Send	Content Lead	Method of Sending	Document Sender	Comments
BC Urban Mayors' Caucus	Kennedy Stewart (NDA received from Mayor Stewart only; waiting on remaining 12 Mayors)	• Housing Supply (Targets) Summary • Strata Summary • Updated Discussion Guide	• Targets team • Strata team • Targets team	SFTS	• Al	• Housing Supply (Targets) summary document (link to existing draft doc) ◦ Does the "CONFIDENTIAL Housing Supply Legislation" Summary doc need to be updated? • Strata Legislative Amendments summary document (link to existing doc) ◦ Does the "CONFIDENTIAL Strata Legislative Amendments" Summary doc need to be updated? • Please confirm location of updated discussion guide ◦ New document needs to be created from the UBCM discussion

						guide?
UDI	Bryan McCauley Cynthia Jagger David Sander Jon Stovell Mark Lewis Rick Ilich Rob Blackwell Andrea Nicholls Anne McMullin Jeff Fisher Michael Drummond	• Housing Supply (Targets) Summary • Strata Summary • Updated Discussion Guide	• Targets team • Strata team • Targets team	SFTS	• AI	• Housing Supply (Targets) summary document (link to existing draft doc) ◦ Does the "CONFIDENTIAL Housing Supply Legislation" Summary doc need to be updated? • Strata Legislative Amendments summary document (link to existing doc) ◦ Does the "CONFIDENTIAL Strata Legislative Amendments" Summary doc need to be updated? • Please confirm location of updated discussion guide ◦ New document needs to be created from the UBCM discussion guide?
BC NPHA	Jill Atkey (awaiting signed NDA)	• Housing Supply (Targets) Summary	• Targets team	SFTS	• AI	• Housing Supply (Targets) summary document (link to existing draft doc) ◦ Does the "CONFIDENTIAL Housing Supply Legislation" Summary doc need to be updated?

AHMA	Margaret Pfoh	Housing Supply (Targets) Summary • Strata Summary	Targets team • Strata team	SFTS	AI	Housing Supply (Targets) summary document (link to existing draft doc) ◦ Does the "CONFIDENTIAL Housing Supply Legislation" Summary doc need to be updated? • Strata Legislative Amendments summary document (link to existing doc) ◦ Does the "CONFIDENTIAL Strata Legislative Amendments" Summary doc need to be updated?
Carrier Sekani Tribal Council	Nathan Silver Leo Herbert	• Housing Supply (Targets) Summary • Strata Summary	• Targets team • Strata team	SFTS	• AI	• Housing Supply (Targets) summary document (link to existing draft doc) ◦ Does the "CONFIDENTIAL Housing Supply Legislation" Summary doc need to be updated? • Strata Legislative Amendments summary document (link to existing doc) ◦ Does the "CONFIDENTIAL Strata Legislative Amendments" Summary doc need to be

						updated?
Treaty Nations (8 Nations)	Maa'Nulth Nations: • Huu-ay-aht First Nations • Uchucklesaht Tribe • Yuułu?ił?ath Government (Ucluelet) • Toquaht Nation • Ka:'Yu:'K't'h'/Che:K'Tles7et'h' First Nations Nisga'a Nation Tla-amin Nation Tsawwassen Nation	• New Strata letter (3 additional Strata projects)	• Strata team	SFTS	• AI	• New, ADM-approved letter needs to be created?

Secure File Tran

Signed onto the BC Secure File Transfer Service as **Ruscheinski, Bonnie OHCS:EX** (borusche). My Account Sign Out

Package to amcmullin@udi.org,jfisher@udi....

To:
amcmullin@udi.org,jfisher@udi.org,mdrummond@udi.org,anicholls@udi.org,jons@relianceproperties.ca,rick.jlich@townline.ca,rblackwell@anthemproperties.com,david@hpllyburn.com,cynthia@goodmanreport.com,McCauley.Brian@outlook.com,lewismv@bennettjor

From: Ruscheinski, Bonnie OHCS:EX at 7/28/2022 7:24:18 PM

Subject: CONFIDENTIAL Proposed legislation

Mailbox:
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Will Expire: in 35 days **Read Status:** Read by no recipients
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Dear UDI members

Thank you for your signed Confidentiality Agreements. We are attaching a summary document of the proposed housing legislation and the summary legislation document under the terms of the Confidentiality Agreement you have signed. This information mu be shared with anyone but you may only discuss the contents with those on this email who have also signed Confidentiality Agreements.

As per previous communication by ADM Teri Collins, we are looking for your consolidated feedback. Teri is available for a briefing next week and will work with the UDI corporate office to arrange a briefing/discussion – following that, if you would like to provi written feedback, it would be appreciated by August 10, 2022. We will also be providing another opportunity for feedback as a consultation draft of the Legislation will be sent to you by August 17, 2022 with feedback required by August 24, 2022.

We recognize this request is under the compressed timelines and appreciate your engagement.

Best Regards

Bonnie

Bonnie Ruscheinski, B.Comm., AACI, P.App.

Executive Director, Housing Policy Branch

Office of Housing and Construction Standards

Ministry of Attorney General and Minister Responsible for Housing

ph: 778-974-5870 **| *cell:*** 250-882-6430 **| *e:*** bonnie.ruscheinski@gov.bc.ca

Files:
CONFIDENTIAL Proposed Housing Legislation July 2022.pdf (199.9 KB)
RFL Housing Targets App C-Three-Col Doc June 9 CONFIDENTIAL.pdf (192.6 KB)

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UDI package sent - document to save

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
To: Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Charania, Al-Nashir AG:EX <Al-Nashir.Charania@gov.bc.ca>
Sent: July 28, 2022 7:29:02 PM PDT
Attachments: UDI Confidential Targets package 28July2022.pdf, RFL Housing Targets App C-Three-Col Doc June 9 CONFIDENTIAL.pdf, image001.jpg, CONFIDENTIAL Proposed Housing Legislation July 2022.pdf

Hi
Please save this email and attachments under UDI.
Thanks
Bonnie

Bonnie Ruscheinski, B.Comm., AACI, P.App.
Executive Director, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

BRITISH COLUMBIA

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

PLEASE NOTE: The information contained in this document is privileged and confidential and must not be shared. For consultation purposes only.

Housing Targets Legislation Three-column Document

Housing Supply Accountability Act [proposed name; to be confirmed with Legislative Counsel]

Headings are included in the table below to assist in referencing various aspects of the proposed legislation within this Appendix and the Drafting Instructions; they are not proposed as the headings to be used in the legislative drafting.

Current	Proposed	Reasons
n/a	s.13	
n/a		
n/a		

Page 212 of 403 to/à Page 220 of 403

Withheld pursuant to/removed as

s.13

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Proposed Housing Targets Legislation
Context and Summary

Context

New legislation is proposed (tentatively the *Housing Supply Accountability Act*) to introduce the authority for the Minister Responsible for Housing to set housing supply objectives with local governments and related outcomes and report on how they are meeting the objectives. This proposed new legislation would not apply to Treaty or reserve lands but will apply to fee simple lands owned by First Nations which are subject to municipal bylaws and zoning.

This legislation builds on the existing requirements for municipalities to create Housing Needs Reports (HNR) that identify housing demand and supply factors in their jurisdictions.

We acknowledge drafting of the legislation is under compressed timelines; we appreciate your consideration of this request on short notice.

The opportunity and Request for Legislation

BC is experiencing insufficient supply of housing to meet growing demand. Many municipalities are responding to this situation with significant actions to facilitate housing development, such as streamlining development approvals processes, contributing land to improve the affordability of housing, and increasing allowable density in residential zones. There are some municipalities who are hesitant, for various reasons, to encourage increased development or some types of development in their jurisdictions.

The proposed *Housing Supply Accountability Act* will enable the Minister Responsible for Housing to:

1. receive and review local Housing Needs Reports and metrics;
2. establish housing targets in specific municipalities;
3. require affected municipalities to report on prescribed metrics and actions taken toward meeting targets; and
4. hold municipalities accountable for meeting targets with corrective/enforcement measures to set targets for housing growth.

Ministry of Attorney General and Minister Responsible for Housing
Housing Policy Branch
Office of Housing and Construction Standards
Mailing Address:
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2
www.gov.bc.ca/ag

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The Province will be able to use targets to set expectations for growth in certain types of housing (e.g., unit sizes, density), affordability levels, tenures, and locations, and then monitor and work with local governments to address obstacles and barriers to delivering that growth.

This legislation is proposed to have the following effects:

a) Provide a way for the Province to establish expectations and accountability for municipalities to facilitate the types of housing supply that are most needed while recognizing local governments' autonomy in how that supply is facilitated and encouraged in their jurisdictions.
b) Provide greater public accountability by requiring municipalities that are subject to a target to submit annual reporting to the Minister Responsible for Housing on metrics and actions taken or planned towards meeting targets.
c) Enable the Province to direct local governments through an Order in Council (OIC), to take actions such as amending plans or bylaws if targets are not met, and if such actions are not taken by the local government, the amendments described in the OIC are deemed to be in effect.

Timelines

Government wishes to introduce the proposed *Housing Supply Accountability Act* legislation in Fall 2022. This compressed timeline is a response to the urgent need to increase the supply of housing and to address the increasing demand and the high cost of housing in BC. In line with the legislative process, the drafting phase of the legislation is scheduled to be complete by the end of August for introduction of the Bill to the Legislative Assembly in the Fall 2022.

Attendees list:

OHCS

Teri Collins

Bonnie Ruscheinski

Cimarron Corpe

Alyssa Teekah

UDI

Anne McMullin

Jeff Fisher

Mike Drummond

Cassandra McColman

Andrea Nicholls

Jon Stovell

Rick Ilich

Rob Blackwell

David Sander

Cynthia Jagger

Brian McCauley

Mark Lewis

Microsoft Teams meeting

Join on your computer or mobile app

s.15

Page 224 of 403

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s.15

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Package to cmccolman@udi.org

To: cmccolman@udi.org

From: Ruscheinski, Bonnie OHCS:EX at 8/2/2022 4:03:19 PM

Subject: CONFIDENTIAL Proposed Housing Legislation

Mailbox:
My Mailboxes ▸ Sent

Will Expire: in 35 days **Read Status:** Read by no recipients

Classification: Confidential

Dear Colleen

Thank you for your signed Confidentiality Agreement. We are attaching a summary document of the proposed housing legislation and the summary legislation document under the terms of the Confidentiality Agreement you have signed. This information must not be shared with anyone and you may only discuss the contents with those listed below who have also signed Confidentiality Agreements.

Anne McMullin, Jeff Fisher, Mike Drummond, Cassandra McColman, Andrea Nicholls, Jon Stovell, Rick Ilich, Rob Blackwell, David Sander, Cynthia Jagger, Brian McCauley, Mark Lewis

As per previous communication by ADM Teri Collins, we are looking for UDIs consolidated feedback. Teri will be briefing UDI on August 4, 2022 at 9:30am. Following that, written feedback from UDI would be appreciated by August 10, 2022. We will also be providing another opportunity for feedback as a consultation draft of the Legislation will be sent to you by August 17, 2022 with feedback required by August 24, 2022.

We recognize this request is under the compressed timelines and appreciate your engagement.

Best Regards

Bonnie

Bonnie Ruscheinski, B.Comm., AACI, P.App.

Executive Director, Housing Policy Branch

Office of Housing and Construction Standards

Ministry of Attorney General and Minister Responsible for Housing

ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

Files:

CONFIDENTIAL Proposed Housing Legislation July 2022.pdf (199.9 KB)

RFL Housing Targets App C-Three-Col Doc June 9 CONFIDENTIAL.pdf (192.6 KB)

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(August 2) Update on Engagement Process

From: Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Barlee, Veronica OHCS:EX <Veronica.Barlee@gov.bc.ca>
Sent: August 2, 2022 4:08:26 PM PDT
Attachments: image002.png, image003.png, image001.png

Hello everyone,

On August 2nd, 2022 we received one email from one of our key stakeholders (UDI):

- **UDI**: Cassandra Smith (McColman), Director, Policy and Public Affairs at UDI, sent a Signed Confidential Agreement and asked for access to confidential documents.

Also, we received an email from our Indigenous Partners:

- **Karrier Sekani Tribal Council**: Leo Hebert confirmed that the techserviceunit@cstc.bc.ca is a secure work email.

Here is the link to the Engaged Stakeholders/Partners Tracker. At this moment we have **three items that still need action:**

- **BC Metis federation:** To prepare a Thank you and response letter as a follow-up to Keith Henry.
- **Women Transforming Cities:** This stakeholder has not signed an NDA. So, either
  - ask them to sign an NDA or
  - Send a general response to their letter.
- UDI: To send confidential documents to Cassandra Smith at cmccolman@udi.org.

All original Consultation Trackers are updated and moved to Tracker Folder.

Please let me know if you have any concerns or questions. Thank you.

Sincerely
Yashar

RE: PRIORITY RUSH UDI Presentation - New Legislation

From: Corpe, Cimarron OHCS:EX
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent: August 2, 2022 5:25:45 PM PDT
Attachments: image004.jpg, image001.png, image002.png
Assigned to Rebecca and will aim for noon.

Cimarron Corpé
Director, Housing Secretariat

Ministry of Attorney General and Minister Responsible for Housing
Main: 778.974.3902
Mobile: 250.208-0242

Email: Cimarron.Corpe@gov.bc.ca

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent: Tuesday, August 2, 2022 4:57 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: PRIORITY RUSH UDI Presentation - New Legislation

Cim
Can you please have one of your staff look at slide 3 speaking notes. AT the bottom, we need to provide Teri with bullets about key changes of our proposed legislation from UDI's original proposal. The presentation is on Thursday morning so if someone can highlight an handful of key differences by noon or early afternoon tomorrow, we can update the slide deck for Teri.
Thanks
Bonnie

Bonnie Ruscheinski, B.Comm., AACI, P.App.
Executive Director, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

BRITISH COLUMBIA

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

UDI notes to summarize for Teri with key takeaways

From:	Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
To:	Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>
Sent:	August 4, 2022 11:26:21 AM PDT
Attachments:	image001.jpg

s.13

Bonnie Ruscheinski, B.Comm., AACI, P.App.
Executive Director, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca



I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

UDI Meeting on August 4, 2022

Attendees List:

OHCS

Teri Collins

Bonnie Ruscheinski

Cimarron Corpe

Alyssa Teekah

UDI

Anne McMullin

Jeff Fisher

Mike Drummond

Cassandra McColman

Andrea Nicholls

Jon Stovell

Rick Ilich

Rob Blackwell

David Sander

Cynthia Jagger

Brian McCauley

Mark Lewis

Bonnie's notes from UDI meeting, August 4, 2022

s.13

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s.13

CONFIDENTIAL STAKEHOLDER SUMMARY

HOUSING POLICY BRANCH

STAKEHOLDER: URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION (UDI)

Key representatives or members:	**Anne McMullin,** President & CEO | amcmullin@udi.org |T:
Background:	A non-profit association of the development industry and its related professions in land development and planning.
Recommendations and Concerns re: Housing Supply Accountability Act	Feedback on consultation draft received August 29, 2022: • Application of penalties (rather than relying only on ability to take direct corrective action on approvals). • A speedier timeline of intervention – bypass municipal processes • The advisor should be able to conduct follow-up reviews so a muni can't revert to its previous approach to housing approvals • Consider Community charter in the leg • Suggested changes to specific sections in the leg. See: s.15 General feedback prior to consultation draft: • Strongly endorses the Ministry's efforts to take bolder action and establish a housing targets framework for municipalities that includes enforcement mechanisms. • Supports broad enabling legislation and phased-in approach • Province should: review and reform the HNRs (issues with methodology and structure) • Want building permits to be key part of target framework • Incent residents to allow new housing through tax measures, and rewards for those that meet and exceed targets • Minister should have ability to extend OICs beyond 2 years • Ability to override RGS and ensure RGS do not block directives to LGs • Advisor should be independent
UDI's housing target proposal	The UDI has met with Minister David Eby on several occasions in 2022 and has presented a proposal for provincial housing targets that would include: • Province-wide ten-year performance-based targets set by the Province, then applied to specific regions or municipalities;

	• Reporting requirements using building permits issued by local governments and zoned capacity as metrics; and • Initial implementation in the transit-oriented areas in the Metro Vancouver area. • Track other key metrics including rezoning approvals and vacancy rates as a measure of progress. • Use a combination of incentives and penalties to enforce targets
Policy Team Response:	**Key differences in legislation from UDI's proposal include:** • How targets will be set and applied: OHCS - A housing target will be established for a particular municipality, in consultation with that municipality • Applicability of targets: the selection of communities subject to a housing target will be phased in. While not specifically focused on areas around transit station and stops, focus will be on areas identified as high-growth at the outset • How targets will be measured: OHCS - Depending on the specific municipality and its unique needs, a target may be based on a suite of measures that can be taken to improve the conditions for creating more housing supply (vs. UDI - the number of units that receive a Building permit.) • How targets will be enforced: OHCS - the Housing minister may issue a directive (or Cabinet an OIC) to a municipality failing to comply if in the public interest to do so. (vs. UDI - incentives and penalties if local governments do not achieve their targets). **New ideas to consider/develop policy position on:** s.13 **For regulations/later policy documents** • Specificities surrounding building permits (methodology for measuring) **Already reflected in the legislation/incorporated into the targets approach:** • The ability of local governments to manipulate needs assessments outlined in HNRs • Building permits as an indicator • Additional sources of information the Minister may consider in establishing targets including immigration data

	• Advisor being a third-party **Outside the scope of the legislation:** • Province providing direction to regional districts regarding Regional Growth Strategies • Enforcement mechanisms associated with property tax • Provincial curtailing of land use and building powers • Development finance tools [s.13] • Councils losing powers for an extended period, delegating decision making to staff • Limiting access to Federal and Provincial funding • Incentivizing municipalities who meet/exceed targets with infrastructure funding • Legislation allows for consultation with stakeholders and experts in setting targets
Objectives or proposed communications to stakeholder:	•

RECENT MEETINGS WITH GOVERNMENT

Meetings:	August 4, 2022 Notes from meeting: Notes from UDI meeting, August 4, 20
Correspondence:	UDI feedback on consultation draft: UDI Comments to OHCS_August 2022.p UDI written submission of feedback following the Aug 4 meeting:

	 UDI Response Letter 10Aug2022 Targets.p Policy Team Marked up version:  UDI Response Letter 10Aug2022 Targets_A
Resources:	 UDI Presentation - New Legislation (002)  Agenda and Memos - April 13, 2022 UDI Me  Agenda and Memos - March 10 2022 UDI M

Secure File Transfer

Signed onto **the BC Secure File Transfer Service** as **Ruscheinski, Bonnie OHCS:EX** (borusche).

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Package from cmccolman@udi.org

To: Ruscheinski, Bonnie OHCS:EX

From: cmccolman@udi.org at 8/10/2022 4:09:55 PM

Subject: Initial Comments - UDI

Mailbox:

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Will Expire: in 35 days

Hello Bonnie,

Thank you again for including UDI and some of our members in the briefing last week. Please find attached our initial comments on the proposed direction.

If you have any questions, please let me know, otherwise we look forward to continuing to engage on this initiative.

Thanks,
Cassandra

Files:

UDI Initial Comments - Proposed Housing Supply Accountability Act_Aug. 10, 2022.pdf (935.3 KB)

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PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#1100 – 1050 West Pender Street
Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
www.udi.bc.ca

August 10, 2022

Teri Collins
Assistant Deputy Minister
Office of Housing and Construction Standards
PO Box 9290, Stn. Prov. Govt.
Victoria British Columbia V8W 9J7

Dear Ms. Collins

Re: Proposed Housing Supply Accountability Act

I would like to thank you and your staff for involving the Urban Development Institute – Pacific Region (UDI) in the consultations regarding the proposed *Housing Supply Accountability Act* (*HSSA*). **We strongly endorse the Ministry's efforts to establish a housing targets framework for municipalities that includes enforcement mechanisms.** We also agree with the approach of having broad enabling legislation, because it will allow the flexibility needed so the government can nimbly react to emerging issues. However, this legislation should also be presented as a strong tool that will be utilized by the Province to address the housing crisis. UDI also supports the framework being phased-in – with an initial focus on municipalities in urban areas with acute housing challenges, but with substantial infrastructure in place and a strong building sector. As discussed, there are some areas that need to be refined and others in which the Ministry could be more forceful and directive.

Housing Needs Reports as a basis for targets

UDI recognizes that the municipal *Housing Needs Reports* (*HNRs*) have been submitted to the Government already, so it would be difficult to amend them now. As such, we are pleased that Ministry is not going to be tied to them and can establish targets above and beyond the *HNRs*. However, there are several issues the *HNR* methodology, structure and process, including:

- The ability of local governments to manipulate and politicize them to reduce their targets and argue against provincially imposed ones;
- As with many population projections by governments, there is chronic undercounting as noted in the recent CMHC report on Canada's housing shortage and the *Opening Doors Report* of the Canada-British Columbia Expert Panel on the Future of Housing Supply and Affordability (Appendix 5);
- The *HNRs* are not timed with Census data; and
- Beyond this, there is even more undercounting in local governments that have traditionally limited growth as much of the population forecasting is based on previous growth rates.

UDI recommends that the Ministry (in conjunction with local governments and stakeholders) review and reform the *HNRs*, as they are still the starting point for the proposed housing targets framework. It would also limit confusion and debates in the future regarding conflicting objectives established wither by the *HNRs* or another body, such as the Metro Vancouver *Regional Growth Strategy (RGS)*. The work that the Ministry is conducting to assess the targets for local governments could be incorporated into the next round of *HNRs* and provide direction to regional districts regarding their growth strategies.

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Evaluation metrics

While UDI supports the use of a broader suite of metrics for the targets and assessments of municipalities because they provide a more complete understanding of what is occurring in their approvals processes, it is critical that Building Permits (BPs) be a key part of the target framework to ensure it is a truly performance-based system. Local governments can "approve" many projects, but introduce conditions which make them unviable and therefore unbuilt. It is the BP stage in the process where there is a clearer picture that projects will be constructed as developers will rarely pay for the consulting work and municipal charges for a Building Permit and then not proceed with construction.

If there are instances in which BPs are not being pulled by builders, this can be reviewed by the "Advisor" who would be appointed by the Minister. They could compare the issuance of BPs in other similar municipalities with what is occurring in the local government they are investigating. The "Advisor" can also discuss the issue with local government officials, builders and other stakeholders to determine why BPs are not being pulled.

Enforcement mechanisms

UDI recommends the legislative framework enable enforcement mechanisms that directly affect not only local governments, but also residents, to change the incentive structure regarding allowing new housing. For example:

- The TransLink component of the property tax could be increased if a municipality does not leverage the billions of dollars invested in SkyTrain service in their community;
- There could also be an affordable housing component added to the property tax for those communities that refuse to allow more housing;
- The Government could curtail land use and building powers (e.g., restrictions on downzoning) as well as development finance tools for an extended period. Councils could also lose powers for an extended period by delegating additional decision making to staff such as technical issues; and/or
- The Government could also limit access to Federal and Provincial funding (e.g., the Canadian Infrastructure Bank and the Housing Accelerator Fund).

In addition, this legislation needs to be paired with more carrots for those that meet and exceed their targets such as senior government funding for schools, parks and transit as well as for processing improvements and area planning; although we recognize that this is beyond the purview of this legislation.

There are also potential issues with the 2-year limitation on the length of the Orders in Council (OIC) that override municipal bylaws, policies and procedures. It would be counterproductive if a local government that is still not achieving its targets were to be allowed to revert to its old bylaws, policies and procedures when they were not delivering enough new homes. We recommend that the Minister be granted that ability to extend the OICs – especially if targets are not being met. In addition, there needs to be grandfathering for instream projects that may be negatively affected by abrupt bylaw, policy or procedure changes.

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www.udi.bc.ca

Regional restrictions

The *Regional Growth Strategy* in Metro Vancouver places numerous restrictions on local governments. For example, there are limitations on housing (even affordable housing) in mixed employment areas. UDI has advocated that mixed employment areas near rapid transit stations would be ideal locations for rental and affordable housing (if the employment spaces are constructed). If the *Metro 2050* proposed *RGS* were passed, this type of housing would be allowed in these areas – but only within 200 metres of a station. UDI recommends that the legislation ensure that the *RGS* does not block any corrective action or directive to a local government that the Government deems necessary to meet its housing objectives.

In a similar fashion, the legislation needs to be written, so that it does not preclude the Province from overriding the *RGS* as well as local by-laws/policies for its own affordable housing projects and partnerships in the future – including establishing a separate approvals process. One of our concerns with the proposed framework is that it may not provide immediate results, but affordable housing could be more quickly delivered by ensuring that the Province has more flexibility and can move forward efficiently with its own projects.

Sources of information for consideration when establishing targets

The sources of information that that the Minister may consider in establishing targets on page two, should include information/data from government sources (e.g., CMHC, BC Housing and BC Stats), academia and industry as well as information from the Federal Government on immigration policy, as British Columbia is one of top jurisdictions for immigrants moving to Canada. In addition, the last bullet in the section should be broadened to "*Advice, information and data obtained at the discretion of the Minister.*"

At several stages of the proposed framework, it is noted that the Ministry and the "Advisor" will consult with local governments, to ensure these consultations are viewed as unbiased, we recommend that the legislation specify that this "Advisor" be a third-party, independent of local governments and their representatives, as well as the Province. We also recommend that the legislation be written to allow for consultation with others such as stakeholders and experts.

Thank you again for involving UDI in the consultation of this important legislation. If you have any questions regarding our comments, please do not hesitate to contact us. We look forward to working with you and your staff to increase the delivery of new homes to British Columbians.

Yours sincerely,



Anne McMullin
President & CEO, UDI

(August 11) Update on Engagement Process

From: Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>, Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: August 11, 2022 8:04:11 PM PDT
Attachments: image001.png, image002.png

Hello everyone,

On August 11th, 2022

1- We received two emails from two of our key stakeholders:

- **UDI**: Cassandra Smith, sent the initial comments of UDI to Bonnie through SFTS (at end of the day Wednesday, August 10th).
- **BC NPHA**: In response to an acknowledgment letter, Jill Atkey, the CEO of BC NPHA, sent **another** paragraph of feedback through SFTS.

Here is the link to the Engaged Stakeholders and Partners Tracker. At this moment we have **three items that still need action**:

- **BC Metis federation:** To prepare a Thank you and response letter as a follow-up to Keith Henry (Not assigned to anyone yet – Need discussion to coordinate the response).
- **Women Transforming Cities:** If the response letter has not been sent yet, then it is in Bonnie's eApps.
- **Treaty Nations (5 Nations)**: To prepare a response and take any other necessary action (Need discussion to coordinate the response).

All original Consultation Trackers are updated and exist in Tracker Folder.

Please let me know if you have any concerns or questions. Thank you.

Sincerely
Yashar

UDI Response Letter August 10, 2022 – Summary

New ideas to consider/develop policy position on

s.13

For regulations/later policy documents

- Specificities surrounding building permits (methodology for measuring)

Already reflected in the legislation/incorporated into the targets approach

- The ability of local governments to manipulate needs assessments outlined in HNRs
- Building permits as an indicator
- Additional sources of information the Minister may consider in establishing targets including immigration data
- Advisor being a third-party

Outside the scope of the legislation

- Province providing direction to regional districts regarding Regional Growth Strategies
- Enforcement mechanisms associated with property tax
- Provincial curtailing of land use and building powers
- Development finance tools [s.13]
- Councils losing powers for an extended period, delegating decision making to staff
- Limiting access to Federal and Provincial funding
- Incentivizing municipalities who meet/exceed targets with infrastructure funding
- Legislation allows for consultation with stakeholders and experts in setting targets

Folder Locations: UBCM, BCUMC, UDI Feedback Summaries

From: Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: August 12, 2022 5:47:30 PM PDT
Attachments: UDI Letter - Summary.docx, image001.png, BC Urban Mayors Caucus - Summary.docx, UDI Response Letter 10Aug2022 Targets_ATcomments.pdf, 2022_08_09 - BCUMC Letter to Minister Rankin re-Legislation_ATComments_RV.pdf, Stakeholder Brief - Targets - DRAFT, August 10, 2022 (1).docx

Hi Cim,

See the folder locations for UBCM, BCUMC and UDI feedback below.
Note that UDI and BCUMC have separate summaries.
The Master Document (DRAFT) contains in-depth summaries and a narrative of the engagement with each group for future reference (will be updated to include more engagement partners) whereas the individual UDI and BCUMC feedback summaries were quick summaries done to inform concurrent legislative drafting.
UBCM's engagement is more complex so our documentation approach may currently vary from other groups.

Document	Parent Folder	File Name
Master Document – Stakeholder Brief *In-depth summary of stakeholder feedback – currently includes UBCM, BCUMC, UDI*	Engagement	– "Stakeholder Brief – Targets – DRAFT, August 10, 2022" file
UBCM Feedback Summary	Engagement	See Stakeholder Brief document: "Stakeholder Brief – Targets – DRAFT, August 10, 2022" file
UDI Feedback Summary	UDI	"UDI Response Letter August 10, 2022 – Summary"
UDI Response Letter with comments markup from policy team	UDI	"UDI Response Letter 10Aug2022 Targets_ATcomments.pdf"
BCUMC Feedback Summary	BC Urban Mayors Caucus	"BC Urban Mayors Caucus Response Letter, August 9 2022 – Summary"
BCUMC Response Letter with comments markup from policy team	BC Urban Mayors Caucus	"2022_08_09-BCUMC Letter to Minister Rankin re-Legislation_ATComments_RV.pdf"

Thanks,
Alyssa

From: Teekah, Alyssa OHCS:EX
Sent: Friday, August 12, 2022 2:41 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Cc: Veilleux, Rebecca OHCS:EX <Rebecca.Veilleux@gov.bc.ca>
Subject: UBCM, BCUMC, UDI Feedback Summaries

Hi Cim,

Please find attached materials for UBCM, BCUMC, and UDI:

- Stakeholder brief document DRAFT version in-depth summary of UBCM, BCUMC, and UDI feedback – this document to be updated to include feedback from other groups
- UDI letter with expanded comments from policy team
- Summary of comparison between UDI advice and legislation
- BCUMC letter with expanded comments from policy team
- Summary of comparison between BCUMC advice and legislation

Note that on Monday we will be working on a summary table with all engagement feedback and correlated actions for quick reference.

Thanks,
Alyssa

Alyssa Teekah (she/her)
Senior Policy Analyst | Housing Policy Branch
Office of Housing and Construction Standards
Ministry of the Attorney General and Minister Responsible for Housing
(236) 478-0930 | alyssa.teekah@gov.bc.ca

I respectfully acknowledge that I work on the traditional lands of the Lək̓ʷəŋən peoples and recognize the Metis, Inuit and many diverse Indigenous peoples who call these lands home today.

UDI Letter – Summary

New ideas to consider/develop policy position on

s.13

For regulations/later policy documents

- Specificities surrounding building permits (methodology for measuring)

Already reflected in the legislation/incorporated into the targets approach

- The ability of local governments to manipulate needs assessments outlined in HNRs
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- Enforcement mechanisms associated with property tax
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- Limiting access to Federal and Provincial funding
- Incentivizing municipalities who meet/exceed targets with infrastructure funding
- Legislation allows for consultation with stakeholders and experts in setting targets

Page 248 of 403

Withheld pursuant to/removed as

s.13 ; s.16

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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www.udi.bc.ca

August 10, 2022

Teri Collins
Assistant Deputy Minister
Office of Housing and Construction Standards
PO Box 9290, Stn. Prov. Govt.
Victoria British Columbia V8W 9J7

Dear Ms. Collins

Re: Proposed Housing Supply Accountability Act

I would like to thank you and your staff for involving the Urban Development Institute – Pacific Region (UDI) in the consultations regarding the proposed *Housing Supply Accountability Act* (*HSSA*). **We strongly endorse the Ministry's efforts to establish a housing targets framework for municipalities that includes enforcement mechanisms.** We also agree with the approach of having broad enabling legislation, because it will allow the flexibility needed so the government can nimbly react to emerging issues. However, this legislation should also be presented as a strong tool that will be utilized by the Province to address the housing crisis. UDI also supports the framework being phased-in – with an initial focus on municipalities in urban areas with acute housing challenges, but with substantial infrastructure in place and a strong building sector. As discussed, there are some areas that need to be refined and others in which the Ministry could be more forceful and directive.

Housing Needs Reports as a basis for targets

UDI recognizes that the municipal *Housing Needs Reports* (*HNRs*) have been submitted to the Government already, so it would be difficult to amend them now. As such, we are pleased that Ministry is not going to be tied to them and can establish targets above and beyond the *HNRs*. However, there are several issues the *HNR* methodology, structure and process, including:

- The ability of local governments to manipulate and politicize them to reduce their targets and argue against provincially imposed ones;
- As with many population projections by governments, there is chronic undercounting as noted in the recent CMHC report on Canada's housing shortage and the *Opening Doors Report* of the Canada-British Columbia Expert Panel on the Future of Housing Supply and Affordability (Appendix 5);
- The *HNRs* are not timed with Census data; and
- Beyond this, there is even more undercounting in local governments that have traditionally limited growth as much of the population forecasting is based on previous growth rates.

UDI recommends that the Ministry (in conjunction with local governments and stakeholders) review and reform the *HNRs*, as they are still the starting point for the proposed housing targets framework. It would also limit confusion and debates in the future regarding conflicting objectives established wither by the *HNRs* or another body, such as the Metro Vancouver *Regional Growth Strategy (RGS)*. The work that the Ministry is conducting to assess the targets for local governments could be incorporated into the next round of *HNRs* and provide direction to regional districts regarding their growth strategies.

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Evaluation metrics

While UDI supports the use of a broader suite of metrics for the targets and assessments of municipalities because they provide a more complete understanding of what is occurring in their approvals processes, it is critical that Building Permits (BPs) be a key part of the target framework to ensure it is a truly performance-based system. Local governments can "approve" many projects, but introduce conditions which make them unviable and therefore unbuilt. It is the BP stage in the process where there is a clearer picture that projects will be constructed as developers will rarely pay for the consulting work and municipal charges for a Building Permit and then not proceed with construction.

If there are instances in which BPs are not being pulled by builders, this can be reviewed by the "Advisor" who would be appointed by the Minister. They could compare the issuance of BPs in other similar municipalities with what is occurring in the local government they are investigating. The "Advisor" can also discuss the issue with local government officials, builders and other stakeholders to determine why BPs are not being pulled.

Enforcement mechanisms

UDI recommends the legislative framework enable enforcement mechanisms that directly affect not only local governments, but also residents, to change the incentive structure regarding allowing new housing. For example:

- The TransLink component of the property tax could be increased if a municipality does not leverage the billions of dollars invested in SkyTrain service in their community;
- There could also be an affordable housing component added to the property tax for those communities that refuse to allow more housing;
- The Government could curtail land use and building powers (e.g., restrictions on downzoning) as well as development finance tools for an extended period. Councils could also lose powers for an extended period by delegating additional decision making to staff such as technical issues; and/or
- The Government could also limit access to Federal and Provincial funding (e.g., the Canadian Infrastructure Bank and the Housing Accelerator Fund).

In addition, this legislation needs to be paired with more carrots for those that meet and exceed their targets such as senior government funding for schools, parks and transit as well as for processing improvements and area planning; although we recognize that this is beyond the purview of this legislation.

There are also potential issues with the 2-year limitation on the length of the Orders in Council (OIC) that override municipal bylaws, policies and procedures. It would be counterproductive if a local government that is still not achieving its targets were to be allowed to revert to its old bylaws, policies and procedures when they were not delivering enough new homes. We recommend that the Minister be granted that ability to extend the OICs – especially if targets are not being met. In addition, there needs to be grandfathering for instream projects that may be negatively affected by abrupt bylaw, policy or procedure changes.

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Regional restrictions

The *Regional Growth Strategy* in Metro Vancouver places numerous restrictions on local governments. For example, there are limitations on housing (even affordable housing) in mixed employment areas. UDI has advocated that mixed employment areas near rapid transit stations would be ideal locations for rental and affordable housing (if the employment spaces are constructed). If the *Metro 2050* proposed *RGS* were passed, this type of housing would be allowed in these areas – but only within 200 metres of a station. UDI recommends that the legislation ensure that the *RGS* does not block any corrective action or directive to a local government that the Government deems necessary to meet its housing objectives.

In a similar fashion, the legislation needs to be written, so that it does not preclude the Province from overriding the *RGS* as well as local by-laws/policies for its own affordable housing projects and partnerships in the future – including establishing a separate approvals process. One of our concerns with the proposed framework is that it may not provide immediate results, but affordable housing could be more quickly delivered by ensuring that the Province has more flexibility and can move forward efficiently with its own projects.

Sources of information for consideration when establishing targets

The sources of information that that the Minister may consider in establishing targets on page two, should include information/data from government sources (e.g., CMHC, BC Housing and BC Stats), academia and industry as well as information from the Federal Government on immigration policy, as British Columbia is one of top jurisdictions for immigrants moving to Canada. In addition, the last bullet in the section should be broadened to "*Advice, information and data obtained at the discretion of the Minister.*"

At several stages of the proposed framework, it is noted that the Ministry and the "Advisor" will consult with local governments, to ensure these consultations are viewed as unbiased, we recommend that the legislation specify that this "Advisor" be a third-party, independent of local governments and their representatives, as well as the Province. We also recommend that the legislation be written to allow for consultation with others such as stakeholders and experts.

Thank you again for involving UDI in the consultation of this important legislation. If you have any questions regarding our comments, please do not hesitate to contact us. We look forward to working with you and your staff to increase the delivery of new homes to British Columbians.

Yours sincerely,



Anne McMullin
President & CEO, UDI

FW: As discussed: UDI consultation on strata bylaws

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: August 22, 2022 8:26:46 AM PDT
Attachments: image001.wmz, image003.png, image002.jpg

Please reach out as you describe below.
Bonnie

Bonnie Ruscheinski, B.Comm., AACI, P.App.
Executive Director, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

BRITISH COLUMBIA

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: Saturday, August 20, 2022 9:59 AM
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Subject: RE: As discussed: UDI consultation on strata bylaws

Yes agreed thanks

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent: Wednesday, August 17, 2022 5:17 PM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Subject: FW: As discussed: UDI consultation on strata bylaws

Do you want us to reach out directly as we have in the past and as Doug has suggested below to UDI. These are amendments and this approach makes sense rather than go to the larger group we briefed on Targets.

Bonnie Ruscheinski, B.Comm., AACI, P.App.
Executive Director, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

BRITISH COLUMBIA

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: Wednesday, August 17, 2022 4:52 PM
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Subject: As discussed: UDI consultation on strata bylaws

Bonnie,

I don't believe from looking at the Teams Engagement folder that UDI has received the 3 column document or summary for strata bylaw changes. Either way, we'd like to get further input on the strata bylaw legislative items from them, specifically on:

1. s.13

2.

3.

In the past, UDI has usually delegated our strata consultation requests to Joscelyn Baker, a strata expert and chief counsel for Polygon Homes who is/was also on their government relations committee. However, I don't see her on the list of those who've already submitted and NDA for UDI. Is there a preference for who should we approach to find out who they'd like to work with us? Otherwise I'd start with Jeff Fisher, one of their VPs I've worked with for a long time and who has signed an NDA already.

Doug Page, (RI)
Director of Policy and Legislation

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
PO Box 9844, Stn Prov Govt, Victoria BC V8W 1C8
Traditional territories of the Lekwungen speaking people
Cell: 250 380-8696
Email: doug.page@gov.bc.ca
Pronoun: he/him

Signed onto **the BC Secure File Transfer Service** as **Ghajar, Yashar OHCS:EX** (yghajar). My Account

Package to cmccolman@udi.org,McCauley.Bri...

To:
cmccolman@udi.org,McCauley.Brian@outlook.com,cynthia@goodmanreport.com,david@hollyburn.com,jons@relianceproperties.ca,lewismv@bennettjones.com,rick.ilich@townline.ca,rblackwell@anthemproperties.com,anicholls@udi.org,amcmullin@udi.org,jfisher@u

From: Ghajar, Yashar OHCS:EX at 8/23/2022 11:03:08 AM

Subject: Legislation Consultation Draft (Housing Targets)

Mailbox:
My Mailboxes ▸ Sent
Will Expire: in 35 days **Read Status:** Read by some recipients
Classification: Confidential

Dear Anne McMullin,

Greetings,

Thank you for your letter dated August 10, 2022, on the proposed Housing Supply Accountability Act legislation. We are sharing with you through the Secure File Transfer Site, a highly confidential consultation draft of the legislation. As per the terms of your Confide information and consultation draft is not to be discussed with anyone who has not signed a Confidentiality Agreement with the Province. PLEASE NOTE: the attached document cannot be shared by email even with others under a Confidentiality Agreement. It must Secure File Transfer System.

The consultation draft is not the final draft and is subject to Legislative Council editing and further revisions. It is shared for the purpose of receiving your feedback before being finalized. As communicated previously, we are working under compressed timelines and comments be received on or before Monday, August 29, 2022.

We have considered all comments received and have incorporated feedback into the draft legislation where appropriate. Other feedback not incorporated may be more appropriately suited to the drafting of future regulations and/or program design and procedures.

We look forward to receiving your comments on the attached Consultation Draft by the date stated above. **Please send your response by replying to this email through the Secure File Transfer System.**

On behalf of Teri Collins, ADM

Yashar Ghajar, Policy Analyst

Housing Policy Branch, (OHCS)

Files:
Confidential Consultation Draft Legislation - Housing Targets 2022 08 23.pdf (327.8 KB)

Return to Normal View

Targets Regulation project planning:

* Project Charter (template)

* Project Sponsor: Bonnie/Cim
* Project Manager: Al
* Project Team: AG (Alyssa, Rebecca, Yashar); MUNI (Jessica, Eric, Lesley), Leg Co Drafter, LSB Counsel,

* Work Plan (Teams and MS Project)

* Draft 3-column regs for consultation and drafting
* Legislative Process/Timeline (Spring 2023 Session) - pending Teri's direction
* Consultation Plan (template): Participants – TN/FN and UBCM, LG staff, UDI, and NGOs (AHMA, BCNPHA)

* Option 1: two tables a) FN/TN Table and b) Stakeholders of in-person meetings (4-6 w/facilitator (technical expert); AG and MUNI staff (chair and policy advisors)
* Option 2: Virtual meetings (replicate and refine Legislation process)

* Budget 2023 Housing TB Sub content - scalable over three-year fiscal plan (Program Design and Implementation, but captured in Regs Project)

* #FTEs: Year 1: 2-6, Year 2: 2-6 (4-12), Year 3: 2-6 (6-18) *Management and R27s
* Advisors (annual contracting budget: Year 1 $0, Year 2 $TBD, Year 3 $TBD)
* Operational budget (TBD)

Recruitment for BOABC Executive Committee

From: Harding, Kevin OHCS:EX
To: jfisher@udi.org
Sent: August 29, 2022 11:31:20 AM PDT
Attachments: image001.png

Hello Jeff,

I'm reaching out on behalf of the Building and Safety Standards Branch regarding recruitment for the Building Officials' Association of BC executive committee. The Province is currently advertising for individuals to represent the general public. Many of the competencies seem like a great fit for people in your network.

I'm wondering if you'd be willing to share this opportunity with your network – this would be greatly appreciated.

The posting is live now: Position Details (gov.bc.ca)

If you have any questions, I would be happy to answer them. I would also be happy to chat with any individual who may be interested – please feel free to make introductions.

Many thanks,

Kevin Harding | Manager, Policy and Regulation

Building and Safety Standards Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Email: kevin.harding@gov.bc.ca
Telephone: 250-213-5461 (direct)

I acknowledge with gratitude that I live and work on the lands of the Musqueam, Squamish, and Tsleil-Waututh peoples, and the lands of the Lekwungen people, traditional keepers of their lands.

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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www.udi.bc.ca

August 29, 2022

Teri Collins
Assistant Deputy Minister
Office of Housing and Construction Standards
PO Box 9290, Stn. Prov. Govt.
Victoria British Columbia V8W 9J7

Dear Ms. Collins

Re: Confidential Consultation Draft Legislation - Housing Targets 2022

We support the intent of the draft legislation and the results of improved housing affordability and stimulated housing supply that it seeks to achieve. We believe that it is an important step to be undertaken and that, if implemented and enforced, it can be an important tool available to the Province. We also acknowledge that these changes will not be made in isolation, and that further incentives will be needed to encourage and drive the supply of long-overdue housing in the forms, and locations, where it is needed most.

We recognize the need to ensure that the draft legislation is broad and ambitious, but also balanced; we feel that it largely accomplishes these goals. However, we think the draft legislation is potentially limited in three key areas and we encourage the ministry to give consideration to these issues (or, if they have been considered and not addressed in the draft, then we would appreciate the opportunity to hear the Province's views on them).

s.13

Page 258 of 403 to/à Page 259 of 403

Withheld pursuant to/removed as

s.13

s.13

Thank you once again for including UDI in these consultations and we look forward to continuing to participate in this important initiative. If you have any questions regarding our comments, please don't hesitate to contact us.

Sincerely,



Anne McMullin
President & CEO, Urban Development Institute



Secure File Transfer

Signed onto **the BC Secure File Transfer Service** as **Ghajar, Yashar OHCS:EX** (yghajar). My Account Sign Out Help

Package from cmccolman@udi.org

To: Ghajar, Yashar OHCS:EX

From: cmccolman@udi.org at 8/29/2022 3:36:31 PM

Subject: RE: Legislation Consultation Draft (Housing Targets)

Mailbox:
My Mailboxes ▸ Inbox

Will Expire: in 34.3 days

Dear Yashar,

Thank you for sharing this confidential draft with us, and on behalf of UDI and the other members of this consultation group, we respectfully submit our comments for consideration.

Should you have any questions or require clarification regarding our feedback, we would be happy to provide it.

Regards,
Cassandra

>----- Original Package -----
>Subject: Legislation Consultation Draft (Housing Targets)
>Date: 8/23/2022 11:03:08 AM
>From: Ghajar, Yashar OHCS:EX (yghajar)
>
>
Dear Anne McMullin,

>
Greetings,

>
Thank you for your letter dated August 10, 2022, on the proposed Housing Supply Accountability Act legislation. We are sharing with you through the Secure File Transfer Site, a highly confidential consultation draft of the legislation. As per the terms of your Confidentiality Agreement, the information and consultation draft is not to be discussed with anyone who has not signed a Confidentiality Agreement with the Province. PLEASE NOTE: the attached document cannot be shared by email even with others under a Confidentiality Agreement. It must only be viewed through the Secure File Transfer System.

>
The consultation draft is not the final draft and is subject to Legislative Council editing and further revisions. It is shared for the purpose of receiving your feedback before being finalized. As communicated previously, we are working under compressed timelines and kindly request written comments be received on or before Monday, August 29, 2022.

>
We have considered all comments received and have incorporated feedback into the draft legislation where appropriate. Other feedback not incorporated may be more appropriately suited to the drafting of future regulations and/or program design and procedures.

>
We look forward to receiving your comments on the attached Consultation Draft by the date stated above. **Please send your response by replying to this email through the Secure File Transfer System.**

On behalf of Teri Collins, ADM

Yashar Ghajar, Policy Analyst

Housing Policy Branch, (OHCS)

Files:

UDI Comments to OHCS_August 2022.pdf (965.1 KB)

In reply to: Legislation Consultation Draft (Housing Targets) (from Ghajar, Yashar OHCS:EX at 8/23/2022 11:03:08 AM)

Return to Normal View

Written Comments from UDI, BCUMC, and UBCM

From:	Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>
To:	Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>, Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>, Veilleux, Rebecca OHCS:EX <Rebecca.Veilleux@gov.bc.ca>
Cc:	Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent:	August 30, 2022 9:27:34 AM PDT
Attachments:	UBCM comments.housing targets legislation.Aug29.pdf, BCUMC_August 29 2022_Re_Housing Legislation.pdf, Housing Legislation Feedback - City of Kelowna_.pdf, image001.png, UDI Comments to OHCS_August 2022.pdf

Hello everyone,

At the end of the day Monday, August 29th, we received four written comments from our key stakeholders: the **City of Kelowna**, **UBCM, BCUMC,** and **UDI**.

Attached are the letters from these stakeholders. I have archived these letters on the Teams site and you can access them via the following links:

- Link **to written comments from UDI**
- Link **to written comments from UBCM**
- Link **to written comments from UBUMC**
- Link **to written comments from the City of Kelowna**

Please let me know if you have any questions or concerns. Thank you.

Sincerely
Yashar

Page 264 of 403 to/à Page 270 of 403

Withheld pursuant to/removed as

s.13 ; s.16

RE: Request to consult

From:	Page, Doug OHCS:EX
To:	Li, Clara <cli@polyhomes.com>, Tsumura, Ed <etsumura@polyhomes.com>, McInnes, Chris <cmcInnes@polyhomes.com>
Cc:	Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>, Baker, Joscelyn <jbaker@polyhomes.com>, DeSouza, Roxanne OHCS:EX <Roxanne.DeSouza@gov.bc.ca>
Sent:	September 1, 2022 4:36:53 PM PDT
Attachments:	image003.wmz, image006.png, image001.png, image005.jpg

Hi Clara,

Yes, thanks for asking. I will send you those right away via SFTS, as it's more secure than email and helps us organize and consolidate input on the amendments.

Doug Page, (RI)
Director of Policy and Legislation

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
PO Box 9844, Stn Prov Govt, Victoria BC V8W 1C8
Traditional territories of the Lekwungen speaking people
Cell: 250 380-8696
Email: doug.page@gov.bc.ca
Pronoun: he/him

BRITISH COLUMBIA

F @polyhomes.com>
S tember 1, 2022 3:14 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Tsumura, Ed <etsumura@polyhomes.com>; McInnes, Chris <cmcInnes@polyhomes.com>
Cc: Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>; Baker, Joscelyn <jbaker@polyhomes.com>
Subject: RE: Request to consult

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Doug – ahead of the meeting next week on September 8th, do you have a list of questions or issues that you would like to address with respect to the proposed legislative changes and UDI or owner-developers?

Best regards,
Clara

Clara Li

Associate General Counsel
Polygon Homes Ltd.
email: cli@polyhomes.com
tel: 604.871.4445 fax: 604.871.4120

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From: Li, Clara
Sent: Friday, August 26, 2022 2:57 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Tsumura, Ed <etsumura@polyhomes.com>; McInnes, Chris <cmcInnes@polyhomes.com>
Cc: Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>; Baker, Joscelyn <jbaker@polyhomes.com>
Subject: RE: Request to consult

Hi Doug – thank you for your email. I was able to download the materials without issue!

I spoke with both Ed and Chris and we appreciate your offer to have a separate call. A more focused call with your questions for UDI and owner-developers makes sense and would be happy to meet at a time that works for everyone.

Best regards,
Clara

Clara Li

Associate General Counsel
Polygon Homes Ltd.
email: cli@polyhomes.com
tel: 604.871.4445 fax: 604.871.4120

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From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: Friday, August 26, 2022 12:31 PM
To: Li, Clara <cli@polyhomes.com>; Tsumura, Ed <etsumura@polyhomes.com>; McInnes, Chris <cmcInnes@polyhomes.com>
Cc: Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>; Baker, Joscelyn <jbaker@polyhomes.com>
Subject: RE: Request to consult

Suspicious Attachment | Out of Character

Hi Clara, Ed and Chris,

Thanks for agreeing to provide your expertise and advice to us on this project. I hope you received the materials OK through SFTS (not the most user-friendly system).

As you can see, we had already scheduled two consultation calls next Wednesday with a group of stakeholders and experts, discussing age restrictions in the morning and rental restrictions in the afternoon. You are welcome to join one or both of these calls if your schedules permit, and I'll send the invitations/links shortly. However, we have some focused questions for UDI and the impact on owner-developers and would also be quite amenable to setting up a phone call to discuss these with just yourselves at a mutually convenient time. It'd probably be a more efficient use of your time, as much of the discussion in the larger group will likely be about the impact on strata residents and managers.

Please let me know your preference.

Doug Page, (RI)
Director of Policy and Legislation

Housing Policy Branch, Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing

PO Box 9844, Stn Prov Govt, Victoria BC V8W 1C8
Traditional territories of the Lekwungen speaking people
Cell: 250 380-8696
Email: doug.page@gov.bc.ca
Pronoun: he/him

BRITISH COLUMBIA

From: Li, Clara <cli@polyhomes.com>
Sent: Thursday, August 25, 2022 4:02 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>
Subject: RE: Request to consult

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Doug – I wanted to confirm whether I am able to discuss the proposed legislative changes with Jeff Fisher? In that I will be consulting on behalf of UDI, I would necessarily have to discuss with Jeff or someone else from UDI to ensure that I am accurately representing UDI's position on the proposed legislative changes.

Please let me know if you require that Jeff sign the Confidentiality Agreement, and I will get him to sign it.

Best regards,
Clara

Clara Li

Associate General Counsel
Polygon Homes Ltd.
email: cli@polyhomes.com
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From: Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>
Sent: Tuesday, August 23, 2022 3:12 PM
To: Li, Clara <cli@polyhomes.com>
Cc: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Subject: FW: Request to consult

Hi Clara,

Thank you for your interest in consultation regarding the proposed housing legislation and Strata Property Act amendments. The next step is to share a confidential and privileged overview of the proposed legislation which we can do under a Confidentiality Agreement with you. As you will not be able to share this information under the Confidentiality Agreement, please also include the name, email address, and signed Confidentiality Agreement of anyone else from your organization that you would like to receive the information. Please reply to this email with signed versions of the Confidentiality Agreement and we will forward the confidential information through our secure file transfer site.

We look forward to hearing from you. Thanks.

On behalf of Doug Page, Director
Yashar Ghajar, Policy Analyst
Housing Policy Branch, OHCS

From: Li, Clara <cli@polyhomes.com>
Sent: Tuesday, August 23, 2022 2:38:03 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Cc: Baker, Joscelyn <jbaker@polyhomes.com>
Subject: RE: Request to consult

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Wonderful! I look forward to discussing further with you.

Clara

Clara Li

Associate General Counsel
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-----Original Message-----
From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: Tuesday, August 23, 2022 2:08 PM
To: Li, Clara <cli@polyhomes.com>
Cc: Baker, Joscelyn <jbaker@polyhomes.com>
Subject: Re: Request to consult

Thanks for your willingness. We can work with that timing. I'll ask that you be sent a standard non disclosure agreement and then be back in touch with more detail.

Doug

s.15

From: Li, Clara <cli@polyhomes.com>
Sent: Tuesday, August 23, 2022 1:14:15 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>

Cc: Baker, Joscelyn <jbaker@polyhomes.com>
Subject: RE: Request to consult

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Doug – Joscelyn passed your email below to me. I'd be happy to participate, but whether I can contribute on this depends on the approximate time commitment required and if you have a particular deadline to complete this consult. If your deadline is within the next 2 weeks, I have about a week (between today and September 1) where I have some availability to review and participate in the consult, but I will be away from Sept 2 – Sept 7.

Best regards,

Clara

Clara Li
Associate General Counsel
Polygon Homes Ltd.

email: cli@polyhomes.com<mailto:cli@polyhomes.com>

tel: 604.871.4445

fax: 604.871.4120

[Description: Polygon Homes Ltd. Logo]<https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.polyhomes.com%2F&data=05%7C01%7Ccli%40polyhomes.com%7Ce4b8a94b08a345ba0a1308da854ba0d5%7C3f32b9ec98004eab97355aa857a89f5b%7C1%7C0%7C637968857109997402%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=4V5BhiAXlOayDQcn6r8NCiqchYretIqYJJ7kh8AJiRk%3D&reserved=0>

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From: Baker, Joscelyn <jbaker@polyhomes.com<mailto:jbaker@polyhomes.com>>
Sent: Monday, August 22, 2022 2:20 PM
To: Li, Clara <cli@polyhomes.com<mailto:cli@polyhomes.com>>
Subject: FW: Request to consult

Hi Clara – Please see below. Would you be available to consult with the Province for UDI? Joscelyn.

From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca<mailto:Doug.Page@gov.bc.ca>>
Sent: Monday, August 22, 2022 2:05 PM
To: Baker, Joscelyn <jbaker@polyhomes.com<mailto:jbaker@polyhomes.com>>
Subject: RE: Request to consult

Thanks for the quick reply, Joscelyn. That would be great if you could check with Clara and let me know.

Doug

From: Baker, Joscelyn <jbaker@polyhomes.com<mailto:jbaker@polyhomes.com>>
Sent: Monday, August 22, 2022 1:54 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca<mailto:Doug.Page@gov.bc.ca>>
Subject: RE: Request to consult

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Doug – Normally I would be delighted, however I will be starting vacation on Friday (my last day being Thursday) and returning on September 6th. In my absence, perhaps our Associate General Counsel Clara Li would be willing to participate. I checked with Jeff and he approved of me asking her if that works for you.

Please let me know if you would like me to check with Clara - she is away today but will return tomorrow.

Best regards, Joscelyn.

Joscelyn Baker
General Counsel
Polygon Homes Ltd.

email: jbaker@polyhomes.com<mailto:jbaker@polyhomes.com>

tel: 604.871.4244

fax: 604.871.4280

[cid:image004.png@01D8B6F1.87E51320]<https://can01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.polyhomes.com%2F&data=05%7C01%7Ccli%40polyhomes.com%7Ce4b8a94b08a345ba0a1308da854ba0d5%7C3f32b9ec98004eab97355aa857a89f5b%7C1%7C0%7C637968857109997402%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=NrXy8aQKjgeGtETglpTEwx2EcHs7K%2BfAdDQk1ihNFjs%3D&reserved=0>

polyhomes.com<https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.polyhomes.com%2F&data=05%7C01%7Ccli%40polyhomes.com%7Ce4b8a94b08a345ba0a1308da854ba0d5%7C3f32b9ec98004eab97355aa857a89f5b%7C1%7C0%7C637968857109997402%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=4V5BhiAXlOayDQcn6r8NCiqchYretIqYJJ7kh8AJiRk%3D&reserved=0>
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From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca<mailto:Doug.Page@gov.bc.ca>>
Sent: Monday, August 22, 2022 1:39 PM
To: Baker, Joscelyn <jbaker@polyhomes.com<mailto:jbaker@polyhomes.com>>
Subject: Request to consult

Suspicious Attachment

Out of Character

Hi Joscelyn,

My office has some important potential legislative changes to permissible strata bylaws that we wanted to consult with UDI on. I spoke to Jeff Fisher this morning, and he indicated that you would still be the go-to person.

If you're around in the next couple of weeks and willing, I could send you a non-disclosure agreement and a summary of what's proposed, and then maybe schedule a phone call to discuss. Please let me know.

Kind regards

Doug Page, (RI)

Director of Policy and Legislation

_____

Housing Policy Branch, Office of Housing and Construction Standards

Ministry of Attorney General and Minister Responsible for Housing

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[cid:image005.png@01D8B6F1.87E51320]

CleanBC Highest Efficiency Equipment Standards – Regulatory Stakeholder Workshop 1

From:	Lisa Westerhoff <lwesterhoff@integralgroup.com>
To:	Marshall Duer-Balkind <mduerbalkind@integralgroup.com>, Christy Love <clove@rdh.com>, Madi Kennedy <madi.kennedy@integralgroup.com>, Shook, Cameron EMLI:EX <Cameron.Shook@gov.bc.ca>, Nikoofard, Sara EMLI:EX <Sara.Nikoofard@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Berkhout, Tom <Tom.Berkhout@bchydro.com>
Cc:	Laura Simandl <lsimandl@rdh.com>, Eduard Cubi <eduard.cubi@integralgroup.com>, Adam Campkin <Adam.Campkin@saanich.ca>, Hans Seidemann <Hans.Seidemann@princerupert.ca>, Heap,Nicholas <NHeap@richmond.ca>, Clevenger, Brandon <Brandon.Clevenger@vancouver.ca>, Tony Gioventu <tony@choa.bc.ca>, Webb, Robyn <robyn.webb@bchydro.com>, Jade Hume <Jade.Hume@metrovancouver.org>, Anastasia Lukyanova <alukyanova@powellriver.ca>, Derek de Candole <ddecandole@victoria.ca>, Bill MacKinnon <bmackinnon@bchousing.org>, Chris Ray <CRay@kelowna.ca>, Lang, Micah <micah.lang@vancouver.ca>, Rachel Buskie <rbuskie@colwood.ca>, Ian Cullis <ian@bcnpha.ca>, Fabian Navarro <fnavarro@bchousing.org>, Ainaz Bozorgzadeh <Ainaz.Bozorgzadeh@technicalsafetybc.ca>, George Benson <gbenson@vancouvereconomic.com>, Matt Greeno <mgreeno@crd.bc.ca>, Harding, Kevin OHCS:EX <Kevin.Harding@gov.bc.ca>, Shaun Chadburn <shaun.chadburn@northcowichan.ca>, Erin Thompson <EThompson@nelson.ca>, ron@havan.ca, Patrick Caraher <pcaraher@ahma-bc.org>, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, Bob Deeks <bdeeks@rdcfinehomes.com>, Catherine Ernst <catherine.ernst@boabc.org>, jfisher@udi.org, Megan Lohmann <mlohmann@communityenergy.bc.ca>, pauline@chbabc.org, building@invermere.net, tryce@cnv.org, tbartko@fvrd.ca, ftewfik@richmond.ca, Patrick.Shek@burnaby.ca, deanna.wasnik@princegeorge.ca, ken.kunka@penticton.ca, Tracy.Wise@nrc-cnrc.gc.ca, Nbrooks@terrace.ca, Coral Buitenhuis <Coral.Buitenhuis@technicalsafetybc.ca>, julie.hewlett@technicalsafetybc.ca, jmunroe@fninspector.ca, Ainaz Bozorgzadeh <IMCEAEX-_o=ExchangeLabs_ou=Exchange+20Administrative+20Group+20+28FYDIBOHF23SPDLT+29_cn=Recipients_cn=7522068f5c6a4b08893531d63d7949f5-Ainaz+20Bozor@namprd18.prod.outlook.com>, malcolm@allanforrest.com
Sent:	September 6, 2022 11:54:46 AM PDT
Attachments:	BC Highest Efficiency Equipment Standards Consultation Primer.pdf, image833063.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello everyone,

On behalf of the Province, we are very much looking forward to hosting you tomorrow at the CleanBC Highest Efficiency Equipment Standards workshop.

I wanted to direct your attention to the primer that was included in the invitation, re-attached here for your convenience. If you have time to review ahead of the workshop, this will help us make the most of our time together.

Thanks very much,
Lisa

(she/her/hers)



Lisa Westerhoff, PhD, EcoDistricts AP | Principal
Integral Group | Trust | **Nurture** | Inspire
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BC Highest Efficiency Equipment Standards Primer for Stakeholder Consultation

September 2022

BACKGROUND

The Ministry of Energy, Mines and Low Carbon Innovation (EMLI) leads policy on energy efficiency standards and market transformation of space and water heating equipment. The Office of Housing and Construction Standards (under the Minister Responsible for Housing) is responsible for the Building Act, BC Building Code, and Safety Standards Act. Together these ministries are responsible for policy development on energy efficiency in the built environment.

The Province is developing policy options to implement the Highest Efficiency Standards for Space and Water Heating Equipment commitment outlined in the CleanBC Roadmap to 2030, which states:

> *Space and water heating are the primary drivers of GHG emissions from buildings. To meet our targets, we need to ensure these functions are super-efficient, improve resilience and, wherever possible, run on clean electricity or other renewable fuels. To help accelerate this transition, we're committing to highest-efficiency standards for new space and water heating equipment by 2030, and earlier where feasible.*
>
> *After 2030, all new space and water heating equipment sold and installed in B.C. will be at least 100% efficient, significantly reducing emissions compared to current combustion technology. Electric resistance technologies like baseboard and electric water heaters are 100% efficient: they convert all the energy they use into heat. But heat pump technologies exceed 100% efficiency by capturing and moving ambient heat, without having to produce it. The new requirements will encourage more people to install electric heat pumps while continuing to allow the use of electric resistance technologies. They will also allow hybrid electric heat pump gas systems and high-efficiency gas heat pumps.*

The CleanBC Roadmap to 2030 was informed by several sources, including macroeconomic modelling of climate policies, technology adoption, energy use, and market trends, and directs the Province to implement policy for time of replacement retrofits of space and water heating equipment.

PURPOSE OF CONSULTATION

Following the mandate given in the CleanBC Roadmap to 2030, the Province is now in the process of developing a set of policy approaches for consideration by Cabinet. At this stage, the Province of BC is looking for stakeholder feedback on the regulatory mechanisms and administrative tools currently under consideration for the regulation of equipment efficiency in new and existing buildings. The intent of this consultation session is to:

- Inform key stakeholders of possible policy approaches
- Obtain feedback on policy approaches
- Understand stakeholder impacts, interest, and capacity to support implementation

Following Cabinet direction, the Province plans to prepare a regulatory impact analysis and complete public consultation on a proposed policy package in 2023. Drafting of regulatory amendments and the development of an order-in-council for approval by cabinet will occur after public consultation.

POLICY APPROACHES UNDER CONSIDERATION

As per the CleanBC Roadmap to 2030, the upcoming energy efficiency standards are being designed to allow electric resistance, electric heat pump, gas heat pump and hybrid dual fuel systems (i.e., electric or gas heat pumps integrated with conventional gas combustion appliances), and *prohibit* the sale and/or installation of conventional gas equipment (such as boilers and furnaces) that are not installed as part of a hybrid dual fuel system. Only asset-based regulatory mechanisms are under consideration – not operational regulation.

The two regulatory mechanisms being considered for this policy are point of sale standards and point of installation standards. *It is not expected that one approach must be selected over the other, but rather that both mechanisms may be required but for different categories of equipment, as appropriate.*

Point of sale standards regulate the performance of specific products at the time they are sold. They are simple tools that yield high compliance rates with relatively low administration burden and are dependent on product certification programs, which require performance ratings, labelling, and certified product directories for regulated products. As these product certification programs cover single packaged products (e.g., rooftop units) and systems sold as a bundle (e.g., residential forced air systems), these types of products are well suited to point of sale standards.

Point of installation standards regulate the performance of products and systems where they have been installed. Although administratively more complex, this approach is better able to cope with "field integrated" systems – for example, some hybrid dual fuel systems consist of products that are sold separately then integrated at time of installation with conventional gas equipment. These systems are unique to each building and are therefore challenging to regulate through product certification programs. Field integrated systems instead require a more flexible, site-specific approach, which is more readily provided by point of installation standards.

Key considerations to keep in mind:

- **Gas equipment regulation.** For EESR-regulated equipment, any conventional gas-fired elements would need to be part of a packaged product or a certified system (such as AHRI certificates) to ensure gas-only options are not purchased and installed under the EESR. Regulation of assets at the point of installation could allow more flexibility in hybrid design and allow systems that fall outside a certification system. The use of natural gas for backup could also be allowed under these regulations.
- **Dual fuel system operation.** With asset-based regulation of dual fuel systems, there is some risk that during operation the gas side of a dual fuel system will be used for most of the load, resulting in limited GHG reductions. Stringent standards for heat pump or hybrid system performance are one way to influence the operation. Other policies that will influence dual fuel system operation are commissioning practices, utility rates, carbon tax, utility demand side management regulation and the GHG emissions cap on gas utilities.

A high-level summary of both approaches is provided in the table below, with more detail in the proceeding sections.

Table 1: Overview of different policy approaches under consideration

	POINT OF SALE	POINT OF INSTALLATION
How would this mechanism be applied?	Via the Energy Efficiency Standards Regulation (EESR) administered by the province.	This mechanism requires policy development. Options may include regulation under new or revised legislation, or regulation under the Building Code.
How is it enforced?	By the Province, with facilitation by certification bodies. Enforcement tools include: • Sales reporting requirements • Retail inspections • Violation tickets • Professional or third-party verification	Site inspections and/or permitting processes are likely required. Professional verification may be considered for certain systems.
What is it best suited for?	• High sales volume equipment that have certified product directories, such as residential forced air systems and rooftop units.	• Large complex heating, ventilation, and air conditioning systems, such as a central hydronic plant consisting of a heat recovery chiller and gas boiler.
What are its strengths?	• Regulates at the highest point in the supply chain and therefore minimal compliance burden placed on contractors and owners • Potential for centralized administration (i.e., by the Province) • A variety of potential enforcement tools can be used	• Potential for more flexible for climate specific, site-specific, and system-based standards
What are its potential weaknesses?	• Difficult to apply to more complex and customized heating systems, whose component parts may not be sold at the same time or from the same seller. • Relies on the development of technical standards for hybrid dual fuel systems.	• This option requires development of policy, legislative amendments, and verification standards. • Relies on the development of technical standards that can be referenced. • Administration and site inspections are more resource intensive than point of sale standards. • If standards were in the BC Building Code, enforcement would be discretionary for local governments. • Permitting processes could increase the time and cost associated with installations

POINT-OF-SALE: Energy Efficiency Standards Regulation (EESR)

The EESR is a point-of-sale regulation designed to put legal requirements on businesses manufacturing, selling, warehousing or distributing products. Equipment performance standards (i.e., testing standards) are used in point-of-sale regulations to define testing, rating and labelling requirements. Certification bodies, hired by manufacturers to comply with the regulation, are responsible for testing, labeling and for verifying compliance of products within their contracts.
The Province is responsible for ensuring all products in the market are sold under a certification program. Certification bodies publish online directories of certified products that can be used by inspectors to check compliance. The Province administers the regulation and conducts inspections to ensure all products in the market are being sold under a certification program.

The Province currently has regulatory authority for inspections of retailers and distributors. The Province also has legislative authority to amendment the regulation and implement; violation tickets up to $2,000, requirements for sellers to report information to the Province and requirements for sellers to keep information about sales.

Note: For certain products, the EESR allows verification to be completed by professional engineers and architects based on reference standards. A similar requirement could be applied to dual fuel systems that are site integrated and outside the scope of a certification program. One example is a hydronic heating system that uses an air-to-water heat pump as its primary heat source and gas boiler for peaking.

Administering the EESR

Two approaches for administering the highest efficiency equipment through the EESR are described below. Both approaches would be administered by the Province of BC.

1. POINT OF SALE REGULATIONS FOR PACKAGED PRODUCTS

This is the simplest type of point-of-sale regulation, where standards are published and administered by the Province but limited enforcement is completed. A level of compliance is obtained by businesses complying with the law. This is how products are currently regulated at point-of-sale through the EESR. Certification bodies (i.e., Standards Council of Canada accredited bodies) are responsible for testing and verifying certain products using their label, and the Province routinely inspects retailers and distributors to ensure products aren't sold without that label.

What is this type of regulation suited for?

High sales volume products that are well established in the market and are sold as a single package e.g.:

- Part 3 packaged rooftop units
- Household hot water heater
- Commercial hot water heaters

Example Scenario: Rooftop units

Under this approach, the regulation of rooftop units would result in the following outcomes:

- Electric heat pump rooftops and dual fuel rooftops would be compliant.
- Single fuel gas rooftops would not be compliant.

Note: This standard would not specify the combined performance or control scheme for dual fuel units. It would only require the unit to include a heat pump. Actual operation would be influenced by utility rates, carbon tax, the GHG emission cap on gas utilities, and building owner choices.

2. POINT OF SALE REGULATIONS FOR SYSTEMS WITH CERTIFIED PRODUCT DIRECTORIES

As noted above, products with certified product directories lend themselves well to point of sale approaches, since they can be regulated high up the supply chain with relatively low administrative burden. However, if low compliance is expected in a certain equipment category, then additional administrative tools may be applied. The Energy Efficiency Act provides authority for violation tickets and reporting requirements, with some limitations. Administrative tools include increased frequency of inspections, violation tickets up to $2,000, and sales reporting requirements.

This is how products are currently regulated at point-of-sale through the EESR, but with additional reporting requirements for sellers and violation tickets. This additional reporting requirement would be a way to manage the sale of dual fuel hybrid systems such that furnaces cannot be sold separately. Violation tickets could be given by Provincial inspectors when non-compliant sales are identified.

What is this type of regulation suited for?

High sales volume products that are sold as a certified system, e.g.:

- Part 9 residential forced air heating systems
- Small hydronic heaters

Example Scenario: residential forced air heating systems
Under this approach, the regulation of forced air heating systems would result in the following outcomes:

- Electric heat pumps, gas heat pumps and certified hybrid fuel systems (i.e., a heat pump with a furnace) would be compliant.
- Furnace replacement parts would be compliant, furnaces sold separately would not be compliant.

Note: This standard does not specify the combined performance or control scheme for dual fuel units, it only requires the unit to include a heat pump. Sizing is typically based on airflow ratios with the heat pump capacity being <=50% of the furnace capacity. Actual operation will be influenced by utility rates, carbon tax, the GHG emission cap on gas utilities and building owner choice.

Key Questions for Stakeholders

Below are the key questions that will be posed of stakeholders in the upcoming consultation:

Table 2: Questions on Point of Sale Approaches

Overall fit/ Effectiveness	• Which types of equipment are most suitable for this type of approach? • Do you see a need for any exemptions (e.g., climate zones, equipment types)?
Administrative burden	• What role, if any, might your organization/industry association have in supporting compliance? • Do you see any potential pitfalls with respect to administration and compliance? • Are you generally supportive of this approach for the equipment categories described?

Industry Readiness	• What impact do you see this approach having on industry members, if any?
	• What kinds of supports would your stakeholders need, if any?
	• If the objective is to align with replacement cycles:
	  ○ What kind of lead time is required from publication of the standard?
	  ○ Is there anything necessary to handle emergency replacements?

Emissions reduction potential	• Does this approach to regulation provide enough assurance of emissions reductions? • How does this align with your long-term emissions reduction plans?

POINT OF INSTALLATION

Administering Point of Installation Standards via the Code

Various mechanisms for point of installation standards are under consideration. One option for implementation of point of installation standards is via the BC Building Code. Developing point of installation standards would require policy development beyond the ongoing code development processes for new construction and alterations to existing buildings as well as changes in how energy codes are referenced. The Province would need to work with the federal government to ensure this policy approach meets existing commitments for code harmonization as well as other building code policy directives.

Administering Point of Installation Standards via regulation/3rd party administration

Recognizing that many authorities having jurisdiction likely do not have the resources to administer equipment standards, other administration options are also under consideration. Another option for the implementation of point of installation standards is to implement the standards through regulation and use a third party for administration and enforcement. This option would require a legislative amendment. This approach potentially provides the most effective administration and compliance process, but would likely require Provincial funding of the third-party administrator or a provision for fee for service administration. The two potential approaches to administration are described below:

1. POINT OF INSTALLATION STANDARDS WITH HEATING SYSTEM PERMIT

This approach would rely on a permit process for verification of compliant installations. A permit process would need to be facilitated by a standard that provides clear guidelines/processes for verification.

What is this type of regulation suited for?

Equipment categories that frequently involve the installation of field integrated dual fuel systems, and are typically installed without professional oversight, such as:

- Medium-sized hydronic systems

Example Scenario: Medium-sized hydronic systems

Under this approach, the regulation of medium-sized hydronic systems would result in the following outcomes:

- Medium-sized gas boilers will continue to be sold and distributed in the Province
- An apartment building could replace a gas boiler, as long as it is part of a system designed to have electric or gas heat pumps serving a significant portion of the heating load.
- A heating system permit would be required for all equipment replacements.

2. POINT OF INSTALLATION STANDARDS WITH PROFESSIONAL VERIFICATION

This approach is similar to the one described above, but includes the use of building professionals to verify that the installation meets the standard. A standard or professional practice guideline would be required to facilitate verification of compliance.

What is this type of regulation suited for?

Equipment categories that frequency involve the installation of field integrated dual fuel systems, and are typically installed with professional oversight, e.g.:

- Large-size hydronic systems

Example Scenario: Large-sized hydronic systems

Under this approach, the regulation of large-sized hydronic systems would result in the following outcomes:

- Large-sized gas boilers would continue to be sold and distributed in the Province
- A high-rise office building could replace a gas boiler, as long as it is part of a system designed to have a heat recovery chiller, or heat pumps serving a significant portion of the heating load, resulting in a seasonal system efficiency greater than 100%.
- Verification that the installation meets the standard would be completed by an authorized professional, based on a standard or professional practice guideline.
- Authorities Having Jurisdiction would be responsible for administration of the standard, but would rely on professionals for site verification and reporting.

Key Questions for Stakeholders
Below are the key questions that will be posed of stakeholders in the upcoming consultation:

Table 3: Questions on Point of Installation Approaches

Overall fit/ Effectiveness	• Do you feel this is an effective means of regulating energy efficiency? Which types of equipment are most suitable? • Do you see a need for any exemptions (e.g., climate zones, equipment types) or prohibitions (e.g., gas backup)?
Administrative burden	*Industry Associations* • What role might your organization/industry association have in supporting compliance? • Do you see any potential pitfalls with respect to administration and compliance? *Local Governments* • What is the capacity and interest from local governments for taking this on? • How/would this approach affect your municipality's activities in the day to day? • Do you see any potential pitfalls with respect to administration and compliance?

Industry Readiness	*Industry Associations*
	• What impact do you see this approach having on industry members, if any?
	• What kinds of supports would your stakeholders need, if any and in what timeframe?
	• If the objective is to align with replacement cycles:
	  ○ How much lead time from the publication of the standard does industry need to ensure it can successfully comply with the standard?
	  ○ Is there anything specific that will be needed to help handle emergency replacements?
	
	Local Governments
	• Is your jurisdiction suitable for early adoption of this approach?
	• Would your Council be interested in early adoption?

Emissions reduction potential	• Does this approach to regulation provide enough assurance of emissions reductions? • How does this align with your long-term emissions reduction plans?

Webinar Questions & Topics for Discussion

Event: UDI Webinar: BC Building Code Proposals – What You Need to Know
Speaker:
Zachary D. May, MBA, Executive Director of the Building and Safety Standards Branch and Ministry of Attorney General and Minister Responsible for Housing
Scott B. Williams, Senior Codes Engineer of the Building and Safety Standards Branch (BSSB
Moderator: Dave Ramslie, COO, OPEN Technologies
Reference Links:

- https://www2.gov.bc.ca/gov/content/industry/construction-industry/building-codes-standards/bc-codes/public-review
- http://www.energystepcode.ca/

2022 Topics and Questions for Discussion

Province-wide changes

1. In addition to providing more tools for municipalities to regulate energy efficiency through the *Energy Step Code (ESC)* and GHGs in new buildings through this new regulation, the Province is also working on B.C.-wide approach over the next decade. Can you lay-out the Province's timeline for this work for both energy efficiency and GHG emissions?
2. What resources is the Province planning to provide for these broader changes, as well as the current regulatory changes.
    a. For example, will there be additional costing analysis, support in securing low-carbon systems, like heat pumps and additional education for builders, energy advisors and contractors on how best and cost effectively achieve the new energy and GHG requirements?

Commented [JF1]: This may be part of their presentation?

Fuel Sources

3. Will local governments be able to prevent the use of RNG in new projects through incentives or requirements, and would this change after the BCUC decision comes down regarding RNG? If yes, then under what authority?
4. Hydro
    a. Local distribution issues – There are areas like Langley where there are hydro distribution issues. Given the capacity constraints in municipalities, are there best practices that municipalities should consider when implementing electrification policies? For example,

area-specific requirements where infrastructure is already in place to support heavier loads?

b. Connection fees have been a long-standing issue for new developments and potentially existing buildings[s.13] [s.13] Can you discuss the challenge from the Province's perspective and any recommendations that are being provided to municipalities?
    i. The Best Practices guide recommends that municipalities establish local building electrification funds to support projects facing electrification challenges, can you provide more detail on this proposal? How would these funds be funded?

c. There are a number of ongoing challenges that BC Hydro is facing as electrification of buildings increases, for example, connection fees, Tier 2 rates, local distribution capacity and staffing shortages. How is the Province working with BC Hydro to address these challenges, which will likely be exacerbated by the push to reduce GHGs in new buildings?

[s.13]

Incentives and Flexibility

5. Are there any limitations to the adoption of higher *ESC* steps or GHG reduction targets by municipalities once these provincial regulations are approved? Can the Province clarify whether municipalities are required to provide incentives as they implement these new requirements?
6. Some municipalities provide a step-down approach currently, where new projects can build to a higher step of the *ESC* or a lower step and provide a low-carbon energy system. Do municipalities have to provide options like this, or could they require the highest step of the *ESC* and the more stringent GHG reductions simultaneously?
    a. How does the Province view this approach, is it one that is being recommended to continue with the introduction of these new regulations?
7. Some municipalities are also considering alternative requirements, such as solar panels, embodied carbon regulations, building electrification, etc. What options or powers do municipalities have to adopt alternative

Commented [JF3]: These may be addressed in the presentation

requirements, as they are outside of the proposed regulations and may not be aligned with the *Building Act*?

Notice and In-stream Protections

8. If these regulations are approved in December, how soon after can municipalities start mandating projects to meet the GHG emission reduction targets as well as increased steps under their own *ESC*?
    a. Are there any in-stream protections that municipalities will be required to provide? What recommendations does the Province have in this regard?
9. When these new regulations kick-in at the end of this year, they will become immediately effective. Some of these proposals, such as the changes for Step 2 for Part 3 commercial projects and the Provincial energy efficiency requirements for municipalities that are not already using the *ESC*, could immediately affect in-stream developments. Is the Province considering extending the implementation timeline for the regulation or having a grandfathering period to allow the building sector to make the necessary adjustments?

Monitoring and Evaluation

10. Will the Province be tracking the adoption of municipal requirements under these new regulations?
    a. Will there be an opportunity to review the types of changes that are implemented?
11. The Premier-designate has identified improving housing affordability and supply as a key objective of his government, are you concerned that these new regulations and the forthcoming municipal requirements will negatively affect both the supply and cost of housing in B.C.?
    a. Will BSSB be monitoring the impact of these regulatory changes on housing supply/affordability?
    b. Would changes to the regulation be considered?

FW: UDI report on rental housing construction

From: Corpe, Cimarron OHCS:EX

To: Gartner, Candice OHCS:EX </o=BCGOVT/ou=Exchange Administrative Group /cn=Recipients/cn=29a04f87a415445fbdaac2fd6b3868bb-Gartner, Candice>, Aman X OHCS:EX Gill (Aman.X.Gill@gov.bc.ca) <Aman.X.Gill@gov.bc.ca>, Veilleux, Rebecca OHCS:EX </o=BCGOVT/ou=Exchange Administrative Group /cn=Recipients/cn=202e2fb61d1845a28fa027f2e738f1b5-Veilleux, Rebecca>, Teekah, Alyssa OHCS:EX </o=BCGOVT/ou=Exchange Administrative Group /cn=Recipients/cn=dc6443a5c5764bada610d46c600a255b-Teekah, Alyssa :E>, Cramer, Leslie OHCS:EX </o=BCGOVT/ou=Exchange Administrative Group /cn=Recipients/cn=ebf01dae4a1647eba0172365765092a3-Cramer, Leslie OH>, Ghajar, Yashar OHCS:EX <Yashar.Ghajar@gov.bc.ca>, al-nashir.charania@gov.bc.ca, Veilleux, Rebecca OHCS:EX </o=BCGOVT/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=202e2fb61d1845a28fa027f2e738f1b5-Veilleux, Rebecca>, Cramer, Leslie OHCS:EX </o=BCGOVT/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ebf01dae4a1647eba0172365765092a3-Cramer, Leslie OH>, Teekah, Alyssa OHCS:EX </o=BCGOVT/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=dc6443a5c5764bada610d46c600a255b-Teekah, Alyssa :E>, Gartner, Candice OHCS:EX </o=BCGOVT/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=29a04f87a415445fbdaac2fd6b3868bb-Gartner, Candice>

Cc: Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>

Sent: September 14, 2022 8:38:43 AM PDT

Attachments: image001.jpg, image002.png, image004.png

FYI – no action, but worth scanning for any nuggets of note. Thanks!

Cimarron Corpé
Director, Housing Secretariat

Ministry of Attorney General and Minister Responsible for Housing
Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent: Wednesday, September 14, 2022 8:25 AM
To: Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>; Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: UDI report on rental housing construction

FYI - Please see below. Feel free to share with your teams.

Through the analysis in the report below, UDI aims to answer the question, in a market where there is considerable and growing demand for rental housing, why isn't more being built, and what can be done?
No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Bonnie Ruscheinski, B.Comm., AACI, P.App.
A/Assistant Deputy Minister
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca



I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

CONFIDENTIAL - REDMA and amendments

From: Baker, Joscelyn <jbaker@polyhomes.com>
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: September 14, 2022 5:24:37 PM PDT
Attachments: image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

CONFIDENTIAL COMMUNICATION SUBJECT TO A CONFIDENTIALITY AGREEMENT

s.13

This email doesn't do the discussion justice, as I'm short on time, but I wanted to get it out to you before my "meeting memory" fades!

Please feel free to call to discuss further and best regards, Joscelyn.

Joscelyn Baker
General Counsel
Polygon Homes Ltd.

email: jbaker@polyhomes.com
tel: 604.871.4244 fax: 604.871.4280

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Vancouver, BC V6H 4C2

This message is intended solely for the named recipient(s) and may be or contain a privileged and confidential communication between solicitor and client. If you are not one of the named recipients, please destroy this message permanently and notify the sender.

FW: Kwong Raymond

From: Baker, Joscelyn <jbaker@polyhomes.com>
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: September 15, 2022 1:51:56 PM PDT
Attachments: Kwong Raymond.vcf, image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Doug – I asked for our BC Housing contact information and was sent the attached. I tried to find Raymond's bio or title on BC Housing's website, but was unable to locate any page showing the "team" or organizational chart. I was able to find various references to presentations that Raymond has made to outside groups but I'm not sure if they have his current title (or what that title is)! Hopefully there is some inter-governmental directory that may give you better information than the attached, or of course there is always Linked In!

Best regards, Joscelyn.

Joscelyn Baker
General Counsel
Polygon Homes Ltd.

email: jbaker@polyhomes.com
tel: 604.871.4244 fax: 604.871.4280

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Vancouver, BC V6H 4C2

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FW: Presentation to UDI Capital Region - BC Energy Step Code

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>, Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>, Harding, Kevin OHCS:EX <Kevin.Harding@gov.bc.ca>
Sent: September 15, 2022 3:13:35 PM PDT

FYI

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Warkentin, Tiffany OHCS:EX
Sent: Thursday, September 15, 2022 3:13 PM
To: 'UDIVictoria@udi.org' <UDIVictoria@udi.org>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: Presentation to UDI Capital Region - BC Energy Step Code

Hi Kathy,

Thanks so much for your interest on our upcoming code changes. As I'm sure you can appreciate, our branch is one of many work units experiencing staffing pressures in our rapidly evolving labour market. This has resulted in the unfortunate reality that we just aren't able to accommodate most in-person speaking appearances at this time.

For this code change, we've focussed our limited resources on creating content that will replicate much of that speaking engagement experience in a virtual way, combined with an on-demand delivery model so that our audiences can access the content at a time that is convenient to them. Those resources will be available to support the public review process that is set to commence very soon. We will be certain to let you know when those materials go live online. We look forward to your members' participation in that forum and thank you again for your interest.

All the best,

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Monday, September 12, 2022 1:40 PM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: Fw: Presentation to UDI Capital Region - BC Energy Step Code

---

From: UDIVictoria <UDIVictoria@udi.org>
Sent: Monday, September 12, 2022 9:34:48 AM
To: Wong, Hugo OHCS:EX
Cc: Emily Donner
Subject: RE: Presentation to UDI Capital Region - BC Energy Step Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Hugo –

I would prefer is someone presented to my members at a lunch so that they can ask question and get answers in real time. This is part of UDI's mandate is to educate our members on topics that influence the industry.

Is there someone other then yourself that would be willing to present the changes?

Regards,

Kathy Whitcher – Executive Director
Urban Development Institute – Capital Region
PO Box 30249
Reynolds PO
Victoria, BC V8X 5E1

250.888.1671 (mobile)
www.udicapitalregion.ca

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: September 9, 2022 4:26 PM
To: UDIVictoria <UDIVictoria@udi.org>
Cc: Emily Donner <emilyd@udi.org>
Subject: RE: Presentation to UDI Capital Region - BC Energy Step Code

Hi Kathy and Emily,

Thank you so much for the invitation. I'm wondering if the presentation might be redundant, because we're releasing a series of instructional videos this month that will go into depth about the changes to the BC Energy Step Code and the proposed Building Carbon Pollution Standard, as well as some written material.

We're planning a webinar which your members are welcome to attend (either at the end of Sept. or early October). We'll send a link when a date's been chosen.

If those don't answer your particular questions, we could also drop into some sort of virtual event if you've got one soon? We will also take questions by email throughout the six-week public review period.

Best,
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

From: UDIVictoria <UDIVictoria@udi.org>
Sent: Wednesday, September 7, 2022 12:53 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Emily Donner <emilyd@udi.org>
Subject: Presentation to UDI Capital Region - BC Energy Step Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Hugo –

I would like to introduce myself, my name is Kathy Whitcher, and I am the Executive Director of the Urban Development Institute – Capital Region (Victoria). I am contacting you with the hopes that you would be willing to present the changes that are coming to the BC Energy Step code to my members at our Wednesday, October 12th luncheon. It is my understanding that the Province has been working on some substantial changes and the development industry is eager to hear them.

Our lunch begins on October 12th at 11:45am at the Union Club with a plated lunch followed by a presentation that would start about 12:30pm and go until 1:30pm. UDI would be honoured to have you as our guest and presenter.

Please let me know if you are willing and able to present and attend.

Kind Regards,

Kathy Whitcher – Executive Director
Urban Development Institute – Capital Region
PO Box 30249
Reynolds PO
Victoria, BC V8X 5E1

250.888.1671 (mobile)
www.udicapitalregion.ca

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Monday, July 25, 2022 4:16 PM
To: Wong, Hugo OHCS:EX; bea.bains@fortisbc.com; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; s.22 ; Warkentin, Tiffany OHCS:EX; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; Muncaster, Katherine EMLI:EX; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; Maxwell.Sykes@surrey.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX; XT:Wimmers, Guido CITZ:IN
Cc: Grass, William OHCS:EX; Harding, Kevin OHCS:EX; Bigonesse, Alexandre
Subject: Energy Step Code Council meeting
When: Tuesday, September 27, 2022 1:30 PM-4:30 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Agenda for now:

Part 9 Unique Building Types presentation (long homes, small homes in cold climates)
More to come.

Microsoft Teams meeting
Join on your computer or mobile app
s.15

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Package

Date and Time of Meeting: Tuesday Sept 27, 2022 | Time: 1:00 p.m. to 4:00 p.m. Pacific Time
Microsoft teams link:

Click here to join the meeting

s.15

Download Teams | Join on the web

Acting Chair: Tiffany Warkentin, Building and Safety Standards Branch, Office of Housing and Construction Standards
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro
Meeting Materials

- Agenda (below)
- PowerPoint presentation

Contacts if You Require Assistance

- Hugo Wong, BSSB – 236 478 1406 (call only); hugo.wong@gov.bc.ca

AGENDA

Time	Topic	Speaker(s)	Purpose(s)
1 p.m.	Welcome, introductions and opening remarks	Tiffany Warkentin, Acting ESCC Chair Robyn Wark and Bob Deeks, ESCC Vice-Chairs	▪ Welcome participants ▪ Approval of agenda
1:10 pm.	Subcommittee report out	Co-chairs	▪ Part 3 and Part 9 Non-Residential ▪ Part 9 Residential ▪ Local Government Peer Network ▪ Communications and Capacity Building Sub-committee
1:30 p.m.	Part 9 Unique Building Types	Susan MacDougall, Focal Engineering; Mark Bernhardt, Bernhardt Contracting	▪ Summary of technical research regarding how log homes and small homes in cold climates can be 20%-more energy efficient
2:45 p.m.	Break		
2:55 p.m.	Roundtable	All	▪ Discussion re: Energy Step Code implementation in your area, readiness for upcoming code change
4 p.m.	Adjournment	All	

RE: Energy Step Code Council meeting

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>

To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, bea.bains@fortisbc.com, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, s.22 , christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, jowen@surrey.ca, sean.pander@vancouver.ca, roberto@zebx.org, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, pauline@chbabc.org, lsampliner@portmoody.ca, zsegal@boma.bc.ca, dstathonikos@boma.bc.ca, Maxwell.Sykes@surrey.ca, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>

Cc: Grass, William OHCS:EX <William.Grass@gov.bc.ca>, Harding, Kevin OHCS:EX <Kevin.Harding@gov.bc.ca>, Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>

Sent: September 26, 2022 9:45:39 AM PDT

Attachments: 2022 09 27 agenda v1.docx

Hi all,

Please find tomorrow's agenda attached.

All the best,

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation

Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

-----Original Appointment-----
From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Monday, July 25, 2022 4:12 PM
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Cc: Grass, William OHCS:EX; Harding, Kevin OHCS:EX; Bigonesse, Alexandre
Subject: Energy Step Code Council meeting
When: Tuesday, September 27, 2022 1:30 PM-4:30 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Agenda for now:

Part 9 Unique Building Types presentation (long homes, small homes in cold climates)
More to come.

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Enright, Patric.

Pete K

Scott's update on P9 subco

Toby Lau report-out from P3/9

Maya: Met in June. A lot of LG participants. Lots of outreach. Working group, public review process and consolidated feedback. Meeting with that group probably twice. Next week, Oct. 5, discussing public review materials.

Will: Comms/Capacity Building Subco: WG stepped into role of co-chair alongside Bertine. Mary's stepping down. We met on Sept. 7, next mtg is Nov. 16. Had BSSB present on the code changes. Busy supporting ESCC collateral. Happy to take direction or questions as a subco.

Williams: Additional ECMs…summarizing the study. "middle of the road" and equitable to larger home sizes. A lot of work in analysis,

Susan MacDougall: Methodology, results, discussion.

2021 Metrics Research Report. Graph which describes that medium homes meet steps at much lower ICC than small and laneway homes. That's Table 6-24.

Log homes feature regional materials and low embodied carbon. Log homes struggle to meet TEDI due to lower log wall R-value

Look at two archetypes, build on the MRR: See how smaller home ICC per cent that can approach medium homes. And evaluate cost-effective ways for log-homes. See if log homes "top out" at a certain Step.

T-shaped single-storey home is the "worst-case" due to high articulation.

Strategically place liner where it'd improve R-value but not impact aesthetics.

How prevalent log homes are? They'll survey their members (log and timber builders assn) to see how prevalent they are.

Drop off R5 quite quickly. R5 walls couldn't meet any of the Step limits other than Step 3 in CZ4 even with EcMs. No adjustments recommended for R5 walls.

IN CZ8, if we applied medium ECMs to small homes, TEDI would increase by 10 per cetn from 115 to 122. That's a relaxation of TEDI there. Challenge in the base results is that these are not consistent increases. Hard to codify from these numbers. CZ8 drops an entire Step and discussion and debate on whether that was good. Maybe that's too much of a relaxation.

When considering Code options, we set some informal goals. Not increasing CZ4. Just shift those down so CZ4 doesn't relax. Hoping to get straightforward approach where values don't drop beyond lower Step.

Proposal: Linearize the trend for each Step. Haven't talked much by the laneway. But suggest to use small home archetype used for anything smaller for 210 sq m. laneway generally complies. Might be able to offer a different TEDI and HDD calc for smaller homes that includes these adjustments. One equation for Part 9 buildings, the other for small P9 buildings.

The odd climate zone gets a slightly higher relaxation than it needs, but that's the simplified approach.

Same analysis on MEUI. This is less clean. Step 5 line, it crosses the Step 4 line when relaxed. So even though it results in a MEUI relaxation, not straightforward enough, may need an interpretation. We found that here, some zones dropped 1-2 Steps,

MEUI goals: no relaxations for CZ4. Tried to drop an entire Step. The MEUI table isn't linear. Showing what base limit is and added size and cooling increase. No linearity, no equation that results in each of these values. Only two sizes. Laneway and small archetype out of five available. No simple formula. Those informed where our recs come from.

Setting delta MEUI same as delta TEDI, set using previous formula. Justification: if we increase TEDI limit by 5 kwh/m2, could be offset by 100%-efficient by electric baseboard. The MEUI would then shift up the same amount as the TEDI. Simpler approach, doesn't drop an entire Step, it still has significant relaxation, but not all scenarios met MEUI. ICC for small and laneway homes, based on MEUI, still pushed a bit higher in some scenarios.

Our proposal was to use small home for any of the smaller homes, tried to avoid another MEUI tables, lots of columns for diff sizes. If we used the small home adjustment, the laneway would also comply. Modified TEDI and TEUI were met in most cases. Even if not met, limit and result were much closer than previously. The laneway benefits from relaxed NBC %-better and energy limits as well.

NBC is less than 300 m3 for small home. Only laneway was smaller home for this archetype.

SW: Demonstrated that we looked at two archetypes among many home sizes/shapes. Hard to draw conclusions. Will have to do more research on this. Maybe absolute limit for MEUI. Could be part of additional work.

Susan MacDougall: Started digging into DHW, absolute values per size. Given it's only been a week, not enough to present on. Makes sense I think.

SW; Nothing from this study is in the code language for public review. We have existing TEDI, MEUI. What has changed is adoption of NBC to relaxation to %-better for 300 cubed or less. Susan outlined that to see how it impacted, and how there are more options for laneway homes for lower Steps. For upper Steps, we're looking at more absolute targets again. Log homes: couldn't get absolute limit for topping out for log homes. We've provided them with the prescriptive approach only. Not required to follow performance path until we get this straightened out. We will have full code in 2023, which will include all sections and subsections of the Code, not just EE and GHGs. We'll look at this further during another public review.

Not many other questions.

Pauline: No concerns from builders on TEDI for Step 3. Our sample is skewed for CZ4. But for CZ5, similarly, no concerns. Want any proposed relaxation may be not necessary for those CZs.

Patrick Enright: Folks will take a moment to process incoming GHG regulations. It changes the context. You might hear some people say: All elec and Step 3, who cares? I wouldn't put it that bluntly. As we have more direct tools to tackle GHG emissions, the overall context of EE may shift more back towards what do utilities need to manage overall EE of built environment and limited supplies of energy. Long story short, the GHG reg changes the context and the overall context of EE, IMO.

Pauline: Great point, Patrick.

Lise Townsend also agrees.

SW: Thanks Susan.

Roberto: Question: how focused, how much input is BC Hydro providing in this process? IN the sense that it's of paramount importance to BC Hydro's integrated resource process, load forecasting to see what the building infrastructure will need from the grid. And finding ways to minimize energy consumed by bldgs. Any strong connection from your study and BCH?

SW: Technical subcos and these forums. No direct contact from this study in particular, other than usual forums. TW?

TW: No, but I saw Robyn turn off her camera, maybe she can add something?

Robyn Wark: Gary Hamer's name, ID'ed on the steering committee for this project. I reiterate we're not silent or not wanting EE. That's just as important to us on the electrification side.

Roberto: is BC H pushing for the most EE possible in bldgs.? Is there a need identified that in BC H? Or are they saying, Step 3 is OK or Step 4 OK?

RW: No position on that question.

Joe: Nervous when I hear this convo. In CZ4, this is fine. As we get into colder climates, it's important that we drive lower emissions through EE. Just electrifying everything in colder climates puts cost burder on customer. Any incentives or plans or programs that get us there can put us there.

Patrick Caraher: If anything, electrically heated/DHW'd homes need to be more efficient than gas, both for DSM and mitigation of energy poverty that often comes with mandated electrification, esp. in the colder climate zones. 2 likes

One alternative time for the Public Review Q&A would be Wed. Oct. 19 from 10 a.m.-noon.

ALTERNATIVE MEETING TIMES:

PREFERRED: Wed Oct. 19 from 10-12 p.m.

Tues. Oct 18 from 10-12 p.m. (second option)

Tues. Oct 18 from 1-3 p.m. (third option)

JF: Metrics Report was absent from the presentations: what will this all cost? Costing would be great to include.

JF: Consider covering off strategies; That's where you get feedback. Well, these are some measures you'd take, does that work, that's the dialogue you might get.

Pete K: Some ICC in small home of 8% ish. If your average new house construction is $1M, 80k could be significant. Good point.

Roundtable:

Kootenays, Megan Lohmann: Lots of ppl already ref Step 3. We have some home types that some EAs . Columbia Valley doesn't' have capacity early, will follow Province. Wanted to flag: wanted to continue with builder engagement and in-person support once again. Some confusion on how we can ensure that builders get credit for those workshops now a percentage required on Step Code. Not sure whether there's flexibility in how those credits are allocated. In Step Code-specific training, building science in person, we'd love ot have that count for Step Code accreditation throughu BC H. I think that's it. Our team is growing.

TW: I've talked up BAL a lot.

Maura: Update, ppl looking at public review, they will get back to use on implications for architects. Looking at thigs in continuing education. For looking backward, we issued practice guidelines for architects but useful to others. On Step Code apaplication with respect to major occupancy. Tradiitonally, major occupancy focused on Part 3 and fire protection. But looked at differently in Part 10 and Step Code. Some architectural guidance for energy modellers. Consulted others. In some time in the future, could be part of AIBC-EGBC guidelines, but wanted to get it out ASAP. It's issued.

Ron: Big concerns with our constituents. Lots of inconsistency from one jurisdiction to the next, often with jurisdictions next to each other. This org, together with the Province has put out many educational resources, full slate of courses, new requirements for BCH 20 CPD points for 24 months, but awareness and capability of members are about 25 per cent of overall 1100 we represent that really wrapped their heads around what's coming. That's always a hard thing to do, to recognize what's coming when they're busy. It's never failed that any new code, any bldg. department, listen to someone whining at the desk, "when did that happen", notwithstanding many years of lead time. What we're trying to do at HAVAN, for request for public review, is doing what we can to get members to look at it so they know what the changes are, then offer some meaningful feedback. We'll keep doing that as long as that's open. Then we can get some traction. Something for people who do even know are changes to Metrics have also led to some confusion and lack of understanding. If you're not involved, just buzz in once ina while, some substantive changes that have taken place for the past 1.5 years, particularly with metrics. That'll leave some people asking questions as they move forward. Hopefully we can keep, along with CHBA, some education necessary to get everyone tuned in. Getting them tuned in is the challenge. I can't tell you how many times "I'm too busy". It'll be interesting ot say the least.

Roberto: I appreciate Ron's comments. We find it hard to get attention of builders who are busy and on site. Maybe ESC newsletter items populating HAVAN newsletters to inform those builders to read 1-2 bullets in a newsletter, a strategy to maybe prepare them. We have programming that will complement, hopefully, evolution of Step Code. For ZEBx programming was "aim for the top". On that note, webinars for PH MURB at UBC, some NZER challenge-case studies, the sixth one is coming up for bldg. in Golden, a Step 4 MURB. Aiming for the highest Steps, and the Steps below, needless to say.

Jeff at UDI: One particular concern: changes to office and retail metrics. They'll be implemented immediately. Right in December of reg goes forward. Some concern about builder aiming for the lower, then higher, what kind of notice is being provided, munis picking up on that issue. A lot of this will depend on, on the BP, no limits on LGs, they can go the highest Step, lowest GHG requirements. How quickly do they move there, what are time frames for that, will they do it in Steps, or just one leap. That'll have huge impact of some members to achieve what municipalities want. We would be, hosting an event, a "high-perfrmance workshop" with membesr on the 14th. Obviously, this will be critical to it. Hopeful someone from the Province can speak to what's proposed. IT's more oriented to Part 3. Hoping someone from the Province can speak to that.

TW: I wanted to do as part of public review, so people could see what we started to think about, ID stuff that's missing, and inform plan making. Runway is important. Beign as proactive as everyone can is key success factor. Welcome comments on that, too.

SW: With changes to metrics for some P3 archetypes. I understand. That can be said about any Code change. If any changes to Code and hasn't been looked at by any sort of designer, owner builder, same issue comes up. I understand issue. It's part of the process.

JF: Slight difference for me. In 2023, when the big BCBC change, lots of attention put on that. In many ways, this is going to get buried. Everyone will focus on munis can do GHG targets, Province-province-wide don't think it'll get attention it deserves. I'm a bit worried this will get missed. Some may get caught. Not a dramatic change to metrics, but I can picture some of these projects, for several years in Part 3, that somehow elevated for communications. It's hard to get through. These are major changes to ESC. Those will be the focus.

Joe Hart: EAs and building inspectors are prepared, but sure wouldn't want to be them for the first 6 months. Builders don't know as much. Lots of education required. Owner-builders are most worrisome. Zero training. For them to jump in…significant percentage of owner builders up here int eh North. Real task to get through that. I'm considering starting a company consulting for owne-rbuilders on Step Code to try help that process. Our EA, he has a pretty good string of trainees he works with, don't think capacity will be a huge deal other than most remote areas. First six months will be struggle fro everybody. Until people get used to it. Get things straight for builders. It's like this every time we get a Code change. I remember when window one came, put it off for a year, no one had a window we could buy. We make it work. I spoke to a group fo builders, thye said: we want to be part of the solution. We just need the tools to get there. Esp. on smaller homes, for affordability, in favour of what we're doing. We want to provide a home ppl can afford to live in. Not because we want to cheap out. We put a solar panel, 9kW system on our yystem this summer, our rate will go up $250 a year because of that. They may charge us more depending how much we make or save based on solar PV. Real disconnect on where we go and what they want to do with us.

TW: At BSSB< we think about how our work intersects with insurance. It's a surprising and education convo every time. About stuff like this. TO help mitigate this. Not necessarily expected.

JH: Total shock. No idea they could charge us on what we could be saving every year. If theres a committee sign me up.

Bertine: In absence of solutions to get these people, any insights, could we involve effort on EA side as they'll be the ones hand-holding some builders, provide that extra training "on the spot" when they do new building. It's a smaller group of pros we can address with training right away. Many builders out there, who are doing their job, every day, in and out. EAs will also be busy, but maybe more receptive to a quick training uptake. We're trying to do this with compliance template updates, anyway. Any other pros who engage with builders who we could train so they can train the builders?

Ron: We have advocating for "integrated design process" for some time. We've engaged all design/architect members, who've embraced training. Large contingent of EAs, too. No holds barred here. Trying to latch on to what we can to pass this info on. Getting anyone to learn anything is hard. NRC LEEP for renos, we're doing, trying to get attendees is hard. It'll be disappointing turnout we're expecting. And yet, six months ago, maybe even more than that, had difficult, we would have had a waiting list.

Pauline: That was point I wanted to make: we're finding as we dig through proposals is that there's a gap with the education and training for EAs under current scheme. Some EAs weren't using most current forms. How do we go about providing that info, archiving old compliance, so we don't see 2018 forms pop up. Maybe it's circling back with Bertine. Mechanical contractors aren't well engaged. They're not available to take the training. They're such a critical component of getting this right (sizing, equipment, etc.) But we can't bring them to the table. Anything we can do it, subsidized training, etc. etc. we could explore? We've heard that repeatedly from our committee meetings.

Roberto: Can CACEA help EAs get up to speed?

Ralph: John M had to step away, had to give an update. Shifting to Part 3, in the past, we've worked towards low-carbon strategy for all future residental construction. We've worked on that for 18 months now. Moving towards carbon targets. We're internally developing new Step Code /GHG targets. Step 2 is our base, we want to go one more. We want to move to public approval process as soon as January. Approval in first half of 2023. This is unofficial. But hopefully an early jurisdiction with the Code. We do our consultation with our developers etc. We are including in our jurisdiction for future climate design for overheating. To use the future climate files as part of our approach. More work in the 2023 update, I think, on the Codes side.

SW: Nationally, some work on overheating. We're looking at that, and as we modify code for end of 2023, something we can consider.

TW: We emailed TECA and HRAI to let them know directly.

Maya: General updates: Quite diverse. Neighbouring communities could have very different approaches. We're trying to get ahead of that some. Through the next iteration of the PN. Where we'll have regional clusters at alignment for policy and Step Code and CPS being one of those. CRD, quite a tight clustering of munis that might want slightly diff adoption schedules. For industry comms, and general structure, even if timing is off, that's the hope. It'd be great to have Ron and Jeff, Pauline, attend some of those in the coming months to help LGs hear from industry in that. Many diff councils next to each other who want to be creative. Leading LGs looking ahead for how they will be implementing this. Some of them, setting specific Level of CPS< others want two-Step approach. Best practices coming soon. Newer

members outside of urban centres, Megan spoke to this a bit, biggest question coming up was how prescriptive approach will work. Some clarity in the public review documents we'll pass on to those.

Harshan: It behooves us to support in near term, provision of responses to engagement opportunities as well as ensuring we reach out to our own networks. We've already sent note to EGBC comms, tell them a note about upcoming newsletter. Engage advisory groups, etc. We'll promote it during the EGBC conference, and hope there's good participation from EGBC-AIBC community. We will definitely reach out to energy modellers, just to ensure they know of proposed changes. Find out what kind of…for any internal…capacity-building activity. Professional practice guidance, opportunity to revisit that next year, five years will have passed since released of that. We can see if any revisions, esp with CPS, need to be reflected continue to assess those things. By and large, in the near term, we promote engagement. In longer term, assess opportunities for education events, both for EGBC, AIBC, mobilize some who are SMEs to lead training for local industry.

Tyler: Building envelkope course coming out, mechanical too. 3-part trinaing series. Starting Nov. and carrying on to new year. Zone meetings in Nov. Just had a series, ongoing this afternoon of regular zone meetings. Amendments, proposed, consultation underway, to host something specific for energy Step Code in our Zones in November as well. An additional opportunity. On a regional basis. On consistency for local authorities, have some regional discussion. May not get region-to-region consistency, at least within regions, something for LGs as they're coming through, to have nuanced info, than is currently the case.

TW: IS there parity for your training at BC Housing and BOABC? Mutual credit recognition?

Tyler Wightman: No mandatory training. We typically do that through exam. It's optional, but something requested by our members. We typically work with BC H. Maybe, we're talking with Bertine, a credential for building officials for EE and ESC. Harshan thumbs up. Support that for individuals and LGs. Some of them, esp. with more capacity, have positions for this part of the code.

Tyler: Lots of inspectors in smaller AHJs take on educational role. Some local authorities provide education to builders. Otuside or over and above regular day to day interactions. If there's key messages or anything that we can share, it's been pointed out that BOs on the front lines, at the permit counter, saying yes you can or no you can't. Or here's how maybe we can do that in the new world. If changes, key messages, things we can do to get consistent messaging out. Things we want from this group, to get to a broader audeicne, we can do that. Our members, BOs, can be educators or communicators with permit applicants. In LGs, and among constractors.

TW: So, KMs are meant for permit applicants?

Tyler: I wouldn't ignore BOs as comms channel.

Roberto: The permitting desk, I agree with Ron, BOs, permitting offices aren't where training should happen but I think for smaller builders that can't be reached well. That is a place or chance for permit dept. to direct them to resources compiled. This is where you need to go now to familiarize yourself with what's coming down the pipe. It's not training per se, but direction. Could take advantage of now. Not after changes have happened, right?

Joe: I like your idea, Tyler, but before owner-builder exams, and where customer had to hire licensed builder, that might be regulated at BO office, and it really wasn't. They just put blinders on and said that's not my job. Maybe in bigger munis. Where we are, they don't want to police anything or add more work.

Tyler: Not regulatory perspective, but just comms and ability. Either direct them to key resources, what are those, where can they access them. Education could be another one. Whether it's us or other orgs.

Joe: We'd need to put together an easy handout pkg for them, then. Talking to local office is they don't know the info and it doesn't…they don't have access to the info, though it's out there. Unless there's someone proactive in that office, they don't seem to have it. There's a disconnect somewhere.

TW: Great point, Joe. Some audiences, even though ESC is out there for years, lots of ppl don't know it's there. Maybe it's format or sheer volume of content. It's a puzzle for me. But I'd love to hear others thoughts.

Joe: I could do it locally, but to go to some of these offices and say, what do you know, what do you need to know, and maybe get it back to you. We don't know what we don't know. We're assuming there's a level of awareness that we're not thinking of.

PR: Can we pass this onto the Communications and Capacity Building subco? Paper's not necessarily wanted, but unfortunately, it might be helpful to have some small handout made, with a QR code? That directs users to wherever we need to? YouTube videos could be a great start, and it could expand. As a physical piece to get people thinking about it. That could be offered at the permit desk, or dinner meetings a tCHBA local, try not have paper.

Maura: Maybe stating the obvious, but P3 systems are designed by mechanical engineers, c/w code-mandated assurances; then installed by contractors, P9 systems are both designed and installed by contractors. That seems like the essential difference between P9 and P3.

Tyler: TBH, always 20% not paying attention until too late. At least. Given busyness, that might be higher. I've seen this play out. I think it'll take a while for machine to turn the gears, work some of this through. Hopeful that this group, all the other infrastructure, the training, collabs, etc. I feel quite fortunate to walk into something like this. Lots working towards the same goals. Change management curve will occur. As long as we cooperatecould be positive.

Joe: A lady speaking earlier, training for P9 designers and architects, a critical piece to this. I seen no designers in our area who know about EE or ESC. Constantly training them on our end. If its' a builder that doesn't know, they get the plan and figure out how to make it work. That's a big one to train. Kudos for that.

Roberto: BC Assn. of Bldg Designers (BCABD) – could be an important channel to build awareness of the change. Not the training, but could be…dunno how many archtects/designers are part of that in the north, but may be worth looking in to.

Joe: A surprise to some, in the Lower Mainland, almost zero architects in homes up here. All designers. Mostly about cost.

Jason: ON the designers, significant history in past decade, where designers live. We have many ofthose ppl part of ASTTBC. Just in middle of disseminating the info. Had a few discussions or emails with others around the table to say, how can ASTTBC partner and offer training. How can we be involved with that, that kind of stuff. Followup: When we send out info, consultation, anyone part of the building designers group part of ASTTBC will get that notification. Like you say TW, can send lots of info out, you can't take them there sometimes. But lead them to it. I can make some calls to some of the people I know ot give them a nudge. EGBC/ASTTBC can connect. ASTTBC…anyone who can get some training or courses promoting that, we could assist that. Our regulatory role…fairly specific with how we go about…advocate…can't get in trouble, how do we get that info out. So, everyone has my contact info, reach out to me. Looking to put stuff into our CPD, registered member portal. Very happy to help. Could be excellent to figure out comms on the subco what we can do in a coordinated way, so we don't just spin our tires. Be happy to get involved with that.

TW: Maybe this is related we have? Bertine?

Bertine: We want to get in touch with more orgs, that we haven't worked with in the past. Made a note for the mech contractors as well. Known addresses on that end as well. Happy to take this offline. Figure out what next steps could look like.

Pete: I looked at the public review docs: for GHG intensity document, is RNG actually still an option? Or not?

TW: Yes.

JF: Not as clear in BP. In the other parts, it said whole thing is fuel neutral, but it recommend that LGs accept RNG for now? Whole BCUC thing. IT wasn't as clear in the BP guide exactly. Didn't have a strong language about it being fuel neutral. I wasn't clear from BP what long-term on that was.

TW: To acknowledge that BCUC process is ongoing. We can't address how it fits in.

Patrick: Wasn't my reading of the documents either. No RNG until RNG is allowed. Was my reading. That BCUC process would be a factor. What the BCUC decides would be a factor. That was my understanding, it would be good to know. Tell em how to read it.

Joe: Any thought to meet in person some time soon? I feel like a lack engagement is due to Zoom fatigue.

TW: maybe we can plan further out.

HW: Consider in-person meeting.

Jeff Fisher: did we look at GHGs. SW no

Susan: Was a back of mind; if it was serviced by electric baseboard, low GHG value

Pauline: Can we purse the MEUI outside of this study? Looking more at an absolute limit rather than providing relaxations.

Scott – yes, we need to more research

Susan – looking at hot water values; an absolute limit makes more sense

Scott as the research unfolded – didn't get any of this research into the public review; TEDI & MEUI stays; adoption of NEB % better is being considered; provided log homes with prescriptive approach and prescriptive approach; 2023 Code will include all sections of this code and making necessary revisions for next round of public review.

Pauline: Reiterate on ground truthing side having heard concerns from builders on meeting Step 3 for the TEDI; work does skew towards CZ 4; any proposed relaxation may not be necessary for CZ 4

Patrick: Incoming GHG requirements does change the context. As we have more direct tools to look at GHGs, opens other doors for energy reduction.

Roberto: How much is input is BC Hydro providing in this process? How does it factor into their overall planning process. Is there a connection between this study.

Scott: No direct contact between BC Hydro and this research.

Robin: Conservation remains a priority. Energy efficiency buildings make sense and also have a low carbon mandate.

Joe: Need incentives for northern BC to off-set the costs of electrification.

ROUNDTABLE Readiness for upcoming Code changes?

Meghan – Lots of people in kootenays already referencing Step 3. The ones that haven't are saying they don't have the capacity to do so but will follow the province. Expanding team and building on the Building a Legacy North.

Maura: Have people looking at public review and will get back on implications for architects. Have issued a guideline on Step Code and major occupancy. Have to look at Part 10 differently particularly with energy modelers. At some point might become part of the joint EGBC -AIBC guidelines.

Ron: One of the biggest concerns in Metro Van, a lot of inconsistency between jurisdictions despite numerable public education initiatives. Builders are very busy and not necessarily comprehending what is coming. Will do best to raise their awareness and get meaningful feedback.

Roberto: Will put out newsletter with articles intended for builders.

Jeff: Changes to office and retail metrics are of concern. What kind of notice is being provided? Attention will be on the big changes to Step Code and CPS but not that certain metrics are also being changed.

Joe: Building officials and energy advisors seem ready for the changes. Worried about owner-builders as they don't necessarily have the training.

Bertine: Could energy advisors be best positioned to help inform builders?

Pauline: Still a gap in the education and training of energy advisors. Mechanical contractors are a missing piece of the training cohorts despite being a critical part of the process. May need to subsidize the training.

Ralph: Plan to be early adopters of new Step Code requirements. Requiring builders to use future climate files for overheating.

Scott: Nationally, things are happening.

Maya: looking at fostering regional alignment by regional clusters. Questions around how the prescriptive approach will work.

Harshan: Significant changes. Should reach out to our own networks. Will promote townhall opportunity to get good participation from EGBC. Will reach out to energy modelers community.

Tiffany: We will let UBCM and LGMA know about the public review.

Tyler: BOABC is working with BC Hydro and BCIT on training for building officials based on existing BCIT content. Three-part training coming out in November. Just has a series of zone meetings around changes and will host something specific around energy step code in November. Not thinking about it from a regulatory perspective, more of a communications perspective.

Tiffany: There is a lack of awareness of the wide range of materials.

Joe: Could go talk to some of the local government offices to see what they know and what they need to know.

Pauline: maybe this should go to the communications sub-committee; might be useful to a have a hand-out maybe with qr code

Roberto: Builder designers could be a channel to raise awareness.

Juan: History of where designers live. Many are registrants of ASTTBC

Bertine: Trying to get in touch with a broader range of stakeholders.

Public review Q&A registration link

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: bea.bains@fortisbc.com, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com,s.22 , Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, jowen@surrey.ca, sean.pander@vancouver.ca, roberto@zebx.org, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, pauline@chbabc.org, lsampliner@portmoody.ca, zsegal@boma.bc.ca, dstathonikos@boma.bc.ca, Maxwell.Sykes@surrey.ca, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>

Cc: Grass, William OHCS:EX <William.Grass@gov.bc.ca>, Harding, Kevin OHCS:EX <Kevin.Harding@gov.bc.ca>, Bigonesse, Alexandre <alexandre.bigonesse@NRCan-RNCan.gc.ca>, Li, Charling <charling.li@vancouver.ca>, Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>, Susan MacDougall <susan@focaleng.com>, Kristian Storgard <kristian@focaleng.com>, mark@bernhardtcontracting.com, Stelzer, Bertine <Bertine.Stelzer@bchydro.com>, Gunn, Meghan OHCS:EX <Meghan.Gunn@gov.bc.ca>, Koepfgen, Pete <Pete.Koepfgen@fortisbc.com>, Groves, Steven EMLI:EX <Steven.Groves@gov.bc.ca>

Sent: September 28, 2022 11:51:32 AM PDT

Hello, everyone:

Thank you for a great meeting yesterday. We will have presentations and notes to share in a bit, but I wanted to share the registration link for the live Public Review Q&A on the morning of Thurs. Oct. 13:

s.15

Please let me know if you have issues registering. I will send it out via broader emails soon but wanted to test it with a smaller group first.

Best,
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
To: vyu@udi.org
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: September 29, 2022 7:11:52 PM PDT
Attachments: image004.jpg, image002.jpg, image005.jpg, image006.jpg, image003.jpg, image001.png

Hi Verna,

Scott and I have some availability via zoom the morning of October 14. How much content/time would you be looking for?

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: Monday, September 26, 2022 5:09 PM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: FW: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

---

From: Verna Yu < >
Sent: Monday, September 26, 2022 5:06 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: 'Stelzer, Bertine' <Bertine.Stelzer@bchydro.com>; Jeff Fisher <jfisher@udi.org>
Subject: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Scott and Hugo,

I would like to take this opportunity to introduce myself as the new Director, Professional Development & Programming with the Urban Development Institute.

One of the initiatives that I have been working on with our Vice President & Senior Policy Advisor, Jeff Fisher, Dave Ramslie, of OPEN Technologies, Jonathan Meads of Streetside Development, and Bertine Stelzer of BC Hydro is putting together a 2-day seminar for our members to help prepare the market for current and future energy and sustainability related building code updates in Part 3 and Part 9 buildings. Our first session will be focused on Part 3 builds and cover topics from Approvals, Design & Construction, Financing, to Building Ownership and Handover. We would like to invite you join us to speak to the recently released proposed revisions to the BC Building Code on the morning of Friday, October 14.

The program dates and details as follows:
Date: Friday, October 14 & Saturday, October 15
Time: 8:30am-5pm Friday, 8:30am-3pm Saturday
Location: 580 West Hastings, SFU, Morris J Wosk Centre for Dialogue

We understand that it may be a challenge to attend in-person events, and if you are available, we can set-up a virtual log-in through zoom for your presentation.

Thank you so much for your consideration, I look forward to your reply.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca



FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

From: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
To: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Cc: Newman, Debbie OHCS:EX <Debbie.Newman@gov.bc.ca>
Sent: October 3, 2022 8:22:21 AM PDT

FYI – bullets from BSSB sent to Teri for this afternoon's UDI meeting.

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 29, 2022 6:37 PM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Sending these directly just in case. RNG = renewable natural gas, which Fortis is currently gearing up to deliver in increasing amounts over time.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing
Phone: 250 858 1325

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: Thursday, September 29, 2022 6:24 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Political Context – Carbon Pollution Standards for New Construction:

- CleanBC Roadmap to 2030 commitment: Zero-carbon new construction in B.C. by 2030, phased in over 2024, 2027 and 2030.
- Mandate commitment to, "support local governments to set their own carbon pollution performance standards for new buildings."

Proposed Building Carbon Pollution Standard (CPS) for New Construction:

- Current code change proposal open for public review until November 4 – feedback is appreciated.
  - Implemented like the BC Energy Step Code.
  - Local governments may opt in to any of four stringency levels.
  - Per Roadmap commitment, phased into BC Building Code (BCBC) over time so the number of opt-in levels will decrease as the stringency of minimum requirements incrementally increases.
- The CPS is outcome oriented; any sufficiently decarbonized fuel source can achieve targets (including RNG).

Implementation and Enforcement of the CPS:

- Developers represented by UDI would prefer we not give local governments a choice of CPS Levels.
  - A single province-wide standard would not accommodate differing states of readiness among and within regions.
  - By offering an incrementally more limited number of CPS Levels, we honour our mandate to support local governments to set their own standards while limiting the impact of potential short-term inconsistencies.
  - Best practice implementation guidance for local governments has been developed and will be refined based on public review feedback.
  - A peer network for local governments to coordinate and collaborate on matters including implementation has been established through the Energy Step Code Council.

- Per the Building Act, building regulations, including the BCBC, have the same force and effect as a local government bylaw.
  - Local governments choose how and if to administer and enforce the BCBC.
- After a request from FortisBC that the Province require local governments to recognize RNG in their enforcement of the CPS, ADM MacLaren conferred with MUNI and confirmed the Province has no intention to interfere with local governments' autonomy in respect of how they administer and enforce the CPS.

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Sent: Thursday, September 29, 2022 4:10 PM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction
Importance: High

Sending this over to you as well Tiffany to possibly get the balling rolling as I see Juni is in a meeting right.

Thank you!!

From: Alexander, Jessica C OHCS:EX
Sent: Thursday, September 29, 2022 4:07 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Subject: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction
Importance: High

Hi Juni, sorry this is extremely last minute.

Can you please provide Teri with some bullets on the highlighted BSSB topic below:

Here are the suggested topics for the meeting, all at a fairly high level:
- *Annual allowable rent increase for 2023*
- *BSSB roll-out of carbon reduction tools through BC Energy Step Code*
- *Ongoing Housing Ministry work and consultations*

The meeting is scheduled for Monday, October 3rd at 2pm

Regards,

Jessica Alexander | *A/Executive Administrative Assistant*
To A/Assistant Deputy Minister Bonnie Ruscheinski
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Office: 250 356-2115 | Cell: 778-677-7263 | Email: Jessica.alexander@gov.bc.ca
Pronouns: *she/her*

Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live, work and play.
This message, including any attachments to it, is not to be disclosed outside of the Provincial Government without prior written approval from the Ministry of Attorney General. If you have received this communication in error, please destroy the email message and any attachments immediately and notify me by telephone or by email.

From: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Sent: Thursday, September 29, 2022 4:04 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Hi Jess,

Teri asked to get some bullets for the BSSB item listed below from Juni. Could you please assist with that?

Kind Regards,

Goneet Gill | *Executive Administrative Assistant*
To A/Associate Deputy Minister Teri Collins
Housing, Multiculturalism and Anti-Racism
Ministry of Attorney General and Minister Responsible for Housing
Office: 250 940-8610| Email: Goneet.Gill@gov.bc.ca
Pronouns: *she/her*

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, September 29, 2022 2:44 PM
To: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Goneet,

Here are the suggested topics for the meeting, all at a fairly high level:

- Annual allowable rent increase for 2023
- BSSB roll-out of carbon reduction tools through BC Energy Step Code
- Ongoing Housing Ministry work and consultations

We were hoping to discuss some of the consultations that UDI participated in over the summer that remain under NDA, in relation to the above topics. Can you confirm whether this will still be possible.

Thanks,
Cassandra

From: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Sent: September 29, 2022 2:34 PM
To: Cassandra Smith <csmith@udi.org>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Hello Cassandra,

Could you please provide an agenda for this meeting?

Kind Regards,

Goneet Gill | *Executive Administrative Assistant*
To A/Associate Deputy Minister Teri Collins
Housing, Multiculturalism and Anti-Racism

Ministry of Attorney General and Minister Responsible for Housing
Office: 250 940-8610| Email: Goneet.Gill@gov.bc.ca
Pronouns: *she/her*

From: Cassandra Smith <csmith@udi.org>
Sent: Tuesday, September 27, 2022 5:36 PM
To: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Cc: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>; Michael Drummond <mdrummond@udi.org>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Goneet,

Thanks for offering those dates. Let's book the call for Monday, October 3 at 2pm. Would you like me to set up a Zoom link?

Our VP, Mike Drummond will also be joining.

Thanks,
Cassandra

On Sept 27, 2022 16:23, "Gill, Goneet AG:EX" <Goneet.Gill@gov.bc.ca> wrote:

> Hi Cassandra,
>
> A/Assoc DM Collins is available for a call next week for the following dates/times:
>
> - Monday October 3, 2 pm – 2:30 pm
> - Thursday October 6, 9:30 am – 10 am
>
> Please confirm if either dates/times work for you.
>
> Kind Regards,
>
> **Goneet Gill** | *Executive Administrative Assistant*
>
> To A/Associate Deputy Minister Teri Collins
>
> Housing, Multiculturalism and Anti-Racism
>
> Ministry of Attorney General and Minister Responsible for Housing
>
> Office: 250 940-8610| Email: Goneet.Gill@gov.bc.ca

Pronouns: *she/her*

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, September 26, 2022 4:06 PM
To: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Goneet,

I hope you had a great weekend. I'm just following up on this request to find some time for a call with Teri. Let me know how the schedule looks for the next couple of weeks.

Thanks,

Cassandra

Cassandra Smith *(McColman)*

Director, Policy and Public Affairs

Direct: 604.661.3032

Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street

Vancouver, BC V6E 3S7

Office: 604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: September 15, 2022 2:46 PM
To: Cassandra Smith <csmith@udi.org>
Cc: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Thanks Cassandra, appreciate you sharing this.

I'm happy to connect any time – Goneet can find us some time.

t

From: Cassandra Smith <csmith@udi.org>
Sent: Tuesday, September 13, 2022 10:03 AM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Subject: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Teri,

I hope you're keeping well, no doubt things are busy in the Ministry getting ready for the start of the fall session next month. UDI has recently completed a report analyzing the viability of three hypothetical purpose-built rental projects and how costs have changed over time. This report highlights the challenges rental builders face and how sensitive these projects are to policy and market changes.

Through this analysis UDI aims to answer the question, in a market where there is considerable and growing demand for rental housing, why isn't more being built, and what can be done? The report, *No Vacancy: Challenges & Opportunities for New Rental Housing Construction* is available on our website.

Following the discussions with UDI's Executive Committee, we thought this report may be of interest to you. If you have any questions regarding the document, please don't hesitate to ask.

As well, I was hoping that you might have some time over the next couple of weeks for a brief call to discuss the recent annual allowable rent increase announcement in relation to the Ministry's ongoing work? Let me know if would work.

Thanks,

Cassandra

Cassandra Smith *(McColman)*

Director, Policy and Public Affairs

Direct: 604.661.3032

Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street

Vancouver, BC V6E 3S7

Office: 604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca

B71C844A

B7/5A1/1FD8B2B]C32E:

RE: BC Provincial Update

From: May, Zachary OHCS:EX
To: Emily Sinclair <esinclair@crd.bc.ca>
Sent: October 3, 2022 2:43:01 PM PDT
Attachments: image002.jpg, image003.jpg, image001.jpg

Emily!

Just came across this while mass deleting emails from the past year. Would love to catch up for lunch or coffee. Let me know when works. I'm back at the office, so anywhere downtown with outdoor seating works for me.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Emily Sinclair <esinclair@crd.bc.ca>
Sent: Monday, October 25, 2021 11:57 AM
To: HOLD - 211006 - May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: BC Provincial Update

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach – it's been a minute! Got this in my inbox today – it's exciting to see this work moving forward. How have you and the team been?

Let me know if you're up for coffee or lunch sometime, COVID-dependent.

Emily

From: UDI Capital Region [mailto:kathyw@udi.org]
Sent: Monday, October 25, 2021 11:33 AM
To: Emily Sinclair <esinclair@crd.bc.ca>
Subject: BC Provincial Update

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BC Provincial Update

n wildfire risk, which took place on October 19. Please see the attached slides for the flood resilience, and water cons

They also note that "**There may be significant consequences for your business if you miss the March 1, 2022 deadl**

e. Key concepts include:

ns, education providers, housing sector organizations or associations, and independent researchers are encouraged to id

Browse upcoming events on our website
Find recordings of past webinars here



UDI Capital Region Contact Information
Kathy Whitcher - Executive Director
kathyw@udi.org

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RE: Confirmation Pls re ICAC Meeting - October 31st

From: Will, Meghan OHCS:EX <Meghan.Will@gov.bc.ca>
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>, Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>, Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 4, 2022 5:07:49 PM PDT

I'm supportive the recommendation for BSSB and HPB to attend given the context on role/gap noted.

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Tuesday, October 4, 2022 12:09 PM
To: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>; Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>; Will, Meghan OHCS:EX <Meghan.Will@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Confirmation Pls re ICAC Meeting - October 31st

Hi Debbie,

Zachary May has now taken over as our ED going forward, so I've looped him in to the email. In my experience it was appropriate for the ED to attend as the building related conversation was more at the branch level. That stated, the expectation around the table with Teri and Cheryl participating was for a divisional update, which often included both housing policy and building policy matters. My recommendation would be for the ED's of Building and Safety Standards and Housing Policy Branch to attend. I don't believe the ED of housing is typically included, though. Last time this was a notable gap, and there will be an expectation for housing policy related updates this time, I suspect.

Zac- for information, the update I last gave was a high level one on major initiatives – status update of Clean BC energy and carbon work and accessibility work, and associated timelines.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing
250 858 1325

From: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>
Sent: Tuesday, October 4, 2022 10:34 AM
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>; Will, Meghan OHCS:EX <Meghan.Will@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: Confirmation Pls re ICAC Meeting - October 31st

Good morning,
Teri has asked that OHCS attend the above meeting. Could you please advise who from OHCS will attend?
Thanks,
Debbie

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: Tuesday, October 4, 2022 10:27 AM
To: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>
Subject: RE: Information re ICAC Meeting - October 31st

Please have OHCS attend

From: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>
Sent: Tuesday, October 4, 2022 9:26 AM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Subject: Information re ICAC Meeting - October 31st

Hi Teri – further to your request for additional context about the above meeting, please see below and attached.
Thanks,
Debbie

From: Sue Bate <sbate@bchousing.org>
Sent: Tuesday, October 4, 2022 8:46 AM
To: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: ICAC Meeting - October 31st

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Debbie,

This Council meets twice a year and all the ADM predecessors get invited, however only Cheryl May and Greg Steves have ever attended on an occasional basis, leaving this meeting to mainly the folks who work on the guidelines for Builders and those in the construction industry i.e. step code and building code changes etc. An update on what Govt, is currently working on in regards to the building industry is also a stand alone item on the agenda. The last meeting was in April of this year and I can't recall which ADM was around then, however Jun'chi attended for OHCS the last time. The Council has been around now for approx. 12 years and meeting twice yearly.

In asking for input to the agenda for the next meeting on October 31st, a number of folks are asking for an update from Govt. on the Step Code Education builder requirements and licencing, so it would be good if Jun'chi and/or Teri can provide an update on this for the agenda.

Attached is the current Membership list, the ICAC TOR and a copy of the minutes of the last meeting.

Cheers,

Sue

-----Original Message-----
From: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>
Sent: Monday, October 3, 2022 10:02 PM
To: Sue Bate <sbate@bchousing.org>
Subject: Fwd: ICAC Meeting - October 31st

Hi Sue, Teri asked me to find out what this meeting is about please. Any context or background you could provide would be great. Thank you!

Debbie

Get Outlook for iOS<https://aka.ms/o0ukef> _____
From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: Monday, October 3, 2022 9:32:08 PM
To: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>
Subject: FW: ICAC Meeting - October 31st

Could you please find out what this is?

From: Sue Bate <sbate@bchousing.org>
Sent: Monday, October 3, 2022 10:26 AM

To: Adam Terris <aterris@bchousing.org>; Allison Dunnet <adunnet@bchousing.org>; Andrew Armstrong s.15
s.15

Ann McMullin <amcmullin@udi.org>; Chris Atchison <chris.atchison@bccassn.com>; Chris Gardner <chris@icba.ca>; Denisa Ionescu <dionescu@bchousing.org>; Esther de Vos <edevos@bchousing.org>; Howard Friedman (external) <howard.friedman2@travelers.com>; Jason Jung s.15
s.15

s.15 ; Mark Sakai <msakai@bcrea.bc.ca>; Mark Vernon <mvernon@aibc.ca>; Mary Gerges <mgerges@bchousing.org>; Michelle Hayes <mhayes@bchousing.org>; Neil Moody <neilmoody@chbabc.org>; XT:Mitchell, Peter FOR:IN <mitchell@apeg.bc.ca>; Ron Rapp <ron@havan.ca>; Scott McIntyre (external) <smcintyre@egi.ca>; XT:Bate, Sue FIN:IN <sbate@bchousing.org>; Tony Gioventu (external) <tony@choa.bc.ca>; Tyler Wightman <tyler.wightman@boabc.org>; Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: ICAC Meeting - October 31st

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning all,

The next meeting of the Council is October 31st from 1 – 2:30 pm (virtual). We will be finalizing the agenda this week and wondering if you have any items you would like to share at the meeting?

Kind regards,

Sue

s.15

Sue Bate EA to CEO|Executive Office

Office: 604-439-4736 |Cell: 236-833-1066 | sbate@bchousing.org<mailto:sbate@bchousing.org> | www.bchousing.org<https://can01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.bchousing.org%2F&data=05%7C01%7CTeri.Collins%40gov.bc.ca%7C0ce7a5221eae4ad23c1e08daa5645230%7C6fdb52003d0d4a8ab036d3685e359adc%7C0%7C0%7C638004147533210333%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=fS4Xlr%2FtCKiPVOSECdAPw61cUSAmQugsIwuWmmujdq8%3D&reserved=0>

1701 - 4555 Kingsway, Burnaby, BC V5H 4V8 Canada

Please note that my regular business hours are between 8:30 – 4:30 pm, Monday – Friday. My work hours may differ from yours so please don't feel obligated to respond to me during hours that are outside of your work schedule.

Absence Alert: I will be on vacation from October 11th – retuning on October 24th

FW: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

From: May, Zachary OHCS:EX
To: Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Sent: October 6, 2022 12:57:58 PM PDT
Attachments: image003.jpg, image005.jpg, image006.jpg, image004.jpg, image007.png, image002.jpg
Please track this with any other presentation requests. We can review them at our weekly check-ins.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Thursday, October 6, 2022 12:20 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zack,

Welcome back!

With the recent release of the proposed BC Building Code updates – we would like to invite you to join us for a virtual session to speak to these proposals with our UDI Members.

We hope to have this webinar ahead of the closing of the review period to provide an opportunity to help educate our members as these changes will have an immense impact to our industry.

Potential Dates/Times for this webinar:

Tuesday, October 25 (9:30-10:30am)

Thursday, October 27 (9:30-10:30am)

Tuesday, November 1 (9:30-10:30am)

Wednesday, November 2 (9:30-10:30)

Thursday, November 3 (9:30-10:30)

Please let me know if any of these dates/times work for you or alternately, please provide me with some date/time options for a 1 hour virtual session.

I look forward to your reply.

Kind regards,
Verna

Verna Yu, PMP®

Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca

From: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Sent: September 23, 2022 2:55 PM
To: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Subject: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

Dear BC Building Code user:

I am writing to advise that the Building and Safety Standards Branch (BSSB) has released proposed revisions to BC Building Code 2018 (BCBC 2018) for public review. These include proposed changes to minimum energy efficiency requirements for most Part 9 and Part 3 buildings, as well as an opt-in carbon pollution standard.

Interested parties may visit gov.bc.ca/buildingcodes to review:

- Proposed Code Change Forms (PCFs) regarding:
  - Changes to energy efficiency language in Part 9 and Part 10 of BCBC 2018
  - Inclusion of greenhouse gas emissions in objective and functional statements
  - Inclusion of greenhouse gas emissions targets for Part 9 and Part 3 buildings
- Supplementary information:
  - Pre-recorded audiovisual presentations summarizing proposed code changes and providing interpretation supports
  - Costing and technical analysis
  - A draft best practice bulletin for local governments prepared in partnership with the Step Code Peer Network

The main goal of a public review is to receive focused, technical comments on proposed changes to the Code language, such as suggestions about targets and values, and comments about scope or application. Any relevant feedback regarding policy and technical approaches will be considered prior to making a recommendation to the Attorney General and Minister Responsible for Housing.

The public review period will end at 11:59 p.m. on November 4, 2022.

To submit your comments or upload attachments, complete the online survey. If the survey does not work for you, email BSSB.Public.Review@gov.bc.ca for further instructions. Please share this information as appropriate within your organization.

Sincerely,

Jun’ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing

www.gov.bc.ca/buildingcodes

RE: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

From:	Verna Yu <vyu@udi.org>
To:	Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent:	October 7, 2022 10:59:20 AM PDT
Attachments:	image008.jpg, image010.jpg, image011.jpg, image012.jpg, image009.jpg, image007.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tiffany,

The decision had been made to postpone this event on the 14th.

We would like to set-up a virtual session so that we can communicate this to the broader UDI member audience before the review closing period. The below dates and times have been proposed to Zack as well.

Tuesday, October 25 (9:30-10:30am)
Thursday, October 27 (9:30-10:30am)
Tuesday, November 1 (9:30-10:30am)
Wednesday, November 2 (9:30-10:30)
Thursday, November 3 (9:30-10:30)

Thank you!

Verna

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: October 6, 2022 4:36 PM
To: Verna Yu <vyu@udi.org>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: RE: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

Hi Verna,

We are still in the process of canvassing potential availability. In the meantime, can you give us a sense of what to expect for the 14th?

All the best,

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Monday, October 3, 2022 10:08 AM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: RE: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tiffany,

Would you and/or your team also consider presenting at a webinar via zoom for any of the below dates:

Tuesday, October 25 (9:30-10:30)
Wednesday, October 26 (9:30-10:30)
Thursday, October 27 (9:30-10:30)

Kind regards,
Verna

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: September 29, 2022 7:12 PM
To: Verna Yu <vyu@udi.org>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: RE: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

Hi Verna,

Scott and I have some availability via zoom the morning of October 14. How much content/time would you be looking for?

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: Monday, September 26, 2022 5:09 PM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: FW: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

---

From: Verna Yu < >
Sent: Monday, September 26, 2022 5:06 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: 'Stelzer, Bertine' <Bertine.Stelzer@bchydro.com>; Jeff Fisher <jfisher@udi.org>
Subject: Faculty Invitation: UDI High Performance Building Program - BC Building Code Updates

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Scott and Hugo,

I would like to take this opportunity to introduce myself as the new Director, Professional Development & Programming with the Urban Development Institute.

One of the initiatives that I have been working on with our Vice President & Senior Policy Advisor, Jeff Fisher, Dave Ramslie, of OPEN Technologies, Jonathan Meads of Streetside Development, and Bertine Stelzer of BC Hydro is putting together a 2-day seminar for our members to help prepare the market for current and future energy and sustainability related building code updates in Part 3 and Part 9 buildings. Our first session will be focused on Part 3 builds and cover topics from Approvals, Design & Construction, Financing, to Building Ownership and Handover. We would like to invite

you join us to speak to the recently released proposed revisions to the BC Building Code on the morning of Friday, October 14.

The program dates and details as follows:
Date: Friday, October 14 & Saturday, October 15
Time: 8:30am-5pm Friday, 8:30am-3pm Saturday
Location: 580 West Hastings, SFU, Morris J Wosk Centre for Dialogue

We understand that it may be a challenge to attend in-person events, and if you are available, we can set-up a virtual log-in through zoom for your presentation.

Thank you so much for your consideration, I look forward to your reply.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

From: May, Zachary OHCS:EX
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>
Sent: October 7, 2022 11:46:04 AM PDT
Attachments: image001.png, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg

Hello Verna and Jeff,

s.22 so I will need to confirm with the team on this one. I'll get back to you early next week. Right now the 1st and 2nd are the only dates that work for me. I'll hold those times in my calendar now.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Thursday, October 6, 2022 12:20 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zack,

Welcome back!

With the recent release of the proposed BC Building Code updates – we would like to invite you to join us for a virtual session to speak to these proposals with our UDI Members.

We hope to have this webinar ahead of the closing of the review period to provide an opportunity to help educate our members as these changes will have an immense impact to our industry.

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Please let me know if any of these dates/times work for you or alternately, please provide me with some date/time options for a 1 hour virtual session.

I look forward to your reply.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca

From: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Sent: September 23, 2022 2:55 PM
To: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Subject: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

Dear BC Building Code user:

I am writing to advise that the Building and Safety Standards Branch (BSSB) has released proposed revisions to BC Building Code 2018 (BCBC 2018) for public review. These include proposed changes to minimum energy efficiency requirements for most Part 9 and Part 3 buildings, as well as an opt-in carbon pollution standard.

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  - Inclusion of greenhouse gas emissions targets for Part 9 and Part 3 buildings
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Sincerely,

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing

www.gov.bc.ca/buildingcodes

HSA Validators

From: Corpe, Cimarron OHCS:EX
To: Teekah, Alyssa OHCS:EX s.15
s.15

Cc: Aman X OHCS:EX Gill (Aman.X.Gill@gov.bc.ca) <Aman.X.Gill@gov.bc.ca>, Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent: October 12, 2022 3:59:11 PM PDT
Attachments: image001.png, image002.png

Hi Alyssa,

As discussed, here are some proposed validators for Liam to present to the MO. I doubt UBCM would offer to validate. If one of the members of the BC Urban Mayors' Caucus is re-elected this weekend, we could review and put a name or two forward, e.g. Kennedy Stewart.

Anne McMullin (engagement participant; reviewed materials under confidentiality agreement)
President & CEO
Urban Development Institute
amcmullin@udi.org
604-661-3030

Or

Jeff Fisher (engagement participant; reviewed materials under confidentiality agreement)
VP and Senior Policy Advisor
Urban Development Institute
604-661-3031
jfisher@udi.org

Jill Atkey (engagement participant; reviewed materials under confidentiality agreement)
CEO , BC Non-Profit Housing Association
778-945-2155
jill@bcnpha.ca

Brian McCauley (engagement participant; reviewed materials under confidentiality agreement)
President & CEO, Concert Properties
604-688-9460
BMcCauley@ConcertProperties.com

Tom Davidoff (did not participate in engagement or review materials under confidentiality agreement, but has participated in housing roundtables with Minister Robinson)
Director, UBC Centre for Urban Economics and Real Estate
University of British Columbia
(604) 822-8325
thomas.davidoff@sauder.ubc.ca

Cimarron Corpé
Director, Housing Secretariat

Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: October 13, 2022 3:53:17 PM PDT
Attachments: image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, image001.png

Thanks Zac.

Please let me know what I can do to support.

Noting that we (Juni, Tracy and myself) will be presenting to the Regional District Planning Managers (ARDPM) at the Parkside one of those days. The time and day has yet to be confirmed, but they are shooting for either the 1st or 2nd of November.

Hoping that there will not be a conflict.

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, October 13, 2022 3:43 PM
To: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>
Cc: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

Hi Verna,

If it's ok with you two, I would like to push the presentation to mid November. Between now and then we need to make sure our office is on the same page as local governments about how this will impact them, and then we can present a clear message to your members about what to expect with the proposed code changes.

Let me know if that works for you.

Also, I believe you have also made an earlier presentation request through Tiffany on this topic, so I'll treat them both as the same request and let Tiffany know she doesn't need to respond further.

Best,

Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Thursday, October 13, 2022 12:06 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

Yes that is correct. We are looking at about 20-25 minutes for your presentation and potentially a representative to provide the municipal perspective/reaction (10 minutes), followed by moderated Q&A.

Verna

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 13, 2022 10:43 AM
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

Hi Verna,

What is the format? 20 min presentation and then questions?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Wednesday, October 12, 2022 2:44 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

We wanted to check in and see if we can proceed in a virtual event with you on November 1 or 2. If possible, we would like to start notifying everyone early next week.

Please let us know if either of these dates would still work for you.

Kind regards,

Verna

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 7, 2022 11:46 AM
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

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Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
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I look forward to your reply.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
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Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691

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From: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Sent: September 23, 2022 2:55 PM
To: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
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- Supplementary information:
  - Pre-recorded audiovisual presentations summarizing proposed code changes and providing interpretation supports
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Sincerely,

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing

RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

From: May, Zachary OHCS:EX
To: Verna Yu <vyu@udi.org>, Jeff Fisher <jfisher@udi.org>
Cc: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: October 13, 2022 8:27:25 PM PDT
Attachments: image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, image001.png

Fair point. Looking at our calendars, Oct 26th or 27th at 9:30-10:30 works for the team here.

I think a 20 minute presentation followed by Q & A works best.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Thursday, October 13, 2022 4:44 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>
Cc: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

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Hi Zach,

We were hoping to have this session before the review closing of November 4 so that our members have an opportunity to be educated and ask questions before these proposals are implemented.

Would your preference be to have a 20 minute presentation followed by a moderated Q&A vs. including an additional presentation?

Kind regards,
Verna

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 13, 2022 3:43 PM
To: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>
Cc: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

Hi Verna,

If it's ok with you two, I would like to push the presentation to mid November. Between now and then we need to make sure our office is on the same page as local governments about how this will impact them, and then we can present a clear message to your members about what to expect with the proposed code changes.

Let me know if that works for you.

Also, I believe you have also made an earlier presentation request through Tiffany on this topic, so I'll treat them both as the same request and let Tiffany know she doesn't need to respond further.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Thursday, October 13, 2022 12:06 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

Yes that is correct. We are looking at about 20-25 minutes for your presentation and potentially a representative to provide the municipal perspective/reaction (10 minutes), followed by moderated Q&A.

Verna

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 13, 2022 10:43 AM
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

Hi Verna,

What is the format? 20 min presentation and then questions?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Wednesday, October 12, 2022 2:44 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

We wanted to check in and see if we can proceed in a virtual event with you on November 1 or 2. If possible, we would like to start notifying everyone early next week.

Please let us know if either of these dates would still work for you.

Kind regards,

Verna

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 7, 2022 11:46 AM
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

Hello Verna and Jeff,

s.22 , so I will need to confirm with the team on this one. I'll get back to you early next week. Right now the 1st and 2nd are the only dates that work for me. I'll hold those times in my calendar now.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Thursday, October 6, 2022 12:20 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: UDI Webinar: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zack,

Welcome back!

With the recent release of the proposed BC Building Code updates – we would like to invite you to join us for a virtual session to speak to these proposals with our UDI Members.

We hope to have this webinar ahead of the closing of the review period to provide an opportunity to help educate our members as these changes will have an immense impact to our industry.

Potential Dates/Times for this webinar:

Tuesday, October 25 (9:30-10:30am)

Thursday, October 27 (9:30-10:30am)

Tuesday, November 1 (9:30-10:30am)

Wednesday, November 2 (9:30-10:30)

Thursday, November 3 (9:30-10:30)

Please let me know if any of these dates/times work for you or alternately, please provide me with some date/time options for a 1 hour virtual session.

I look forward to your reply.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca

From: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Sent: September 23, 2022 2:55 PM
To: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Subject: Public review launch, energy efficiency and greenhouse gas emissions, BC Building Code

Dear BC Building Code user:

I am writing to advise that the Building and Safety Standards Branch (BSSB) has released proposed revisions to BC Building Code 2018 (BCBC 2018) for public review. These include proposed changes to minimum energy efficiency requirements for most Part 9 and Part 3 buildings, as well as an opt-in carbon pollution standard.

Interested parties may visit gov.bc.ca/buildingcodes to review:

- Proposed Code Change Forms (PCFs) regarding:
  - Changes to energy efficiency language in Part 9 and Part 10 of BCBC 2018
  - Inclusion of greenhouse gas emissions in objective and functional statements
  - Inclusion of greenhouse gas emissions targets for Part 9 and Part 3 buildings
- Supplementary information:
  - Pre-recorded audiovisual presentations summarizing proposed code changes and providing interpretation supports
  - Costing and technical analysis
  - A draft best practice bulletin for local governments prepared in partnership with the Step Code Peer Network

The main goal of a public review is to receive focused, technical comments on proposed changes to the Code language, such as suggestions about targets and values, and comments about scope or application. Any relevant feedback regarding policy and technical approaches will be considered prior to making a recommendation to the Attorney General and Minister Responsible for Housing.

The public review period will end at 11:59 p.m. on November 4, 2022.

To submit your comments or upload attachments, complete the online survey. If the survey does not work for you, email BSSB.Public.Review@gov.bc.ca for further instructions. Please share this information as appropriate within your organization.

Sincerely,

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing

www.gov.bc.ca/buildingcodes

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15

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Hi Zachary May,

This is your personal panelist link for the upcoming webinar. Thank you once again!

Verna

Date Time: Nov 2, 2022 09:30 AM Vancouver
Topic: UDI Webinar: BC Building Code Update - What You Need to Know

Join from a PC, Mac, iPad, iPhone or Android device:

s.15

UDI Webinar - Pre-Meeting Notes & Next Steps

From:	Verna Yu <vyu@udi.org>
To:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Dave Ramslie (dave@opentech.eco) <dave@opentech.eco>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Jeff Fisher <jfisher@udi.org>
Sent:	October 17, 2022 4:17:13 PM PDT
Attachments:	image003.jpg, image005.jpg, image007.jpg, image008.png, image006.jpg, image004.jpg, BC Building Code Pre-Meeting Notes (2).docx

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Hi everyone,

It was great seeing you all this afternoon!

I have sent through the calendar invites with a panelist link for Wednesday, November 2 from 9:15-10:30am for this webinar.

Attached is a brief overview of our conversation from this afternoon. We will aim to open the event registration this week. Please see this link here for the draft event page: https://udi.memberzone.com/events/details/udi-webinar-bc-building-code-proposals-what-you-need-to-know-1858?range=160 **If you have any feedback or would like to make any revisions to this page/information, please let me know before noon on October 18.**

Scott and Zach, could you please provide me with an updated headshot and short bio?

As mentioned during our meeting, I will compile some potential questions in advance of the event – if you have any questions you would like to be included in this list, please send them to me by Friday, October 28.

Zach/Scott – would you be able to send me your updated presentation by Friday, October 28?

Thank you all!

Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
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Web: udi.bc.ca



UDI Webinar – BC Building Code Proposals – What You Need to Know
Pre-meeting Notes

AGENDA:

- **Format**
  - 3-5 min introductions & Sponsor remarks
  - 20-25 min presentation
  - 20-25 min moderated Q&A & discussion

- **Notes & Presentation Focus areas:**
  - Focus on Part 3 & Part 9 (mainly townhouses)
  - Climate zones 4 and 5
  - Event will be open to UDI Pacific Region, UDI Capital Region, UDI Okanagan and Fraser Valley registrants
  - High level overview of what these proposed changes mean
  - Key issues from an industry perspective – the metrics report, how early could a municipality move forward with the reduction of GHG and how far can they go with this in terms of the energy step codes etc.
  - RNG – what municipalities can and can't do, clarification
  - District energy and how that would work under
  - GHG and GHGI – how quickly local governments can get there. What's the highest and lowest step, what's the difference?
  - Focus on fuels – what are the HVAC systems and decisions you will have to make
  - Discuss some of the break points – knowing how this all shapes out
  - Question regarding the service and staffing capacity that BC Hydro has
  - What are the capacity constraints
  - What kind of over-sight/follow-up would BSSB be doing
  - What is coming up next in terms of BSSB – last question
- **Next Steps:**
  - Verna to schedule webinar for November 2
  - Zach & Scott to send updated headshot and bio to Verna
  - Zach & Scott to update presentation and send to Verna
  - Verna to compile questions from everyone to send to Dave, Zach, and Scott
  - Event registration to open Week of October 17

Purposed Event Schedule:

November 2 – 9:30 – 10:30

TIME (Pacific)	ACTIVITY	DURATION	LEAD
9:15	Dry Run / Zoom testing	15	All
9:30	Webinar goes live UDI Introduction Intro Dave Pass to Sponsor	1	Jeff Fisher
	Sponsor Remarks	2	BC Hydro
9:33	Sponsor Thank You Moderator Introduction Panel Introduction	5	Dave Ramslie
9:40	Presentation 1	20-25	Zachary May & Scott Williams
10:05	Moderated Q&A & Discussion	20-25	Dave Ramslie
10:30	Webinar Concludes Thank Speakers Thank Sponsor Promote: High Performance Building Program	1	Dave Ramslie

RE: BC Hydro capacity re. electrified development

From: May, Zachary OHCS:EX
To: Berkhout, Tom <Tom.Berkhout@bchydro.com>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Cc: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Sent: October 17, 2022 4:22:17 PM PDT

Thanks! All I really need to be able to say is that BC Hydro is aware of the issue and how developers can engage with them on this issue. This is definitely not BSSB's lane, but it does create some issues for electrifying new buildings that needs to be addressed.

Any info or contacts are appreciated.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Berkhout, Tom <Tom.Berkhout@bchydro.com>
Sent: Monday, October 17, 2022 4:15 PM
To: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Subject: RE: BC Hydro capacity re. electrified development

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

A presentation was made by BC Hydro to UDI last week where some of these issues were touched on (I think). Let me check on who presented and see if I can put them in touch with you. My guess is that this will save you a bit of time in pulling the info together.

tom

Tom Berkhout | Building Electrification, Strategic Implementation

BC Hydro
333 Dunsmuir Street,
Vancouver, BC V6B 5R3

M 250 880 1636
E tom.berkhout@bchydro.com

bchydro.com

From: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Sent: Monday, October 17, 2022 4:11 PM
To: Berkhout, Tom <Tom.Berkhout@bchydro.com>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Subject: [External] RE: BC Hydro capacity re. electrified development

Security Risk Assessment: Use Caution

The email is from <Katherine.Muncaster@gov.bc.ca> with a friendly name of "Muncaster, Katherine EMLI:EX" <Katherine.Muncaster@gov.bc.ca>

DO NOT click on links or open attachments unless you trust the sender and are expecting the link or attachment.
If you suspect this message to be phishing, please report it to BC Hydro Phishing Support

Thanks Tom!
Zach, some contacts below to start with at BC Hydro.

Our branch is only tangentially connected on non-DSM matters. The Electricity Policy and Regulation Branch in our division has more general oversight of BC Hydro and may have some info, but you're probably best to go to the source.

Katherine Muncaster | Director, Energy Efficiency Branch | Electricity and Alternative Energy Division | BC Ministry of Energy, Mines and Low Carbon Innovation | Tel 778-698-7180| katherine.muncaster@gov.bc.ca

---

From: Berkhout, Tom <Tom.Berkhout@bchydro.com>
Sent: October 17, 2022 4:05 PM
To: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Cc: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Subject: RE: BC Hydro capacity re. electrified development

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I would start with Robert Chin in Distribution Policy. He is leading the process to review the existing interconnection tariff: Robert.chin@bchydro.com. He is Manger of Distribution Policy in the Interconnections Policy and Agreement group.

You may also want to speak with Rob Zeni (rob.zeni@bchydro.com). His title is Regulatory Manager with the Regulatory and Rates group.

Tom Berkhout | Building Electrification, Strategic Implementation

BC Hydro
333 Dunsmuir Street,
Vancouver, BC V6B 5R3

M 250 880 1636
E tom.berkhout@bchydro.com

bchydro.com

From: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>
Sent: Monday, October 17, 2022 2:48 PM
To: Berkhout, Tom <Tom.Berkhout@bchydro.com>
Cc: Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>
Subject: [External] FW: BC Hydro capacity re. electrified development

Security Risk Assessment: Use Caution
The email is from <Katherine.Muncaster@gov.bc.ca> with a friendly name of "Muncaster, Katherine EMLI:EX" <Katherine.Muncaster@gov.bc.ca>

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If you suspect this message to be phishing, please report it to BC Hydro Phishing Support

Tom, Can you suggest who at BC Hydro is working on the issue of resolving/improving BC Hydro hookups/capacity upgrades, to better facilitate electrification in commercial buildings especially?

Katherine

Katherine Muncaster | Director, Energy Efficiency Branch | Electricity and Alternative Energy Division | BC Ministry of Energy, Mines and Low Carbon Innovation | Tel 778-698-7180| katherine.muncaster@gov.bc.ca

---

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 17, 2022 2:32 PM
To: Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: BC Hydro capacity re. electrified development

Hi Nat and Katherine,

We have a presentation to UDI on Nov 2, and we're expecting some questions about BC Hydro distribution capacity and infrastructure issues. Is that something your Ministry deals with?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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RE: UDI Webinar - Pre-Meeting Notes & Next Steps

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: Verna Yu <vyu@udi.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Dave Ramslie (dave@opentech.eco) <dave@opentech.eco>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Jeff Fisher <jfisher@udi.org>
Sent: October 17, 2022 4:56:02 PM PDT
Attachments: image001.png, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg, IMG_2451.JPG

Hi Verna,

It was pleasure speaking with you today.

Please see attached my headshot with bio below:

Scott Williams P.Eng
Scott is a Senior Codes Engineer with the Building and Safety Standards Branch and his primary focus is on the development and successful implementation of the BC Energy Step Code and the transition to net-zero energy ready buildings and zero-carbon new construction. With over 12 years of experience as a Building Enclosure Engineer, Scott brings his strong technical background and passion for green building design to the development of policies and technical regulations relating to building performance and the BC Building Code.

From: Verna Yu <vyu@udi.org>
Sent: Monday, October 17, 2022 4:17 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Dave Ramslie (dave@opentech.eco) <dave@opentech.eco>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Webinar - Pre-Meeting Notes & Next Steps

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi everyone,

It was great seeing you all this afternoon!

I have sent through the calendar invites with a panelist link for Wednesday, November 2 from 9:15-10:30am for this webinar.

Attached is a brief overview of our conversation from this afternoon. We will aim to open the event registration this week. Please see this link here for the draft event page: https://udi.memberzone.com/events/details/udi-webinar-bc-building-code-proposals-what-you-need-to-know-1858?range=160 **If you have any feedback or would like to make any revisions to this page/information, please let me know before noon on October 18.**

Scott and Zach, could you please provide me with an updated headshot and short bio?

As mentioned during our meeting, I will compile some potential questions in advance of the event – if you have any questions you would like to be included in this list, please send them to me by Friday, October 28.

Zach/Scott – would you be able to send me your updated presentation by Friday, October 28?

Thank you all!

Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038

Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca



Page 364 of 403

Withheld pursuant to/removed as

s.22

RE: BC Provincial Update

From: Emily Sinclair <esinclair@crd.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 19, 2022 12:48:08 PM PDT
Attachments: image002.jpg, image003.jpg, image001.jpg

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s.22

Emily

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, October 03, 2022 2:43 PM
To: Emily Sinclair <esinclair@crd.bc.ca>
Subject: RE: BC Provincial Update

CAUTION: This Email is from an EXTERNAL source. Ensure you trust this sender before clicking on any links or attachments.

Emily!

Just came across this while mass deleting emails from the past year. Would love to catch up for lunch or coffee. Let me know when works. I'm back at the office, so anywhere downtown with outdoor seating works for me.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Emily Sinclair <esinclair@crd.bc.ca>
Sent: Monday, October 25, 2021 11:57 AM
To: HOLD - 211006 - May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: BC Provincial Update

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach – it's been a minute! Got this in my inbox today – it's exciting to see this work moving forward. How have you and the team been?

Let me know if you're up for coffee or lunch sometime, COVID-dependent.

Emily

From: UDI Capital Region [mailto:kathyw@udi.org]
Sent: Monday, October 25, 2021 11:33 AM
To: Emily Sinclair <esinclair@crd.bc.ca>
Subject: BC Provincial Update

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View this email in your browser

BC Provincial Update

n wildfire risk, which took place on October 19. Please see the attached slides for the flood resilience, and water cons

They also note that "**There may be significant consequences for your business if you miss the March 1, 2022 deadl**

e. Key concepts include:

ns, education providers, housing sector organizations or associations, and independent researchers are encouraged to id

Browse upcoming events on our website
Find recordings of past webinars here

UDI Capital Region Contact Information
Kathy Whitcher - Executive Director
kathyw@udi.org

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RE: Bio and headshot

From: Verna Yu <vyu@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 21, 2022 9:34:46 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Zach!

Have a great weekend ☺

Verna

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 20, 2022 9:56 PM
To: Verna Yu <vyu@udi.org>
Subject: Bio and headshot

Zachary May is the Executive Director of the Building and Safety Standards Branch, where he leads the team responsible for British Columbia's building and technical safety regulatory systems. He has led several national and provincial building code initiatives, including the development of the BC Energy Step Code. He is the Chair of the BC Energy Step Code Council and a former member of the National Research Council's Standing Committee on Housing and Small Buildings, and the Standing Committee on Energy Efficiency.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: ICAC Council Meeting on October 31st

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: October 25, 2022 12:34:25 PM PDT
Attachments: image001.jpg

It's not really our policy initiative, but it might be good to flag that equipment standards changes are in the works since EMLI doesn't appear to attend.

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, October 25, 2022 12:08 PM
To: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: FW: ICAC Council Meeting on October 31st

FYI. Anything we want raised at this meeting?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sue Bate <sbate@bchousing.org>
Sent: Monday, October 24, 2022 12:11 PM
To: Adam Terris <aterris@bchousing.org>; Allison Dunnet <adunnet@bchousing.org>; Andrew Armstrong s.15 s.15 s.15 Ann McMullin <amcmullin@udi.org>; Chris Atchison <chris.atchison@bccassn.com>; Chris Gardner <chris@icba.ca>; Denisa Ionescu <dionescu@bchousing.org>; Esther de Vos <edevos@bchousing.org>; Howard Friedman (external) <howard.friedman2@travelers.com>; Jason Jung s.15 s.15 s.15 ; Mark Sakai <msakai@bcrea.bc.ca>; Mark Vernon <mvernon@aibc.ca>; Mary Gerges <mgerges@bchousing.org>; Michelle Hayes <mhayes@bchousing.org>; Neil Moody <neilmoody@chbabc.org>; XT:Mitchell, Peter FOR:IN <mitchell@apeg.bc.ca>; Ron Rapp <ron@havan.ca>; Scott McIntyre (external) <smcintyre@egi.ca>; Tony Gioventu (external) <tony@choa.bc.ca>; Tyler Wightman <tyler.wightman@boabc.org>; Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>
Cc: XT:Shen, Cathy BCHM:IN <cshen@bchousing.org>; Vincent Tong <vtong@bchousing.org>
Subject: ICAC Council Meeting on October 31st

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning all,

I have uploaded today the agenda and materials to APRIO for the ICAC meeting next week. Please note there will be data migration happening within the APRIO software on the same day as the meeting, therefore I'm forwarding the attached to you for reference just in case there are issues in you logging in to the program.

Click here to join the meeting
Or call in (audio only)
s.15 Canada, New Westminster
Canada (Toll-free)

Phone Conference ID:s.15

Kind regards,

Sue

BC HOUSING

Sue Bate EA to CEO|Executive Office
Office: 604-439-4736 |Cell: 236-833-1066 | sbate@bchousing.org | www.bchousing.org
1701 - 4555 Kingsway, Burnaby, BC V5H 4V8 Canada

Please note that my regular business hours are between 8:30 – 4:30 pm, Monday – Friday. My work hours may differ from yours so please don't feel obligated to respond to me during hours that are outside of your work schedule.

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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www.udi.bc.ca

August 10, 2022

Teri Collins
Assistant Deputy Minister
Office of Housing and Construction Standards
PO Box 9290, Stn. Prov. Govt.
Victoria British Columbia V8W 9J7

Dear Ms. Collins

Re: Proposed Housing Supply Accountability Act

I would like to thank you and your staff for involving the Urban Development Institute – Pacific Region (UDI) in the consultations regarding the proposed *Housing Supply Accountability Act* (*HSSA*). **We strongly endorse the Ministry's efforts to establish a housing targets framework for municipalities that includes enforcement mechanisms.** We also agree with the approach of having broad enabling legislation, because it will allow the flexibility needed so the government can nimbly react to emerging issues. However, this legislation should also be presented as a strong tool that will be utilized by the Province to address the housing crisis. UDI also supports the framework being phased-in – with an initial focus on municipalities in urban areas with acute housing challenges, but with substantial infrastructure in place and a strong building sector. As discussed, there are some areas that need to be refined and others in which the Ministry could be more forceful and directive.

Housing Needs Reports as a basis for targets

UDI recognizes that the municipal *Housing Needs Reports* (*HNRs*) have been submitted to the Government already, so it would be difficult to amend them now. As such, we are pleased that Ministry is not going to be tied to them and can establish targets above and beyond the *HNRs*. However, there are several issues the *HNR* methodology, structure and process, including:

- The ability of local governments to manipulate and politicize them to reduce their targets and argue against provincially imposed ones;
- As with many population projections by governments, there is chronic undercounting as noted in the recent CMHC report on Canada's housing shortage and the *Opening Doors Report* of the Canada-British Columbia Expert Panel on the Future of Housing Supply and Affordability (Appendix 5);
- The *HNRs* are not timed with Census data; and
- Beyond this, there is even more undercounting in local governments that have traditionally limited growth as much of the population forecasting is based on previous growth rates.

UDI recommends that the Ministry (in conjunction with local governments and stakeholders) review and reform the *HNRs*, as they are still the starting point for the proposed housing targets framework. It would also limit confusion and debates in the future regarding conflicting objectives established wither by the *HNRs* or another body, such as the Metro Vancouver *Regional Growth Strategy (RGS)*. The work that the Ministry is conducting to assess the targets for local governments could be incorporated into the next round of *HNRs* and provide direction to regional districts regarding their growth strategies.

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Evaluation metrics

While UDI supports the use of a broader suite of metrics for the targets and assessments of municipalities because they provide a more complete understanding of what is occurring in their approvals processes, it is critical that Building Permits (BPs) be a key part of the target framework to ensure it is a truly performance-based system. Local governments can "approve" many projects, but introduce conditions which make them unviable and therefore unbuilt. It is the BP stage in the process where there is a clearer picture that projects will be constructed as developers will rarely pay for the consulting work and municipal charges for a Building Permit and then not proceed with construction.

If there are instances in which BPs are not being pulled by builders, this can be reviewed by the "Advisor" who would be appointed by the Minister. They could compare the issuance of BPs in other similar municipalities with what is occurring in the local government they are investigating. The "Advisor" can also discuss the issue with local government officials, builders and other stakeholders to determine why BPs are not being pulled.

Enforcement mechanisms

UDI recommends the legislative framework enable enforcement mechanisms that directly affect not only local governments, but also residents, to change the incentive structure regarding allowing new housing. For example:

- The TransLink component of the property tax could be increased if a municipality does not leverage the billions of dollars invested in SkyTrain service in their community;
- There could also be an affordable housing component added to the property tax for those communities that refuse to allow more housing;
- The Government could curtail land use and building powers (e.g., restrictions on downzoning) as well as development finance tools for an extended period. Councils could also lose powers for an extended period by delegating additional decision making to staff such as technical issues; and/or
- The Government could also limit access to Federal and Provincial funding (e.g., the Canadian Infrastructure Bank and the Housing Accelerator Fund).

In addition, this legislation needs to be paired with more carrots for those that meet and exceed their targets such as senior government funding for schools, parks and transit as well as for processing improvements and area planning; although we recognize that this is beyond the purview of this legislation.

There are also potential issues with the 2-year limitation on the length of the Orders in Council (OIC) that override municipal bylaws, policies and procedures. It would be counterproductive if a local government that is still not achieving its targets were to be allowed to revert to its old bylaws, policies and procedures when they were not delivering enough new homes. We recommend that the Minister be granted that ability to extend the OICs – especially if targets are not being met. In addition, there needs to be grandfathering for instream projects that may be negatively affected by abrupt bylaw, policy or procedure changes.

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Regional restrictions

The *Regional Growth Strategy* in Metro Vancouver places numerous restrictions on local governments. For example, there are limitations on housing (even affordable housing) in mixed employment areas. UDI has advocated that mixed employment areas near rapid transit stations would be ideal locations for rental and affordable housing (if the employment spaces are constructed). If the *Metro 2050* proposed *RGS* were passed, this type of housing would be allowed in these areas – but only within 200 metres of a station. UDI recommends that the legislation ensure that the *RGS* does not block any corrective action or directive to a local government that the Government deems necessary to meet its housing objectives.

In a similar fashion, the legislation needs to be written, so that it does not preclude the Province from overriding the *RGS* as well as local by-laws/policies for its own affordable housing projects and partnerships in the future – including establishing a separate approvals process. One of our concerns with the proposed framework is that it may not provide immediate results, but affordable housing could be more quickly delivered by ensuring that the Province has more flexibility and can move forward efficiently with its own projects.

Sources of information for consideration when establishing targets

The sources of information that that the Minister may consider in establishing targets on page two, should include information/data from government sources (e.g., CMHC, BC Housing and BC Stats), academia and industry as well as information from the Federal Government on immigration policy, as British Columbia is one of top jurisdictions for immigrants moving to Canada. In addition, the last bullet in the section should be broadened to "*Advice, information and data obtained at the discretion of the Minister.*"

At several stages of the proposed framework, it is noted that the Ministry and the "Advisor" will consult with local governments, to ensure these consultations are viewed as unbiased, we recommend that the legislation specify that this "Advisor" be a third-party, independent of local governments and their representatives, as well as the Province. We also recommend that the legislation be written to allow for consultation with others such as stakeholders and experts.

Thank you again for involving UDI in the consultation of this important legislation. If you have any questions regarding our comments, please do not hesitate to contact us. We look forward to working with you and your staff to increase the delivery of new homes to British Columbians.

Yours sincerely,



Anne McMullin
President & CEO, UDI

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August 29, 2022

Teri Collins
Assistant Deputy Minister
Office of Housing and Construction Standards
PO Box 9290, Stn. Prov. Govt.
Victoria British Columbia V8W 9J7

Dear Ms. Collins

Re: Confidential Consultation Draft Legislation - Housing Targets 2022

We support the intent of the draft legislation and the results of improved housing affordability and stimulated housing supply that it seeks to achieve. We believe that it is an important step to be undertaken and that, if implemented and enforced, it can be an important tool available to the Province. We also acknowledge that these changes will not be made in isolation, and that further incentives will be needed to encourage and drive the supply of long-overdue housing in the forms, and locations, where it is needed most.

We recognize the need to ensure that the draft legislation is broad and ambitious, but also balanced; we feel that it largely accomplishes these goals. However, we think the draft legislation is potentially limited in three key areas and we encourage the ministry to give consideration to these issues (or, if they have been considered and not addressed in the draft, then we would appreciate the opportunity to hear the Province's views on them).

s.13

Page 376 of 403 to/à Page 377 of 403

Withheld pursuant to/removed as

s.13

s.13

Thank you once again for including UDI in these consultations and we look forward to continuing to participate in this important initiative. If you have any questions regarding our comments, please don't hesitate to contact us.

Sincerely,



Anne McMullin
President & CEO, Urban Development Institute

RE: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: October 27, 2022 9:38:27 AM PDT

Sure thing Zac. I'll send Hugo a copy of the bullets previously advanced for reference.

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, October 27, 2022 9:28 AM
To: Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Jenna – please assign to Tiffany actually.

Tiffany – any chance Hugo can drop what he's doing to work on these this morning? Sorry for the late notice. If we can, I would like to get these to the ADMO by early afternoon.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: May, Zachary OHCS:EX
Sent: Thursday, October 27, 2022 9:24 AM
To: Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

If there's nothing in eapps, then we didn't assign to anyone. Can you start one, looking for bullets and assign to Juni ASAP. I assume we can have materials up by EOD without issue.

Can you also add me as a watcher on the eapps so I can track it while it's in development?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Sent: Thursday, October 27, 2022 9:02 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Hi Zac,

Do you know if we have drafted any materials for this meeting?

Thanks,
Jenna

From: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Sent: Thursday, October 27, 2022 9:00 AM
To: Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Morning!

Is BSSB drafting materials for this meeting tomorrow? I tried to do a quick search in eApps but nothing is coming up.

Regards,

Jessica Alexander | *A/Executive Administrative Assistant*
To A/Assistant Deputy Minister Bonnie Ruscheinski
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Office: 250 356-2115 | Cell: 778-677-7263 | Email: Jessica.alexander@gov.bc.ca
Pronouns: *she/her*

Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live, work and play.
This message, including any attachments to it, is not to be disclosed outside of the Provincial Government without prior written approval from the Ministry of Attorney General. If you have received this communication in error, please destroy the email message and any attachments immediately and notify me by telephone or by email.

From: Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>
Sent: Tuesday, October 11, 2022 1:38 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Jess – can you please work with Jenna on this.

Thank you

Regards,
Nikki

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, October 11, 2022 1:24 PM
To: Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

ACTION – OHCS to set a dedicated mtg with Juni, Jeff and OHCS ADM (Bonnie) to explore further.

Hi Nikki,

BSSB has the following action item from Meghan (as A/ADM) from the Oct 3 meeting with UDI.

Could you suggest some times that work for Bonnie at the end of October or early November for a 1hr meeting with Jeff Fisher (jfisher@udi.org), and I can work with Jenna and Jeff to finalize the meeting details?

Once we have the date set we will get an eapps started as well.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Tuesday, October 11, 2022 9:18 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: RE: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Yes-ED and Bonnie and Jeff. I think TW could be included at your discretion. I will step back unless needed, but Tiffany will be better to speak to the details.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing
250 858 1325

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Saturday, October 8, 2022 2:45 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Subject: RE: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Please confirm – required action is for BSSB to book a meeting with Bonnie and Jeff Fisher?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, October 7, 2022 5:16 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>

Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

For action, please. Sorry for the delay.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing
250 858 1325

From: Will, Meghan OHCS:EX <Meghan.Will@gov.bc.ca>
Sent: Monday, October 3, 2022 4:19 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Hey there,

Sharing my notes from the UDI meeting today that I joined in with Teri. My notes are purple – please forgive me if I've totally captured something incoherent but I did my best please note action item below – I will leave it with you to schedule a focussed meeting to get to the details of their concerns.

- BSSB roll-out of carbon reduction tools through BC Energy Step Code
  - UDI is on the energy step code council – have flagged this concern previously re: spring roll-out. Looking at regulations closer to Dec so municipalities could implement carbon targets in new buildings shortly after.
  - Will there be adequate guidance to do it phased/staged?
  - TC – are they requesting guidance and confirmation that it can be phased?
    - Yes
  - Unclear if natural gas can be used to meet GHG targets? Ex. If a new bldg has a contract with Fortis, they meet their GHG targets now but, in a few years time if the strata wants to switch - there's nothing stopping them from doing so.
  - Jeff Fisher at UDI is engaged with Juni/BSSB. See it being a potential speed bump to the new housing legislation.

ACTION – OHCS to set a dedicated mtg with Juni, Jeff and OHCS ADM (Bonnie) to explore further.

Thanks,

M

From: Alexander, Jessica C OHCS:EX
Sent: Monday, October 3, 2022 8:22 AM
To: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Cc: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

FYI – bullets from BSSB sent to Teri for this afternoon's UDI meeting.

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 29, 2022 6:37 PM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Sending these directly just in case. RNG = renewable natural gas, which Fortis is currently gearing up to deliver in increasing amounts over time.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Attorney General and Minister Responsible for Housing
Phone: 250 858 1325

From: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Sent: Thursday, September 29, 2022 6:24 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Political Context – Carbon Pollution Standards for New Construction:

- CleanBC Roadmap to 2030 commitment: Zero-carbon new construction in B.C. by 2030, phased in over 2024, 2027 and 2030.
- Mandate commitment to, "support local governments to set their own carbon pollution performance standards for new buildings."

Proposed Building Carbon Pollution Standard (CPS) for New Construction:

- Current code change proposal open for public review until November 4 – feedback is appreciated.
  - Implemented like the BC Energy Step Code.
  - Local governments may opt in to any of four stringency levels.
  - Per Roadmap commitment, phased into BC Building Code (BCBC) over time so the number of opt-in levels will decrease as the stringency of minimum requirements incrementally increases.
- The CPS is outcome oriented; any sufficiently decarbonized fuel source can achieve targets (including RNG).

Implementation and Enforcement of the CPS:

- Developers represented by UDI would prefer we not give local governments a choice of CPS Levels.
  - A single province-wide standard would not accommodate differing states of readiness among and within regions.
  - By offering an incrementally more limited number of CPS Levels, we honour our mandate to support local governments to set their own standards while limiting the impact of potential short-term inconsistencies.
  - Best practice implementation guidance for local governments has been developed and will be refined based on public review feedback.
  - A peer network for local governments to coordinate and collaborate on matters including implementation has been established through the Energy Step Code Council.
- Per the Building Act, building regulations, including the BCBC, have the same force and effect as a local government bylaw.
  - Local governments choose how and if to administer and enforce the BCBC.
- After a request from FortisBC that the Province require local governments to recognize RNG in their enforcement of the CPS, ADM MacLaren conferred with MUNI and confirmed the Province has no intention to interfere with local governments' autonomy in respect of how they administer and enforce the CPS.

TIFFANY WARKENTIN, BDes, LLB | Director, Building Policy & Legislation
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Ministry responsible for Housing
Desk Line/Skype (preferred): (236) 478-2666 | Mobile: (250) 883-1584
Email: Tiffany.Warkentin@gov.bc.ca

From: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Sent: Thursday, September 29, 2022 4:10 PM
To: Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>
Cc: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: FW: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Importance: High

Sending this over to you as well Tiffany to possibly get the balling rolling as I see Juni is in a meeting right.

Thank you!!

From: Alexander, Jessica C OHCS:EX
Sent: Thursday, September 29, 2022 4:07 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Subject: RUSH REQUEST | FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction
Importance: High

Hi Juni, sorry this is extremely last minute.

Can you please provide Teri with some bullets on the highlighted BSSB topic below:

Here are the suggested topics for the meeting, all at a fairly high level:

- *Annual allowable rent increase for 2023*
- *BSSB roll-out of carbon reduction tools through BC Energy Step Code*
- *Ongoing Housing Ministry work and consultations*

The meeting is scheduled for Monday, October 3rd at 2pm

Regards,

Jessica Alexander | *A/Executive Administrative Assistant*
To A/Assistant Deputy Minister Bonnie Ruscheinski
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
Office: 250 356-2115 | Cell: 778-677-7263 | Email: Jessica.alexander@gov.bc.ca
Pronouns: *she/her*

Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live, work and play.
This message, including any attachments to it, is not to be disclosed outside of the Provincial Government without prior written approval from the Ministry of Attorney General. If you have received this communication in error, please destroy the email message and any attachments immediately and notify me by telephone or by email.

From: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Sent: Thursday, September 29, 2022 4:04 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: FW: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Hi Jess,

Teri asked to get some bullets for the BSSB item listed below from Juni. Could you please assist with that?

Kind Regards,

Goneet Gill | *Executive Administrative Assistant*
To A/Associate Deputy Minister Teri Collins
Housing, Multiculturalism and Anti-Racism
Ministry of Attorney General and Minister Responsible for Housing
Office: 250 940-8610| Email: Goneet.Gill@gov.bc.ca
Pronouns: *she/her*

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, September 29, 2022 2:44 PM
To: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Goneet,

Here are the suggested topics for the meeting, all at a fairly high level:

- Annual allowable rent increase for 2023
- BSSB roll-out of carbon reduction tools through BC Energy Step Code
- Ongoing Housing Ministry work and consultations

We were hoping to discuss some of the consultations that UDI participated in over the summer that remain under NDA, in relation to the above topics. Can you confirm whether this will still be possible.

Thanks,
Cassandra

From: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Sent: September 29, 2022 2:34 PM
To: Cassandra Smith <csmith@udi.org>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Hello Cassandra,

Could you please provide an agenda for this meeting?

Kind Regards,

Goneet Gill | *Executive Administrative Assistant*
To A/Associate Deputy Minister Teri Collins
Housing, Multiculturalism and Anti-Racism
Ministry of Attorney General and Minister Responsible for Housing
Office: 250 940-8610| Email: Goneet.Gill@gov.bc.ca
Pronouns: *she/her*

From: Cassandra Smith <csmith@udi.org>
Sent: Tuesday, September 27, 2022 5:36 PM
To: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Cc: Newman, Debbie AG:EX <Debbie.Newman@gov.bc.ca>; Michael Drummond <mdrummond@udi.org>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Goneet,

Thanks for offering those dates. Let's book the call for Monday, October 3 at 2pm. Would you like me to set up a Zoom link?

Our VP, Mike Drummond will also be joining.

Thanks,
Cassandra

On Sept 27, 2022 16:23, "Gill, Goneet AG:EX" <Goneet.Gill@gov.bc.ca> wrote:

> Hi Cassandra,
>
> A/Assoc DM Collins is available for a call next week for the following dates/times:
>
> - Monday October 3, 2 pm – 2:30 pm
> - Thursday October 6, 9:30 am – 10 am
>
> Please confirm if either dates/times work for you.
>
> Kind Regards,
>
> **Goneet Gill** | *Executive Administrative Assistant*
>
> To A/Associate Deputy Minister Teri Collins
>
> Housing, Multiculturalism and Anti-Racism
>
> Ministry of Attorney General and Minister Responsible for Housing
>
> Office: 250 940-8610| Email: Goneet.Gill@gov.bc.ca
>
> Pronouns: *she/her*
>
> ---
>
> **From:** Cassandra Smith <csmith@udi.org>
> **Sent:** Monday, September 26, 2022 4:06 PM
> **To:** Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
> **Subject:** RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Goneet,

I hope you had a great weekend. I'm just following up on this request to find some time for a call with Teri. Let me know how the schedule looks for the next couple of weeks.

Thanks,

Cassandra

Cassandra Smith *(McColman)*

Director, Policy and Public Affairs

Direct: 604.661.3032

Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street

Vancouver, BC V6E 3S7

Office: 604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: September 15, 2022 2:46 PM
To: Cassandra Smith <csmith@udi.org>
Cc: Gill, Goneet AG:EX <Goneet.Gill@gov.bc.ca>
Subject: RE: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

Thanks Cassandra, appreciate you sharing this.

I'm happy to connect any time – Goneet can find us some time.

t

From: Cassandra Smith <csmith@udi.org>
Sent: Tuesday, September 13, 2022 10:03 AM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Subject: UDI Report- No Vacancy: Challenges & Opportunities for New Rental Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Teri,

I hope you're keeping well, no doubt things are busy in the Ministry getting ready for the start of the fall session next month. UDI has recently completed a report analyzing the viability of three hypothetical purpose-built rental projects and how costs have changed over time. This report highlights the challenges rental builders face and how sensitive these projects are to policy and market changes.

Through this analysis UDI aims to answer the question, in a market where there is considerable and growing demand for rental housing, why isn't more being built, and what can be done? The report, *No Vacancy: Challenges & Opportunities for New Rental Housing Construction* is available on our website.

Following the discussions with UDI's Executive Committee, we thought this report may be of interest to you. If you have any questions regarding the document, please don't hesitate to ask.

As well, I was hoping that you might have some time over the next couple of weeks for a brief call to discuss the recent annual allowable rent increase announcement in relation to the Ministry's ongoing work? Let me know if would work.

Thanks,

Cassandra

Cassandra Smith *(McColman)*

Director, Policy and Public Affairs

Direct: 604.661.3032

Email: csmith@udi.org

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1100-1050 West Pender Street

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NOTIFICATION - RUSH - eApprovals Item ID: 60971 - Item Forwarded - Due 2022-10-27

From: JPSS eApprovals <donotreply@sp.gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>, Hrechka, Jenna OHCS:EX <Jenna.Hrechka@gov.bc.ca>
Sent: October 27, 2022 9:43:23 AM PDT

Warkentin, Tiffany [Assignee] forwarded an eApprovals item to Wong, Hugo for action

Comment: over to you

#: 633553

Title: 633553 | MBN | OHCS/UDI Follow up to Oct 3rd Mtg

Full Name:

Due Date: 10/27/2022

Category: Briefing Note - Meeting Note

Go to item...

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15

DRAFT

November 4, 2022

Zachary May
Executive Director
Building Safety & Standards Branch (BSSB)
Office of Housing and Construction Standards (OHCS)
Ministry of Housing
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2

Dear Mr. May:

Re: UDI Response to Public Review of Energy Efficiency & Greenhouse Gas (GHG) Emissions Proposals for the 2018 B.C. Building Code (BCBC)

The Urban Development Institute (UDI) would like to thank you and BSSB staff for presenting the proposed changes to Provincial energy efficiency requirements, the amendments to *Energy Step Code* (*ESC*), and the Regulation that would empower local governments to establish GHG emission restrictions for new buildings to our membership at our November 2, 2022 *BC Building Code Proposals - What You Need To Know Webinar*.

In addition to the *Webinar*, we have reviewed the materials provided by BSSB on the proposed Regulation. UDI is concerned about the December timeframe for the implementation of it as well as some issues that still need to be addressed in the proposed *Provincial policy bulletin for cleaner, more energy efficient new construction* (*Best Practices Bulletin*) and other supporting documents for local governments.

Need for Delay of the Implementation of the Regulation

We recommend delaying the implementation of the Regulation as there are a number of issues that need to be further addressed, including potential housing legislation, a critical B.C. Utilities Commission (BCUC) decision on Renewable Natural Gas (RNG) and several BC Hydro issues, which are barriers to building electrification. More notice and communication regarding the changes is also needed for the industry.

Potential Provincial Housing Requirements for Local Governments

In a CBC Metro Matters interview with Premier-Designate David Eby, the issue of upcoming "… *legislation on housing targets and forcing municipalities to act* …," was discussed. While UDI has been a long-standing advocate of this type of approach to address housing supply and affordability issues, it is not known what requirements will be imposed on local governments.

If the OHCS Regulation is approved in December, local governments will be proceeding with consultations and making decisions on potentially significant changes to their energy efficiency and GHG emission reduction policies. If they are excessive, the cost impacts could undermine their ability to meet future Provincial housing requirements. Fully understanding these expectations would be critical information for local governments as they establish the *ESC* step and GHG reduction steps, and many would likely proceed more cautiously if these requirements were understood. ***UDI recommends that the Government wait until details about future legislated housing delivery requirements and regulations are released before proceeding with the proposed regulatory changes to the 2018 BCBC. When it is announced, the Best Practices Bulletin needs to reference the changes and how they might impact the new GHG emission powers being offered to local governments.*** This issue is particularly important given that under the *Best Practices Bulletin* there will be no limits on local governments in establishing *ESC* requirements and GHG reduction requirements (i.e., they can mandate the highest step for both without providing any incentives).

Renewable Natural Gas

There is also little clarity on another key issue for the GHG proposals – how RNG will be addressed. As noted in the *Draft Building Carbon Pollution Standards for Part 3 buildings in British Columbia* Report, "*… there is no mechanism available … to ensure low-carbon energy will be used for the life of the building*." We are awaiting a BCUC decision on whether strata corporations can be bound to RNG contracts if they use natural gas. Local governments are concerned that stratas can switch to less expensive regular natural gas even if developers sign contracts for RNG. This could be why the language in the documentation provided by OHSC was confusing regarding the status of RNG. Wording in the *Best Practices Bulletin* seems to give local governments potentially the option of disallowing the use of RNG, although the Office has indicated that the new Regulation is to be fuel neutral. ***UDI recommends that the Government wait until the BCUC determines if strata councils can be bound by RNG contracts before proceeding with the proposed regulatory changes to the 2018 BCBC.***

BC Hydro Issues

Having an RNG option is critical to our members because there have been ongoing issues with BC Hydro that would be further exacerbated by new building electrification policies (and electrical vehicle charging requirements, which are likely already mandated by local governments who would adopt the *Building Carbon Pollution Standard*), including:

- BC Hydro's electrical extension fees policy is still in place, which BSSB rightly notes results in some "*… developers needing to pay significantly higher extension fees (i.e., the cost of new electrical service) for larger electrical services …,"* that *"… can be difficult to predict*;"
- BC Hydro's Tier 2 rates are still in place, which financially penalizes fully electrified buildings;
- There are staffing shortages at BC Hydro in regions such as the Capital Regional District that are delaying the delivery of housing; and
- Although, BC Hydro has indicated to BSSB that they will have the generating capacity to meet the electric vehicle charging and building electrification requirements for new and existing buildings, there are still issues with the capacity of local distribution. We are hearing from our

members that there have been several reports in the Fraser Valley, especially Langley, regarding brownouts and a shortage of electricity. This is exacerbated by the lack of integration between BC Hydro and local governments regarding long range area planning in which decisions are being made about where future growth will be located in communities.

UDI recommends that the Government delay the implementation of the proposed regulatory changes to the 2018 BCBC until here is an understood plan in place to address these hydro infrastructure issues.

These issues also need to be identified in the Best Practices Bulletin. Currently, the only one specifically addressed in the *Bulletin* is the extension fees, and the solutions offered to local governments would be difficult for them to implement. Revising the electrical utility extension fees in utility tariffs is beyond their purview. It is up to the Province, BC Hydro and the BCUC to resolve this problem, as are the issues regarding RNG (see above). It is doubtful that the recommendation to establish a local building electrification fund will be utilized by municipalities as no details are provided on how it would work, and the measure will likely be considered a downloading of Provincial costs and responsibilities onto local governments.

OHCS needs to recommend that local governments discuss with BC Hydro the state of electrical infrastructure in the growth areas of their communities to assess how much load is available before making decisions on GHG reduction targets (and electric vehicle charging standards). Similarly, local governments on go forward basis need to closely work with BC Hydro on Official Community Plans and Area Plans to ensure the utility understands what infrastructure is needed across the municipality and in certain growing areas. This suggestion could also be included in the *Best Practices Bulletin*. Municipalities should also be encouraged to enquire about potential BC Hydro staffing challenges that could slow reviews of new developments as well.

Notice

Despite the efforts of BSSB, we are also concerned about the lack of knowledge in the industry in municipal jurisdictions that have not adopted the *ESC* (especially outside the Lower Mainland and the Capital Regional District) regarding the proposed regulation, which was just released in late September, and its impact on projects. The new Regulation will take immediate effect for those submitting building permit applications. Many will likely be surprised by the new Provincial energy efficiency requirements. – especially those with Part 3 projects

Even in jurisdictions with the *ESC* in place, there is another concern for Part 3 commercial builders the proposed changes to the Provincial energy efficiency requirements, which will immediately increase for Step 2 for office and retail projects in December. Designers and contractors have been using the *ESC* for guidance, and now may have to make adjustments to projects. This is especially problematic for Part 3 builders who have been potentially designing their buildings for years. In addition to delaying the approvals for their projects, there will be added costs to resubmit their designs to achieve the higher energy efficiencies.

While we recognize that this problem occurs with every code cycle, it was not clear how the Province would mesh the *ESC* with Federal codes, and the window between the notice of the changes on September 23rd and the implementation of them in December is a much smaller than previous code cycles.

UDI recommends that implementation of the proposed regulatory changes to the 2018 BCBC be delayed allowing time for designers to adjust projects, and that the Province have an extensive communications outreach program to builders and their design/construction teams about the Provincial energy efficiency requirements.

Best Practices Bulletin/Presentations

More information and direction are needed in the *Best Practice Bulletin* and presentations to guide local governments and builders on other matters. From an industry perspective, ***stronger language is needed than "… local governments are advised …," and clarity is needed regarding what steps will be taken if municipalities do not follow the Bulletin or advice from the Province (and Energy Step Code Council)***. Issues have occurred with some local governments already proceeding now to the highest *ESC* step with zero carbon requirements.

Timing of Municipal Requirements & Instream Protection

The timing of when municipal requirements can be imposed on builders is not clear. It is stated in the *Bulletin* that "*… local governments are advised to notify industry that they will be enforcing them at least 6 months prior to requirements coming into effect*." However, in Episode 5, a longer notice period is endorsed: "*… a six to 12-month notice period for local industry is strongly recommended, depending on the stringency of the carbon requirements being considered*." ***UDI agrees with the longer notice period (12 months) – especially if local governments move to the highest ESC step as well as implementing stringent GHG emission reduction requirements***.[1]

Clarity is also needed regarding how these timeframes are coordinated with municipal consultations with industry. ***Ideally there are extensive discussions with industry prior to local governments determining (and providing notice regarding) what ESC and GHG reduction targets they want to mandate for builders – especially if local governments only need to provide six months notice.***

Although there is stronger language in Episode 5, UDI is also disappointed that BSSB states in the *Bulletin* that "*… a grace period for in-stream applications may be considered*," by local governments for the *Building Carbon Pollution Standard*. ***A stronger recommendation for in-stream protection is needed in the Bulletin – especially for local governments mandating the highest ESC step and/or stringent GHG reductions with only six months notice. Advice needs to also be provided on how long the grace period for in-stream protection should be.***

[1] There may be missing information from Episode 5 as well. It is noted that there will be more information on the timeframes "*… in a little bit*," but no further information is shared.

Relaxation-type Approach

As with the grace period, little positive direction is given to local governments to utilize the relaxation-type approach that many are using now, prior to the proposed Regulation. Under this approach, local governments have offered two options to builders:

- meeting a higher *ESC* step; or
- meeting a low step with a low carbon energy system.

UDI has strongly supported this approach, and we continue to be concerned that this option may not be utilized if local governments are given the ability to mandate any *ESC* step and GHG emission reduction target – without using incentives. The Province is not even encouraging the continued use of the relaxation-type approach. The issue is not addressed in the *Bulletin*. Although an example is provided in Episode 5, it is only noted that the option is still available, and "*Communities could require or incentivize lower carbon construction using the provincial approach*." **UDI recommends that the Province provide stronger encouragement in the *Best Practices Bulletin* for the continued use of the relaxation-type approach and other incentives.**[2]

Municipal Powers Beyond the Building Carbon Pollution Standard

It is stated in Episode 5 that the Province is providing flexibility with the *ESC* and the *Building Carbon Pollutions Standard* with the caveat that local governments "*… would have to use the provincial approach, as any existing technical building requirements that conflict with the BC Building Code will have no force or effect*." However, it is not clear why builders may lose the relaxation-type approach, noted above, when it is stated in Episode 4 that the door is open for local governments to impose other energy efficiency and GHG emissions requirements:

> "*The building carbon pollution standard does not regulate so-called "luxury loads", such as hot tubs, pools, heated driveways. Some local governments may wish to explore other ways of reducing the energy use of these luxury loads, including development permit authorities for energy conservation and GHG reduction*."

Some communities are exploring and even implementing policies to mandate/incent onsite renewable energy, heat pumps, fully electric buildings and embodied carbon reductions - in addition to the *ESC* and the *Building Carbon Pollution Standard*. It is not clear what the limits of municipal powers are regarding these issues. ***UDI recommends further advice be provided in the Best Practices Bulletin on the powers local governments have regarding energy conservation and GHG reductions. This should involve consultation with local governments, the building sector and other stakeholders.***

[2] The Community C scenario in Episode 5 could include more details on how a local government using the relaxation-type approach can continue it in an appropriate manner under the new Regulation.

The Need for more Provincial Supports

It is stated in bold in the Preface of the *Draft Building Carbon Pollution Standards for Part 3 buildings in British Columbia* (the *Metrics Report*) that:

> "*This document is meant to be an initial costing analysis by illustrating whether decarbonizing a hypothetical building is cost effective across climate zones in B.C. This document should not be considered an exhaustive costing study to meet the carbon pollution steps in your area. This analysis is not representative of all buildings in all situations. Local governments and the construction industry should conduct more detailed or specific costing analysis which builds on this initial analysis*."

UDI continues to recommend that the Province conduct the ongoing work to enhance this initial costing analysis[3] with further research and analyses as well as a establishing a monitoring program of what the real costs are when high ESC step and low carbon projects are built. Most local governments, even if the recommended regional approach is utilized (especially outside urban centres), will not have resources or the interest in conducting further analysis in a substantive way. There is also little to no direction in the *Best Practices Bulletin* for local governments to conduct further costing analyses for their areas. It should also not be up to the industry to conduct the analysis in place of regulators, and it is doubtful that estimates from industry reports would sway local decision making on future regulations.

The *Best Practices Bulletin* includes the need for municipalities to *"Seek to understand industry's readiness to implement these requirements. In particular, they should seek to understand the local challenges and opportunities to implement low-carbon building systems, especially heat pump space and water heating*." This is important as we have heard that in some jurisdictions the availability of heat pumps is limited. ***However, the Province, again, needs to take the lead with understanding and improving the availability of heat pumps in British Columbia*** especially since new buildings in B.C. will have to be net-zero carbon by 2030 under the *BCBC*, and one of the actions in the *CleanBC Roadmap* is to "*… focus on growing markets for, and speeding up the adoption of, technologies we know are ready for deployment, such as … heat pumps*."[4]

For similar reasons, the Province needs to take a leadership role in ensuring that we have enough trained mechanical contractors and energy advisors across the Province. The issue should also be flagged in the *Best Practices Bulletin* for local governments to review.

The OHCS should also consider working with the Energy Step Code Council and the Local Government Peer Network to develop a model for the thermal conditioning permit proposed in the *Best Practices Bulletin*. Ideally, this approach could be extended to other forms municipalities utilize for the *ESC* and the *Building Carbon Pollution Standard*. This would help achieve the Province's objective of having permitting processes that are "*… simple to follow and administer*," as well as coordinated across local governments and inspection entities.

---

[3] Further suggestions are noted in Additional Comments section below

[4] In the *2018 CleanBC Strategy* there was also a stated desire by 2030 to have 310,000 new residential heat pumps and 53 million m² of commercial floor space heated by heat pumps in the Province.

BSSB (with other Provincial entities) needs to be given the resources to conduct this work and provide supports to local governments, or delaying the implementation of the Building Carbon Pollution Standard Regulation should be considered. These issues are critical given how soon Provincial building carbon requirements will be implemented across the British Columbia.

Provincial and Broader Public Sector (BPS) Buildings

UDI has been a strong supporter of the Province and the Broader Public Sector (BPS) taking a leadership role with their new buildings. As we have stated in the past, this leadership was prevalent when the Leadership in Energy and Environmental Design (LEED) standard was introduced to Metro Vancouver, when the BPS incorporated it in their new buildings. This ensured that the design and construction became familiar with LEED. It also allowed UDI and other organizations to educate their members on LEED case studies to show the benefits of the standard, how to reduce costs and avoid pitfalls.
BC Housing is a leader for its projects with regard to the *ESC* and other green building initiatives, and the Province is also committed to doing more through its *CleanBC Roadmap to 2030*:

- By "*Requiring all new public sector buildings to align with our climate goals beginning with performance standards (2023) and moving to zero-carbon new buildings (2027)*;" and
- With low carbon building materials by "*… supporting the development and implementation of embodied carbon targets for public sector buildings by 2030*," before they are applied to other new buildings.

However, UDI is disappointed that the BPS is still not adequately addressed under the *ESC* regime, when it is being applied across British Columbia. If the Province and the BPS want to show leadership regarding climate change, they should be doing more with their new buildings than the private sector – not less. ***UDI recommends that similar standards for ESC be developed for new BPS buildings as soon as possible***.

Additional Comments

- UDI supports local governments working the District Energy (DE) providers to establish emissions factors for the DE systems because of the language in the *Best Practices Bulletin* that municipalities "*Not establish GHG targets for buildings that cannot reasonably be achieved by buildings compelled to connect to district energy systems*." However, the Province will soon be establishing its own GHG targets for new construction, and it is not clear how these targets will work with emissions factors established by local governments and DE providers. As municipalities such as Burnaby are now considering developing new DE systems, this issue needs to be addressed as soon as possible.

- It is not clear from the episodes and *Bulletin* about whether it is up to the builder or municipality to decide which type of airtightness test is to be used (e.g., Normalized Leakage Area, Normalized Air Leakage Rate or air changes per hour). UDI would prefer that decisions on airtightness testing methods be left to builders.

- In terms of communications, we're pleased that the Province is participating in virtual events such as the UDI webinar on November 2nd as well as holding its own Live Q/A on October 13th. However, these communication efforts need to also occur after the Regulation has been approved. We would also recommend that the Province develop a Q/A document to address questions as they arise at events or through discussions with stakeholders.

- As discussed at the September Energy Step Code Council meeting ***UDI recommends that the OHCS add new episodes to review the findings in the Part 3 and Part 9 technical analyses.*** Our members are also going to want to understand the strategies and solutions they can utilize to reduce costs and risks.

- Further work is needed to address some of the issues that were left unaddressed in the current Metrics *Report*, such as:

    - Heat pump domestic hot water heaters not being modelled in the study;
    - The costs of meeting the higher steps of the *ESC* need to be incorporated with the costs of meeting the steps of the *Building Carbon Pollution standard*, as many municipalities will do both.
    - Costing information for all climate zones (other than 4 and 7a) for office, retail and hotels need to be provided;
    - Costing information for the highest steps for retail and hotels for all climate zones need to be provided, as the GHG reduction targets are more stringent for office and retail, but the incremental costs in the *Report* seem higher;
    - Including more "*Highlights from analysis*" for the various building archetypes; and
    - Providing details on the ten lowest cost incremental capital cost options.[5]

- The *Metrics Report* and the *Best Practices Bulletin* also need to be updated when new costing information is available and key decisions are made, such as the BCUC decision on RNG.

- Although this is not an issue for UDI members, the proposed decarbonization path for the Fort Nelson area, which has a high carbon emitting electricity grid, is not clear. OHCS is proposing a prescriptive path to reduce GHG emissions in new buildings for the area that is supposed to be simple and practical. However, all that is noted under the prescriptive path for the various steps is builders are to decarbonize - space heating; space heating and hot water; or the full building. It is not stated how this would be done and whether there is a cost-effective way of accomplishing this. OHCS may want to consider exempting the Fort Nelson area from the GHG requirements in the proposed Regulation – and potentially future Provincial GHG requirements.

[5] In addition, the base costs need to be included for Step 4 on the High-rise residential table for Climate Zone 4 as well as modelling for electric vehicle charging, which is required by many of the local governments that will be utilizing the *Building Carbon Pollution Standard*. The latter is critical if it increases the Tier 2 rates of buildings and units.

Conclusion

FW: Emailing: New Version - UDI Response to ESC Regulatory Changes 2022 (draft for October 27)

From:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
To:	Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent:	October 27, 2022 11:45:31 AM PDT
Attachments:	New Version - UDI Response to ESC Regulatory Changes 2022 (draft for October 27).docx

FYI

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Message-----
From: Jeff Fisher <jfisher@udi.org>
Sent: Thursday, October 27, 2022 11:31 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Michael Drummond <mdrummond@udi.org>
Subject: Emailing: New Version - UDI Response to ESC Regulatory Changes 2022 (draft for October 27)

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Zachary, as discussed in our call, here is a current draft of our response to the Building Code Regulatory Proposals.

Your message is ready to be sent with the following file or link attachments:

New Version - UDI Response to ESC Regulatory Changes 2022 (draft for October 27)

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

ALERT - RUSH - eApprovals Item ID: 60971 - Item Forwarded - Due 2022-10-27

From: JPSS eApprovals <donotreply@sp.gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 27, 2022 12:17:37 PM PDT

Warkentin, Tiffany [Assignee] forwarded an eApprovals item to May, Zachary for action

Comment: Tightened it up a bit and added some content based on the draft UDI submission that Hugo hadn't seen when he drafted.

#: 633553

Title: 633553 | MBN | OHCS/UDI Follow up to Oct 3rd Mtg

Full Name:

Due Date: 10/27/2022

Category: Briefing Note - Meeting Note

Go to item...

RE: Budget for accessibility project consultant

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October 27, 2022 4:58:20 PM PDT
Attachments: image001.jpg

Sounds good. I have read the UDI BN. Can we spend some time discussing in prep for the 11am meeting. I don't want UDI to feel like they are being shuffled since I need to be brought up to speed after they spend time discussing with Meghan. Hoping to look at the most efficient use of our time but need a bit more context.
Thanks
Bonnie

Bonnie Ruscheinski, B.Comm., AACI, P.App.
A/Assistant Deputy Minister
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, October 27, 2022 9:54 AM
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Subject: Budget for accessibility project consultant

Hi Bonnie,

Quick update on this issue – it looks like we have negotiated our way out of paying for publishing the next edition of the Codes out of our branch budget, which leaves us with roughly 40k in contracts budget this fiscal to support the accessibility project.

Will discuss in more detail tomorrow, but wanted to flag since I know you were looking at other possible funding options.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Re: ICAC Council

From: Tony Gioventu <tony@choa.bc.ca>
To: XT:Bate, Sue FIN:IN <sbate@bchousing.org>
Cc: Adam Terris <aterris@bchousing.org>, Andrew Armstrong <IMCEAEX-_o=ExchangeLabs_ou=Exchange+20Administrative+20Group+20+28FYDIBOHF23SPDLT+29_cn=Recipients_cn=f66ebd4b9d6b4aaf85f7ea5954c8b685-Andrew+5FArms@canprd01.prod.outlook.com>, Ann McMullin <amcmullin@udi.org>, Chris Atchison <chris.atchison@bccassn.com>, Chris Gardner <chris@icba.ca>, Denisa Ionescu <dionescu@bchousing.org>, Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>, Esther de Vos <edevos@bchousing.org>, Howard Friedman (external) <howard.friedman2@travelers.com>, Mark Sakai <msakai@bcrea.bc.ca>, Mark Vernon <mvernon@aibc.ca>, Mary Gerges <mgerges@bchousing.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Michelle Hayes <mhayes@bchousing.org>, Neil Moody <neilmoody@chbabc.org>, Patrick.ryan@vancouver.ca <patrick.ryan@vancouver.ca>, XT:Mitchell, Peter FOR:IN <mitchell@apeg.bc.ca>, Ron Rapp <ron@havan.ca>, Scott McIntyre (external) <smcintyre@egi.ca>, Tyler Wightman <tyler.wightman@boabc.org>, Vincent Tong <vtong@bchousing.org>, jjung@asttbc.org
Sent: October 28, 2022 11:17:30 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks, I'll be there.

On Fri, Oct 28, 2022 at 9:31 AM Sue Bate <sbate@bchousing.org> wrote:

> Details to be confirmed

FW: Notes - Step Code Meeting with UDI October 28, 2022

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>, Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>, Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: October 28, 2022 12:05:59 PM PDT
Attachments: image001.jpg

Hi folks,

We just had a meeting with UDI related to the proposed Step Code and Carbon Pollution Standards changes. Notes are below. General direction going forward:

1. No significant issues with the technical content of the regulation.
2. We should start thinking about a delayed effective date, probably 6 months after signing of the regulation. Bonnie seems open to the idea and it will give us time to clarify issues and help with an orderly transition for LGs. This isn't a final decision, just direction to consider a delayed effective date and pros/cons.
3. We need to coordinate with HPB on how our proposed changes may impact their work, and ideally build housing policy implications into our communications to local governments. I have asked HPB to set up monthly meetings with us to coordinate.
4. We need to advocate for EMLI staff and BC Hydro to meaningly engage with UDI on local infrastructure challenges. I have reached out to Hydro and EMLI, but flagging for all of you as an FYI at this point.
5. We will need to do more work on guidance documentation. A delayed effective date would buy us some time to develop and release the content early in the new year.
6. We have agreed to consider further impact analysis, but not before the regulation is finalized. We need to work with the ESCC to scope out the next phase of modelling once we've completed our work on the reg.

Also, with our recent changes to the management team, I have asked Nicole to lead work on the Existing Buildings Renewal Strategy (as well as several other areas of work), but I will be stepping in as the management team lead for the proposed changes to the ESC and carbon pollution standards through to implementation (or until we have Tiffany's position backfilled). Juni and Andy will continue to provide support/oversight for the development of content for the code and ensuring due diligence on that work.

Not sure if I missed anyone working on this project. Please forward to anyone else who should be looped in.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent: Friday, October 28, 2022 11:49 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Notes - Step Code Meeting with UDI October 28, 2022

Thanks Zac

Bonnie Ruscheinski, B.Comm., AACI, P.App.
A/Assistant Deputy Minister
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, October 28, 2022 11:46 AM
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Subject: Notes - Step Code Meeting with UDI October 28, 2022

Attendees:
Mike Drummond, VP Corporate Affairs
Jeff Fisher, VP & Senior Policy Advisor
Cassandra Smith, Director Policy and Public Affairs

Topic:
Issues to raise related to proposed Building Code changes related to energy efficiency and carbon pollution

- UDI appreciates us speaking to their members on November 2
- Concerns are not with the direction of the regulation, but with potential conflicts with Provincial goals on housing delivery with local governments
- LG consultations typically set a target then consult on that, missing the opportunity for meaningful consultation
- The only limit on LGs will be the anticipated housing targets legislation
- LG sustainability staff likely don't understand the link between housing and climate action
- **This is key issue #1** – alignment between housing policies and building energy policies by local governments
- **Issue #2** is RNG
- Contracts with Stratas aren't binding, Fortis has applied to the BCUC
- There is confusion on how this would work with applications coming online now, or after
- Seeking clarity on BCUC impacts and LG approaches to this so developers can anticipate these changes
- ZM: RNG does not fit into the regulatory system today, at least as far as the code.
- ZM: We can't pre-decide what Prov might do if/when BCUC makes a decision
- **Issue #3** – BC Hydro issues are augmented by the move to electrification and EV charging
- Staffing issues at BC Hydro, cost issues for upgrades of infrastructure, lack of local capacity on the system (Langley)
- Leading developers have to pay for all future capacity with no way to recover costs
- There hasn't been action from BC Hydro on this
- BC Hydro's long term planning seems at odds with changes in buildings and transportation
- BC Hydro issues are causing some delays in occupancy
- ZM: OHCS will advocate regarding this issue with our colleagues at EMLI and BC Hydro
- BR: very interested seeing that we consider impacts on getting occupancy for housing with these technical infrastructure issues on the electricity grid
- UDI is going to be raising these issues to Ministers and BC Hydro's board
- Seems that people involved from EMLI are supportive of electrification but not involved in the operations of BC Hydro
- **Issue #4** – areas without ESC yet and this will be an issue for development in those locations
- December enactment will cause an issue for many in-stream projects
- ZM: we are still considering what the effective date should be and appreciate the feedback.
- ZM: We will follow up with any information regarding who UDI should be speaking with at EMLI
- ZM: many of the other issues identified can likely be addressed through improved clarity in guidance documents for local governments
- ZM: we are happy to scope out additional costing analysis through the Energy Step Code Council in the coming months.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Building code implications

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>
Cc: Gartner, Candice OHCS:EX <Candice.Gartner@gov.bc.ca>, Gill, Aman X OHCS:EX <Aman.X.Gill@gov.bc.ca>
Sent: October 28, 2022 2:15:28 PM PDT
Attachments: image001.png, image004.jpg, image002.png

Hi Bonnie,

We will absolutely take code changes into consideration and look forward to a briefing with Zac. In the interim, are there any written comments/memos we can review?

Copying Cadice and Aman so we're all in the loop.

Cheers!

Cimarron Corpé
Director, Housing Secretariat

Ministry of Attorney General and Minister Responsible for Housing
Main: 778.974.3902
Mobile: 250.208-0242
Email: Cimarron.Corpe@gov.bc.ca

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Sent: Friday, October 28, 2022 1:01 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>; Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: Building code implications

Hi All
Please ensure that building code/step code etc changes are contemplated in the process of setting targets along with any other new pressures on local gov'ts as a result of gov't regulations/processes etc are considered. Zac should go over what BSSB is working on and some of the concerns for local governments raised by UDI that may impact their ability to deliver on targets.
Bonnie

Bonnie Ruscheinski, B.Comm., AACI, P.App.
A/Assistant Deputy Minister
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

BRITISH COLUMBIA

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

From: May, Zachary OHCS:EX
To: Ally Bodnar <Ally@icba.ca>
Sent: October 31, 2022 10:25:57 PM PDT
Attachments: image001.png

Hi Ally,

Sorry to take so long to get back to you. Unfortunately we're stretched thin right now and don't have capacity to do additional presentations before the end of our public review for the proposed changes. I would be happy to plan a presentation for your members once we have the regulation finalized and can speak about all the specifics. Would that work?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Ally Bodnar <Ally@icba.ca>
Sent: Tuesday, October 25, 2022 11:01 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

Just following up on this inquiry?

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 f. 604-298-2246
Association | Benefits | Training

Book a call with me! Click here!



From: Ally Bodnar
Sent: October-20-22 4:05 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

Hi Zachary,

I hope you are well.

I see that you are doing a webinar for UDI on the BC Building Code Proposal on November 2nd. I was wondering if you might be willing to do a session on this for ICBA members? ICBA would be happy to host and look after everything, you'd just need to log in and present.
I'd love to connect with you to talk more about if this would be possible. Would you be open to a video call in the next week or so?

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 tf. 1-800-663-2865 f. 604-298-2246
Association | Benefits | Training



[External Email]

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RE: UDI Presentation Slides

From: May, Zachary OHCS:EX
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: November 1, 2022 2:20:18 PM PDT

Scott,

Can you strike the highlighted text from the presentation? Ok to say this is what the proposal is right now verbally, but I would like to create some ability for us to make performance the default and prescriptive be the opt-in.

- Prescriptive compliance path comparable to performance 'Step 3', Part 9
  - Builders have the choice between prescriptive and performance compliance

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: May, Zachary OHCS:EX
Sent: Tuesday, November 1, 2022 2:11 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Subject: RE: UDI Presentation Slides

Reviewed the slides and made minor edits to the last slide.

Thanks for pulling this together, Scott.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: Tuesday, November 1, 2022 11:47 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: UDI Presentation Slides

Hey Zac,

I made a number of changes to the PPT for tomorrow's presentation. Link below in previous email.
I have marked the slides with your initials in the comment pane for those slides that are to be addressed by you. (slides 2 and 10) I will handle all others.
We have 11 slides – so about 2.5 minutes per if we want to stay within 25 minutes.
For slide 10 – I have highlighted in the comment pane the common questions that have been asked by UDI. You can use these to form your talking points.

I let Verna know that we would have these to her by end of day; however, given the time pinch, I am sure we will be sharing our screen during the presentation and could just provide after the meeting instead.

Have a look and let me know your thoughts.

Scott

From: Williams, Scott B OHCS:EX
Sent: Thursday, October 27, 2022 3:52 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: UDI Presentation Slides

Hi Zac,

As discussed, slides for the upcoming UDI presentation can be found here:
G:\Building_Safety\1 ADMIN\324 SPEECHES & PRESENTATIONS\-40 Staff\2022\10-18 UDI - Proposed Code Changes

This is just a cut and past of the slides used for the Q&A a few weeks back.
Right now, slides are light regarding implementation – I will populate a few slides based on UDI comments so far.

Structure of the presentation
General intro

- Roadmap to 230
- Harmonization etc
- Public review process

Proposed code changes

-EE, GHGs with focus on Part 3
-slide on GHG summary sheets and Metrics report
-highlight of typical systems and associated costs for meeting different levels of GHGs

Implementation

- A couple slides on comments received thus far
  - BCHydro
  - LG authorities
  - Step up step down for EE and GHGs
  - Supports ie best practice guides etc.

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

RE: UDI Webinar - Pre-Meeting Notes & Next Steps

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: Verna Yu <vyu@udi.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Dave Ramslie (dave@opentech.eco) <dave@opentech.eco>
Sent: November 1, 2022 5:04:44 PM PDT
Attachments: image001.png, image003.jpg, image005.jpg, image004.jpg, image006.jpg, image002.jpg, 2022_11_02_UDI.pdf

Hi Verna –
Please see attached a copy of our slides for tomorrow morning.

Cheers,
Scott

From: Verna Yu <vyu@udi.org>
Sent: Tuesday, November 1, 2022 10:07 AM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Dave Ramslie (dave@opentech.eco) <dave@opentech.eco>
Subject: RE: UDI Webinar - Pre-Meeting Notes & Next Steps

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning panel,

Jeff and our team has put together some draft questions for tomorrow's session. Please see attached for your reference.

Zach & Scott - if there are any additional questions that you would like to address but do not have an opportunity to do so in your presentation, please forward them to Dave and I to incorporate in the notes for tomorrow's session.

Dave – please feel free to revise/adjust the questions.

Kind regards,
Verna

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: October 31, 2022 11:01 AM
To: Verna Yu <vyu@udi.org>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: UDI Webinar - Pre-Meeting Notes & Next Steps

Hi Verna,

We will try our best to have a copy of the updated presentation to you in advance and should have something to you by tomorrow end of day.
Thanks for collating the sample questions. We look forward to seeing these in advance of the presentation.

Cheers,

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Verna Yu <vyu@udi.org>

Sent: Monday, October 31, 2022 9:31 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; 'Warkentin, Tiffany OHCS:EX' <Tiffany.Warkentin@gov.bc.ca>
Subject: RE: UDI Webinar - Pre-Meeting Notes & Next Steps

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning,

I would like to follow-up and see if you would be able to provide a copy of your updated presentation in advance of our event on Wednesday.

I will be preparing some sample questions with Jeff this afternoon and will share that with the group as well.

Thank you!

Verna

From: Verna Yu
Sent: October 17, 2022 4:17 PM
To: 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Dave Ramslie (dave@opentech.eco) <dave@opentech.eco>; Warkentin, Tiffany OHCS:EX <Tiffany.Warkentin@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Webinar - Pre-Meeting Notes & Next Steps

Hi everyone,

It was great seeing you all this afternoon!

I have sent through the calendar invites with a panelist link for Wednesday, November 2 from 9:15-10:30am for this webinar.

Attached is a brief overview of our conversation from this afternoon. We will aim to open the event registration this week. Please see this link here for the draft event page: https://udi.memberzone.com/events/details/udi-webinar-bc-building-code-proposals-what-you-need-to-know-1858?range=160 **If you have any feedback or would like to make any revisions to this page/information, please let me know before noon on October 18.**

Scott and Zach, could you please provide me with an updated headshot and short bio?

As mentioned during our meeting, I will compile some potential questions in advance of the event – if you have any questions you would like to be included in this list, please send them to me by Friday, October 28.

Zach/Scott – would you be able to send me your updated presentation by Friday, October 28?

Thank you all!

Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

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1100-1050 West Pender Street
Vancouver, BC V6E 3S7
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Web: udi.bc.ca

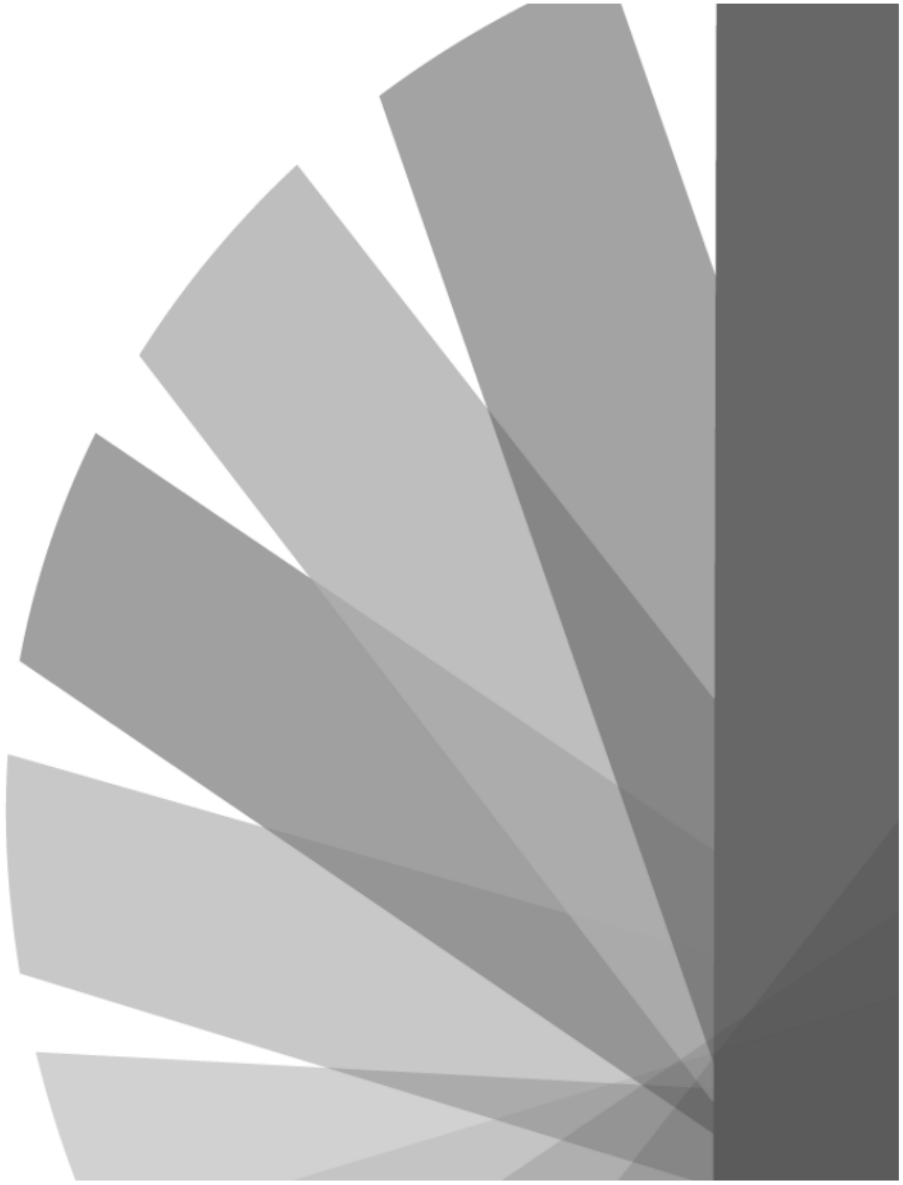


Cleaner, More Energy-Efficient New Construction

Overview: BC Building Code proposals for public review closing November 4

November 2022

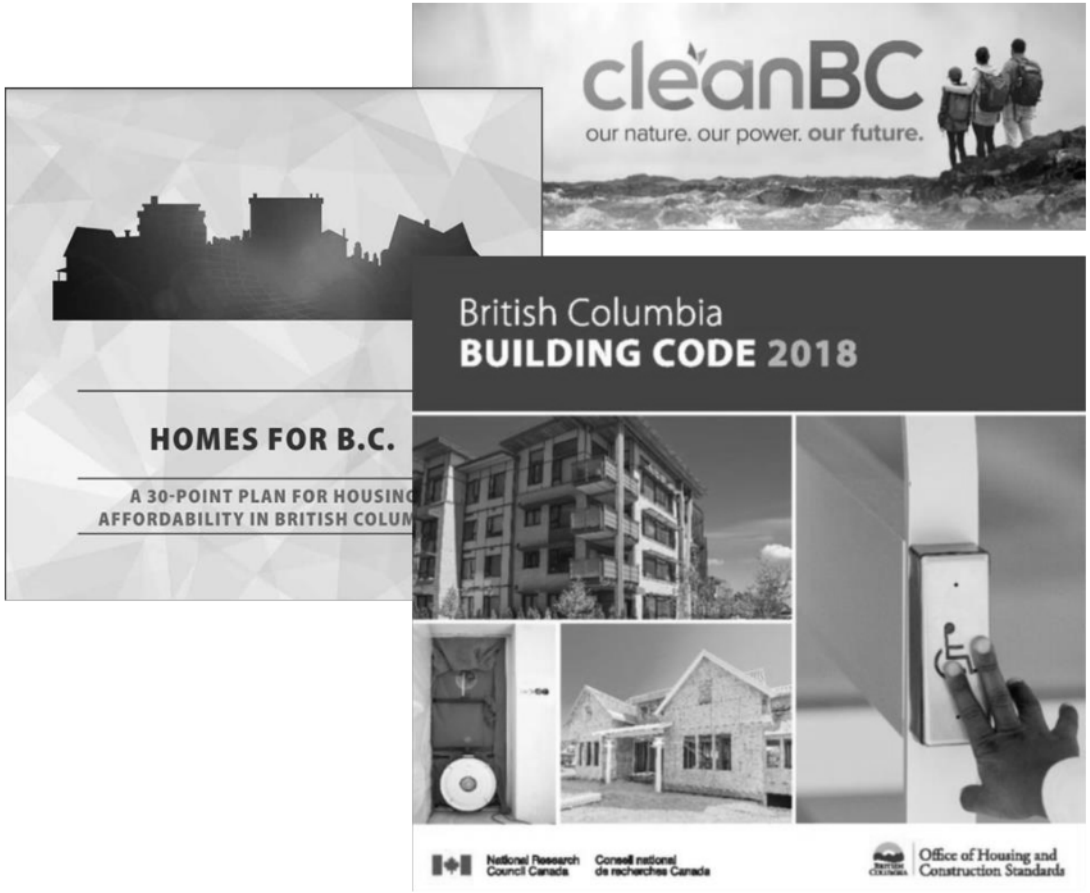
Building and Safety Standards Branch
Province of British Columbia



More Information & Contacts

National & Provincial Policy Collaboration

- CleanBC
- Harmonization with National Codes
- Homes for BC: A 30-Point Plan for Housing Affordability in British Columbia
- Pan Canadian Framework on Clean Growth and Climate Change



Two proposed building code changes

Public Review Closing November 4

1. 20%-better energy efficiency required for most new buildings

- Similar to:
  - Step 3 for Part 9 (small) buildings
  - Step 2 for Part 3 (large) buildings
- 2032 goal: Net-zero energy ready new construction in B.C.

2. Building Carbon Pollution Standard for local governments

- Implementation like the BC Energy Step Code
  - Local governments may opt in at first
  - Measure Only, Medium, Low, and Zero Carbon-Ready options for buildings
- 2030 goal: Zero-carbon new construction in B.C.

Overview: 20%-Better Energy Efficiency

Added:

- Prescriptive compliance path comparable to performance ‘Step 3’, Part 9
- More airtightness testing options for Part 9
- Introducing *some* National Building Code provisions
- New energy performance improvement compliance calculations (*Based on 2020 National Building Code*)
- **Small changes to metrics for office and commercial occupancies in Part 10**

Still under development:

- Adjusted requirements for log homes and small homes in cold climates

Overview: Building Carbon Pollution Standard

Structured and implemented like the Energy Step Code

- Four levels of increasing stringency.
- Apply to all climate zones.
- Local governments may choose to reference.
- Limits greenhouse gasses *from operation* of buildings.

Table 9.37.1.3.
Greenhouse Gas Emissions
Forming part of Sentence 9.37.1.3.(1)

GHG Emission Level	GHG Emission Compliance Options					
	Maximum GHG Emissions by House, Expressed in kg CO_{2e} per House	or	Maximum GHG Emissions by House[1]		or	Reduction of GHG Emissions by Energy Source of Building Systems
			Maximum GHGi of the House, Expressed in $kgCO_{2e}/m^2$/year	Maximum GHG Emissions by House, Expressed in $kgCO_{2e}$ per House		
Measure	Measure Only		Measure Only			N/A
medium	1050		6.0	2400		Decarbonize heating system energy source
low	440		2.5	800		Decarbonize heating and service water heating system energy source
zero carbon ready	265		1.5	500		Decarbonize all *building* systems energy sources

Table 10.3.1.3.
Greenhouse Gas Emissions
Forming Part of Sentence 10.3.1.3.(1)

GHG Emission Level	Maximum GHGi of the *Building*, Expressed in $kgCO_{2e}/m^2$/year			
	Residential Major Occupancy		*Business and Personal Service* and *Mercantile Major Occupancies*	
	Hotels and Motels	Other *Residential Occupancies*	Offices	Other *Business and Personal Service* and *Mercantile Occupancies*
Measure	Measure Only			
medium	9.0	7.0	5.0	6.0
low	4.0	3.0	3.0	3.0
zero carbon ready	2.0	1.8	1.5	2.0

Overview: Costing Methodology

Incremental Capital Costs (ICC)

- Baseline: Step 3 for Part 9; Step 2 for Part 3 with carbon intensive equipment
- ICC looks at changes in equipment over and above baseline to less carbon intensive - may not have significant impact on the ICC

Operational Costs

- Calculations included carbon tax applied over a 20-year period

Quadplex data tables: Climate Zone 6 (Cranbrook)

	Step 3					Step 4				Step 5			
Target Level Achieved	None	Medium		Low	Zero Carbon Ready	None	Medium	Low	Zero Carbon Ready	None	Medium	Low	Zero Carbon Ready
GHG Target (based on 113m² unit size x 4 units = 451m² total size)	>4200 $kgCO_2/yr$	4200 $kgCO_2e/yr$		1760 $kgCO_2e/yr$	1060 $kgCO_2e/yr$	>4200 $kgCO_2/yr$	4200 $kgCO_2e/yr$	1760 $kgCO_2e/yr$	1060 $kgCO_2e/yr$	>4200 $kgCO_2/yr$	4200 $kgCO_2e/yr$	1760 $kgCO_2e/yr$	1060 $kgCO_2e/yr$
		A	B										
Space heating equipment													
Gas furnace	•					•				•			
Electric baseboard		•		None modeled	•			None modeled	•			None modeled	•
Air-source heat pump			•				•				•		
Water heating equipment													
Tankless gas heater 95%	•	•	•			•	•			•	•		
Electric resistance													
ASHP					•				•				•
Cost and performance data													
Annual modelled GHG	6662	3417	3328		652	5618	3304		589	5334	3291		569
Annual modelled GHGI	14.8	7.6	7.4		1.4	12.5	7.3		1.3	11.8	7.3		1.3
Annual modelled utility cost ($/m²)	7	8.8	7.5		9.7	6.8	5.4		8.8	Not calculated	7		8.5
Annual modelled utility cost increase vs. base case (%)	0	25.7%	7.1%		38.6%	0	-20.6%		29.4%	0%	Not calculated		Not calculated
Total ICC vs. base case ($/m²)	0	4.7	36.2		4.7	0	36.2		12.4	0.0	34.6		10.9
% ICC vs base case	0%	0.2%	1.5%		0.2%	0%	1.4%		0.5%	0.0%	1.4%		0.4%

Overview: Costing Methodology

High-Rise MURB data tables: Climate Zone 5

	Step 2						Step 3						Step 4					
	None	Medium		Low	Zero-Carbon Ready		None	Medium		Low	Zero-Carbon Ready		None	Medium		Low	Zero-Carbon Ready	
	>7 kgCO2e/m2/yr	7 kgCO2e/m2/yr		3 kgCO2e/m2/yr	1.8 kgCO2e/m2/yr		>7 kgCO2e/m2/yr	7 kgCO2e/m2/yr		3 kgCO2e/m2/yr	1.8 kgCO2e/m2/yr		>7 kgCO2e/m2/yr	7 kgCO2e/m2/yr		3 kgCO2e/m2/yr	1.8 kgCO2e/m2/yr	
		A	B		A	B		A	B		A	B		A	B		A	B
Space heating equipment																		
Gas condensing boiler with fan coils	●	●					●	●					●			●		
Electric baseboard			●		●				●		●				●		●	
Air-source heat pump; 30% natural gas backup				●						●				●				●
Air-source heat pump; no natural gas backup						●						●						
Water heating equipment [viii]																		
High efficiency gas (95%)	●		●				●		●				●	●	●			
Electric resistance		●		●	●	●		●		●	●	●				●	●	●
Cost and performance data																		
Actual modelled GHGI	11.5	6.6	6.4	2.9	1.3	1.3	10.4	5.4	6.3	2.5	1.2	1.3	8.1	6.8	6.2	3	1.1	1.8
Annual modelled utility cost ($/m^2)	10.5	11.1	9.7	10.5	10.2	10.2	10	10.6	9.1	10.2	9.7	9.9	9.4	9.1	8.1	10	8.7	9.9
Total ICC vs. base case ($/m^2)	0	0	−3.2	40.3	−3.2	66.7	0	0	−3.2	40.3	−3.2	66.7	0	40.3	−3.1	0	−3.1	66.8
% ICC vs base case	0.0%	0.0%	−0.1%	1.2%	−0.1%	2.1%	0	0.0%	−0.1%	1.2%	−0.1%	2.1%	0.0%	1.3%	−0.1%	0.0%	−0.1%	2.1%
Net present value	Not calculated						Not calculated											

Overview: Costing Methodology

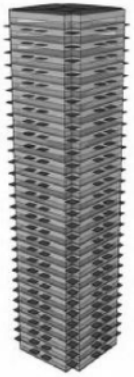
Metrics Research Report

- Energy and GHG performance analysis and associated costs
- Used to inform proposed changes to Step Code and develop the Carbon Pollution Standard
  - 6 archetypes for Part 3
  - 7 archetypes for Part 9
  - Approximately 30 ECMs evaluated per archetype and climate zone
  - ICC, NPV, Cost of Carbon Abatement, 10 lowest cost options

    - https://energystepcode.ca/app/uploads/sites/257/2022/10/BC-Energy-Step-Code_Metrics-Report_2022-09-29-R1-Compressed.pdf

Appendix A: Detailed Energy Modelling Inputs

Part 3 Energy Modelling Inputs

High-Rise MURB			
	Proposed Design	**NECB 2015 Baseline (BCBC 2018)**	**NECB 2020 Baseline**
Climate Zone	Climate Zone 4, 5, 6, 7a		
Weather File	Vancouver Airport CWEC 2016, Kamloops AP CWEC 2016, Prince George Intl AP CWEC 2016, Fort St. John – North Peace Rgnl AP CWEC 2016		
Software	EnergyPlus v9.4		
Building Area	18,000 m^2 conditioned floor area (approx. 90% suite area, 10% corridor/common areas) Parking area varies: low density 2504 m^2, mid density 3512 m^2, high density 4014 m^2		
Storeys	30		
Building Description (space types)	Suites (approx. 90% of floor area) Corridor (approx. 10% of floor area) Parkade No amenity spaces modeled		
Visual			
Zoning	Suites exterior, corridor/core interior. Several suites along each façade are combined, which allows variations in suite size within the model (each façade modeled as separate zone to account for variations in load). Zone multipliers used for intermediate floors.		

Implementation Supports in Progress

GHG Modelling Ruleset & Compliance Tools

- Will go beyond CoV Modelling Guidelines for Part 9
  - Modelling GHGs for backup (heat) systems
  - Ancillary uses
  - Training and Manuals for Compliance Tools

Best Practices Bulletin Refinements and Handbook Development

- Building on draft best practice guidance published to support review
- More content based on local government pilots

Building Official Guide

- Working in collaboration with BOABC

Issues Raised

- **Local Government**
  - Consideration of Renewable Fuels
  - Enforcement of changes to BCBC
    - Notice period
    - Industry consultation
  - ‘Step Down’ approach
    - Relaxation of energy efficiency requirement when using low-carbon systems
- **BC Hydro**
  - Capacity/distribution
  - Extension fees
- **Province**
  - Additional costing analysis and further research

More Information & Contacts

More information about the proposed code changes and interpretive supports are available online:

gov.bc.ca/BuildingCodes

Feedback can be provided through our online survey. We recommend all responses follow this format.

For assistance, or if you are unable to send comments using the survey, you may copy the questions into an email, write your answers, and send to

BSSB.Public.Review@gov.bc.ca

Questions?

Thank you!

Question	Answer
Who is training trades to implement step 3 and 4 to be more cost efficent? Is there a program?	live answered
Can you please try and translate some of the jargon for those of us who don't know waht NLR, NLA, etc mean?	live answered
Is the carbon pollution standard a separate standalone standard or is it a series of changes to Parts 9 and 10 of the BCBC?	live answered
Where can we find these Costing Methodology tables?	I have posted the link to the metrics report in the "chat"
you indicated that local governments will be able to determine whether RNG can be used to achieve the GHG emission targets	live answered
Is there still variation in the TEDI/TEUI/GHG targets for different building types? ex. Recreation centres?	live answered
what about municipalities that don't have BC Hydro infrastructure and proper load for this level of projects? Is there a plan for BC Hydro extension of its systems? Who is paying for it?	live answered
My clients have asked what happens in fossil-fuel-free buildings when there's an extended power failure. What should I tell them.	
Apart from energy efficiency are we going to see embodied carbon requirements in the code?	live answered
Any plan to change the name of the Energy Step Code to just the Step Code? Given that it's now both energy and GHGs	live answered
Can you confirm if the proposed "ghg steps" are similar to the energy step code, where municipal governments decide if their buildings need to comply to "medium" or "low" etc.	live answered
are there going to be incentives to encourage early adoption to the 2032 targets?	
What is the timeline for release of standards for existing buildings?	CleanBC Roadmap 2030 commits to a code for alterations to existing buildings by 2024.
Often, we speak about 'housing affordability'. How do the code updates and implementions reflect upon that?	live answered
Has there been/will there be an energy step code study on the comprehensive cost of delivering to the high energy targets for affordable housing projects? Considering approval timelines, supply chain, high capital costs etc.	BC Housing has done considerable research on this topic. Recommend reviewing the reserch on their website.
Why can't there be one metric measured GHG/m2?	The Province has two separate goals: 1. reduce energy use and 2. reduce carbon emissions. We need separate requirements to ensure both goals are met.

FW: UDI Letter - Energy Efficiency and GHG Proposals

From: May, Zachary OHCS:EX
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Sent: November 14, 2022 10:34:28 AM PST
Attachments: UDI Letter - Energy Efficiency & Greenhouse Gas (GHG) Emissions_November 2022.pdf

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, November 14, 2022 10:32 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter - Energy Efficiency and GHG Proposals

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Zach,

Thank you again for presenting with Scott Williams at our UDI webinar last week, our members appreciated the opportunity to learn about the upcoming regulatory changes and ask questions. As discussed with Jeff, please find attached our letter providing comments and recommendations on the upcoming energy efficiency and GHG proposals for the 2018 BC Building Code.

If you have any questions or would like to discuss any of our feedback further, please don't hesitate to reach out.

Thanks and we look forward to continuing to work with you and your team,

Cassandra

Cassandra Smith *(McColman)*
Director, Policy and Public Affairs
Direct: 604.661.3032
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November 10, 2022

Zachary May
Executive Director
Building Safety & Standards Branch (BSSB)
Office of Housing and Construction Standards (OHCS)
Ministry of Housing
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2

Dear Mr. May:

Re: UDI Response to Public Review of Energy Efficiency & Greenhouse Gas (GHG) Emissions Proposals for the 2018 B.C. Building Code (BCBC)

The Urban Development Institute (UDI) would like to thank you and Scott Williams for presenting the proposed changes to Provincial energy efficiency requirements, the amendments to *Energy Step Code* (*ESC*), and the Regulation that would empower local governments to establish GHG emission restrictions for new buildings, to our membership at our November 2, 2022 Webinar. Our members found your presentation very informative and continue to be engaged on this topic.

In addition to the webinar, we have reviewed the materials provided by BSSB on the proposed Regulation. UDI is concerned about the December timeframe for the implementation of the changes and believe that there are some issues that still need to be addressed in the proposed *Provincial policy bulletin for cleaner, more energy efficient new construction* (*Best Practices Bulletin*) and other supporting documents for local governments. We recommend that the implementation of the regulatory changes be paused until the issues can be resolved.

Need for Delay of the Implementation of the Regulation

These issues include housing delivery expectations, a critical B.C. Utilities Commission (BCUC) decision on Renewable Natural Gas (RNG) and several BC Hydro distribution issues, which are barriers to building electrification. More notice and communication regarding the changes would also support more effective industry adoption.

Provincial Housing Expectations for Local Governments

In recent months, the Province, in particular the Premier-designate, has made it clear that all levels of government, including municipalities will have to step-up to deliver more homes for British Columbians. If the OHCS Regulation is approved in December, local governments will be proceeding with consultations and making decisions on potentially significant changes to their energy efficiency and GHG emission reduction policies. If they are excessive, the cost impacts could undermine their ability to increase housing delivery in their communities. Fully understanding the expectations from the Province would be critical information for local governments as they establish the *ESC* step and

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GHG reduction targets, and many would likely proceed more cautiously if these requirements were understood.

UDI recommends that the Government wait until details about any future housing delivery expectations or requirements are clearly defined before proceeding with implementing the proposed regulatory changes to the 2018 BCBC. The Best Practices Bulletin needs to reference these objectives and how they might impact the new GHG emission powers being offered to local governments. This issue is particularly important given that under the *Best Practices Bulletin* there will be no limits on local governments in establishing *ESC* requirements and GHG reduction requirements (i.e., they can mandate the most stringent steps for both without providing any incentives).

BC Hydro Issues

There are several ongoing issues with BC Hydro that would be further exacerbated by new building electrification policies (and electric vehicle charging requirements, which are likely already mandated by local governments who would adopt the *Building Carbon Pollution Standard*), such as:

- BC Hydro's electrical extension fee policy is still in place, which BSSB rightly notes results in some "*… developers needing to pay significantly higher extension fees (i.e., the cost of new electrical service) for larger electrical services …,"* that *"… can be difficult to predict*;"
- BC Hydro's Tier 2 rate structure is still in place, which financially penalizes electrified buildings and electric vehicle charging;
- There are staffing shortages at BC Hydro in several regions such as the Capital Regional District that are delaying the delivery of housing; and
- Although, BC Hydro has indicated to BSSB that they will have the generating capacity to meet the electric vehicle charging and building electrification requirements for new and existing buildings, there are still issues with the capacity of local distribution. We are hearing from our members that there have been several reports in the Fraser Valley of electricity shortages. This is exacerbated by the lack of integration between BC Hydro and local governments regarding long range area planning that determines where future growth will be located in communities.

While we are pleased that BSSB is also advocating to BC Hydro and the Ministry of Energy, Mines and Low Carbon Innovation to quickly address these issues, UDI has been raising them for several years. ***We recommend that the Government delay the implementation of the proposed regulatory changes to the 2018 BCBC until here is an understood plan in place to address these hydro delivery issues.***

These issues also need to be identified in the Best Practices Bulletin. Currently, the only one specifically addressed in the *Bulletin* are the extension fees, and the solutions offered to local governments would be difficult for them to implement. Revising the electrical utility extension fees in the utility tariffs is beyond their purview. It is up to the Province, BC Hydro and the BCUC to resolve this problem, as are the issues regarding RNG. It is doubtful that the recommendation to establish a local building electrification fund will be utilized by municipalities as no details are provided on how it

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would work, and the measure may be considered a downloading of Provincial costs and responsibilities onto local governments.

OHCS needs to recommend that local governments discuss with BC Hydro the state of electrical infrastructure in the growth areas of their communities to assess how much capacity is available before making decisions on GHG reduction targets (and electric vehicle charging standards). Similarly, local governments on a go-forward basis need to closely work with BC Hydro on Official Community Plans and Area Plans to ensure the utility understands what infrastructure is needed across the municipality and in certain growing areas. This suggestion could also be included in the *Best Practices Bulletin*. Municipalities should be aware of potential BC Hydro staffing challenges that could slow reviews of new developments as well.

Renewable Natural Gas

UDI appreciates the clarification that local governments, at this time, have the ability to decide whether or not RNG can be used to meet their GHG reduction steps. We understand the Province's rationale for this approach because a key BCUC hearing on RNG has not concluded. This hearing is expected to determine if strata corporations can be bound by RNG contracts signed by developers and provide clarity to local governments regarding how RNG usage in buildings can be calculated and monitored.

However, this means in many local governments the only option to achieve the GHG emission targets would be electrification. Given the concerns noted above regarding BC Hydro, ***UDI recommends that the Government wait until the BCUC RNG hearing has concluded and the Commission has made decisions on whether strata councils can be bound by RNG contracts and how RNG usage can be calculated and monitored before proceeding with the proposed regulatory changes to the 2018 BCBC. If these issues are resolved by the Commission, UDI also recommends that the use of RNG be embedded in the Regulation, as an option that builders can utilize for their projects. This is especially important as the Province moves forward with its own GHG emission requirements. In addition, there will have to be updates to the Best Practices Bulletin and the Metrics Report.***

Notice

Despite the efforts of BSSB (including the presentation at the UDI webinar), we are concerned about the lack of knowledge regarding the proposed Regulation and its potential impact amongst builders. In particular, those who are operating in municipal jurisdictions that have not adopted the *ESC,* especially outside the Lower Mainland and the Capital Regional District.

The details of the Regulation were only released in late September. If it takes immediate effect in December, many proponents submitting building permit applications soon afterward will likely be surprised by the new Provincial energy efficiency requirements.

Even in jurisdictions with the *ESC* in place, there is another concern for Part 3 commercial builders - the proposed changes to the Provincial energy efficiency requirements, which are more stringent for Step 2 for office and retail projects. Architects, engineers and contractors have been using the *ESC* for guidance, and would have to make immediate adjustments to projects, if the new requirements

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came into force in December. This would be especially problematic for Part 3 builders who have been potentially designing their buildings for months – even years. In addition to delaying the approvals for their projects, there will be added costs to resubmit their designs to achieve the higher energy efficiencies.

While we recognize that this problem occurs with every code cycle, it was not clear how the Province would integrate the *ESC* with national codes, and the window between the notice of the changes on September 23rd and the implementation of them in December is a much smaller than previous code cycles.

UDI is pleased that you and BSSB staff have an understanding and appreciation of this issue. ***We recommend the implementation of the proposed regulatory changes to the 2018 BCBC be delayed allowing time for designers to adjust projects, and that the Province have an extensive communications outreach program to builders and their design/construction teams about the Provincial energy efficiency requirements.***

Best Practices Bulletin/Presentations

More information and direction are needed in the *Best Practices Bulletin* and presentations to guide local governments and builders on other matters. From an industry perspective, ***stronger language is needed than "… local governments are advised …," and clarity provided on the steps that will be taken if municipalities do not follow the Bulletin or advice from the Province (and Energy Step Code Council)***. Issues have occurred with some local governments already proceeding now to the highest *ESC* step with Zero-Carbon Ready requirements.

Timing of Municipal Requirements & Instream Protection

The timing of when municipal requirements can be imposed on builders is not clear. It is stated in the *Bulletin* that "… *local governments are advised to notify industry that they will be enforcing them at least 6 months prior to requirements coming into effect*." However, in Episode 5, a longer notice period is endorsed: "… *a six to 12-month notice period for local industry is strongly recommended, depending on the stringency of the carbon requirements being considered.*" ***UDI agrees with the longer notice period (12 months) – especially if local governments move to the highest ESC step as well as implementing stringent GHG emission reduction requirements***.[1]

Clarity is also needed regarding how these timeframes are coordinated with municipally-led industry consultations. ***Ideally there are extensive discussions with industry prior to local governments determining (and providing notice regarding) what ESC and GHG reduction targets they want to mandate for builders – especially if local governments only need to provide six months' notice.***

Although there is stronger language in Episode 5, UDI is disappointed that BSSB states in the *Bulletin* that "… *a grace period for in-stream applications may be considered*," by local governments

[1] There may be missing information from Episode 5 as well. It is noted that there will be more information on the timeframes "… *in a little bit*," but no further information is shared.

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for the *Building Carbon Pollution Standard*. ***A stronger recommendation for in-stream protection is needed in the Bulletin – especially for local governments mandating the highest ESC step and/or stringent GHG reductions with only six months' notice. Advice needs to also be provided on how long the grace period for in-stream protection should be.***

Relaxation-type Approach

As with the grace period, little positive direction is given to local governments to utilize the relaxation-type approach that many are using now. Under this approach, local governments have offered two options to builders:

- meeting a higher *ESC* step; or
- meeting a lower step with a low carbon energy system.

UDI has strongly supported this approach, and we continue to be concerned that this option may not be utilized if local governments are given the ability to mandate any *ESC* step and GHG emission reduction target – without using incentives.

The issue is not addressed in the *Bulletin.* Although an example is provided in Episode 5, it is only noted that the option is still available, and "*Communities could require or incentivize lower carbon construction using the provincial approach*." **UDI recommends that the Province provide stronger encouragement in the *Best Practices Bulletin* for the continued use of the relaxation-type approach and other incentives.[2]**

Municipal Powers Beyond the Building Carbon Pollution Standard

It is stated in Episode 5 that the Province is providing flexibility with the *ESC* and the *Building Carbon Pollutions Standard* with the caveat that local governments "*… would have to use the provincial approach, as any existing technical building requirements that conflict with the BC Building Code will have no force or effect*." However, it is not clear why builders may lose the relaxation-type approach, noted above, when it is stated in Episode 4 that the door is open for local governments to impose other energy efficiency and GHG emissions requirements:

> "*The building carbon pollution standard does not regulate so-called "luxury loads", such as hot tubs, pools, heated driveways. Some local governments may wish to explore other ways of reducing the energy use of these luxury loads, including development permit authorities for energy conservation and GHG reduction*."

Some communities are exploring and even implementing policies to mandate/incent onsite renewable energy, heat pumps, fully electric buildings and embodied carbon reductions - in addition to the *ESC* and the *Building Carbon Pollution Standard.* It is not clear what the limits of municipal powers are regarding these issues. ***UDI recommends further advice be provided in the Best Practices Bulletin on the powers local governments have regarding energy conservation and***

[2] The Community C scenario in Episode 5 could include more details on how a local government using the relaxation-type approach can continue it in an appropriate manner under the new Regulation.

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GHG reductions. This should involve consultation with local governments, the building sector and other stakeholders.

It may also be necessary to amend the *Building Act*. UDI worked-on and endorsed the *ESC* because it was supposed to limit the number of new and differing municipal green building policies our members were facing that tested the limits of industry capacity and undermined our ability to deliver new housing as well as commercial and industrial projects.

The Need for more Provincial Supports

It is stated in bold in the Preface of the *Draft Building Carbon Pollution Standards for Part 3 buildings in British Columbia* (the *Metrics Report*) that:

> *"This document is meant to be an initial costing analysis by illustrating whether decarbonizing a hypothetical building is cost effective across climate zones in B.C. This document should not be considered an exhaustive costing study to meet the carbon pollution steps in your area. This analysis is not representative of all buildings in all situations. Local governments and the construction industry should conduct more detailed or specific costing analysis which builds on this initial analysis."*

UDI continues to recommend that the Province conduct the ongoing work to enhance this initial costing analysis[3] with further research and analyses as well as establishing a monitoring program of what the real costs are when high ESC step and low carbon projects are built.

We are pleased that resources are available to update the *Metrics Report*, as most local governments, even if the recommended regional approach is utilized, will not have resources or the interest in conducting further analysis in a substantive way. There is also little to no direction in the *Best Practices Bulletin* for local governments to conduct further costing analyses for their areas. It should not be up to the industry to conduct the analysis in place of regulators, and it is doubtful that estimates from industry reports would sway local decision making on future regulations.

The *Best Practices Bulletin* includes recommendations for municipalities to *"Seek to understand industry's readiness to implement these requirements. In particular, they should seek to understand the local challenges and opportunities to implement low-carbon building systems, especially heat pump space and water heating."* This is important as we have heard that in some jurisdictions the availability of heat pumps is limited.

However, we encourage the Province to take the lead with understanding and improving the availability of heat pumps in British Columbia especially since new buildings in B.C. will have to be zero carbon ready by 2030 under the *BCBC*, and one of the actions in the *CleanBC Roadmap* is to "*… focus on growing markets for, and speeding up the adoption of, technologies we know are ready for deployment, such as … heat pumps.*"[4]

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[3] Further suggestions are noted in Additional Comments section below.

[4] In the *2018 CleanBC Strategy* there was also a stated desire by 2030 to have 310,000 new residential heat pumps and 53 million m² of commercial floor space heated by heat pumps in the Province.

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For similar reasons, we encourage the Province to take a leadership role in ensuring that we have enough trained mechanical contractors and energy advisors in B.C. The issue should also be flagged in the *Best Practices Bulletin* for local governments to review. More resources for the training of builders and trades are needed – especially since the industry is already facing labour shortages.

The OHCS should also consider working with the Energy Step Code Council and the Local Government Peer Network to develop a model for the thermal conditioning permit proposed in the *Best Practices Bulletin*. Ideally, this approach could be extended to other forms municipalities utilize for the *ESC* and the *Building Carbon Pollution Standard*. This would help achieve the Province's objective of having permitting processes that are "… *simple to follow and administer*," as well as coordinated across local governments and inspection entities.

We support BSSB (with other Provincial entities) being given the resources to conduct this work and provide supports to local governments, or further delaying the implementation of the Building Carbon Pollution Standard Regulation should be considered. These issues are critical given how soon Provincial building carbon requirements will be implemented across the British Columbia.

Provincial and Broader Public Sector (BPS) Buildings

UDI has been a strong supporter of the Province and the Broader Public Sector (BPS) taking a leadership role with their new buildings. As we have stated in the past, this leadership was prevalent when the Leadership in Energy and Environmental Design (LEED) standard was introduced to Metro Vancouver, when the BPS incorporated it in their new buildings. This ensured that the design and construction sectors became familiar with LEED. It also allowed UDI and other organizations to educate their members on LEED case studies to show the benefits of the standard, how to reduce costs and avoid pitfalls.

BC Housing is a leader for its projects with regard to the *ESC* and other green building initiatives, and the Province is also committed to doing more through its *CleanBC Roadmap to 2030*:

- By "*Requiring all new public sector buildings to align with our climate goals beginning with performance standards (2023) and moving to zero-carbon new buildings (2027)*;" and
- With low carbon building materials by "… *supporting the development and implementation of embodied carbon targets for public sector buildings by 2030*," before they are applied to other new buildings.

However, UDI is disappointed that the BPS is still not adequately addressed under the *ESC* regime, when it is being applied across British Columbia. The Province and BPS could adopt a leadership role regarding energy efficiency, in advance of wider private sector adoption. ***UDI recommends that similar standards for ESC be developed for new BPS buildings as soon as possible***.

Additional Comments

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- UDI supports local governments working the District Energy (DE) providers to establish emissions factors for the DE systems because of the language in the *Best Practices Bulletin* that municipalities "*Not establish GHG targets for buildings that cannot reasonably be achieved by buildings compelled to connect to district energy systems.*" However, the Province will soon be establishing its own GHG targets for new construction, and it is not clear how these targets will work with emissions factors established by local governments and DE providers. As municipalities such as Burnaby are now considering developing new DE systems, this issue needs to be addressed as soon as possible.

- It is not clear from the episodes and *Bulletin* about whether it is up to the builder or municipality to decide which type of airtightness test is to be used (e.g., Normalized Leakage Area, Normalized Air Leakage Rate or air changes per hour). UDI would prefer that decisions on airtightness testing methods be left to builders.

- In terms of communications, we're pleased that the Province is participating in virtual events such as the *UDI Webinar* and the October 13th *Live Q/A*. However, these communication efforts need to also occur after the Regulation has been approved. We would also recommend that the Province develop a Q/A document to address questions as they arise at events or through discussions with stakeholders.

- As discussed at the September Energy Step Code Council meeting ***UDI recommends that the OHCS add new episodes to review the findings in the Part 3 and Part 9 technical analyses.*** Our members are also going to want to understand the strategies and solutions they can utilize to reduce costs and risks.

- Further work is needed to address some of the issues that were left unaddressed in the current *Metrics Report*, such as:

    - Heat pump domestic hot water heaters not being modelled in the study;
    - The costs of meeting the higher steps of the *ESC* need to be incorporated with the costs of meeting the steps of the *Building Carbon Pollution standard*, as many municipalities will do both;
    - Costing information for all climate zones (not just 4 and 7a) for office, retail and hotels need to be provided;
    - Costing information for the highest steps for retail and hotels for all climate zones need to be provided, as the GHG reduction targets are more stringent for office and retail, but the incremental costs in the *Report* seem higher;
    - Including more "*Highlights from analysis*" for the various building archetypes; and
    - Providing details on the ten lowest cost incremental capital cost options;[5]

[5] In addition, the base costs need to be included for Step 4 on the High-rise residential table for Climate Zone 4 as well as modelling for electric vehicle charging, which is required by many of the local governments that will be utilizing the *Building Carbon Pollution Standard*. The latter is critical if it increases the Tier 2 rates of buildings and units.

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- The *Metrics Report* and the *Best Practices Bulletin* also need to be updated when new costing information is available and key decisions are made, such as the BCUC decision on RNG; and

- Although this is not an issue for UDI members, the proposed decarbonization path for the Fort Nelson area, which has a high carbon emitting electricity grid, is not clear. OHCS is proposing a prescriptive path to reduce GHG emissions in new buildings for the area that is supposed to be simple and practical. However, all that is noted under the prescriptive path for the various steps is builders are to decarbonize - space heating; space heating and hot water; or the full building. It is not stated how this would be done and whether there is a cost-effective way of accomplishing this. OHCS may want to consider exempting the Fort Nelson area from the GHG requirements in the proposed Regulation – and potentially future Provincial GHG requirements.

Again, thank you for speaking to our membership at the November 2nd UDI webinar regarding these important energy efficiency and GHG reduction proposals. UDI does not oppose the Regulation being approved in December. However, we recommend its implementation be delayed until the issues we have noted above are addressed. UDI believes that this will ensure the successful implementation of these policies in a way that will not undermine the ability of our members to build their projects. If you have any questions, please do not hesitate to contact us. We look forward to working with you and BSSB on these and other initiatives.

Yours sincerely,

Jeffrey E. Fisher

Jeff Fisher
Vice-President & Senior Policy Advisor, UDI

FW: UDI Submission: Public Review of Energy Efficiency & GHG Emissions Proposals for the 2018 B.C. Building Code

From: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: November 15, 2022 5:09:01 PM PST
Attachments: image005.jpg, image007.jpg, image008.png, image001.jpg, image006.jpg, image004.jpg, image003.jpg, UDI Letter - Energy Efficiency & Greenhouse Gas (GHG) Emissions_November 15 2022.pdf

Please see attached. It will need to be CLIFFed and need your assessment on a response please.
Thanks
Bonnie

Bonnie Ruscheinski, B.Comm., AACI, P.App.
A/Assistant Deputy Minister
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca

BRITISH COLUMBIA

I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

From: Cassandra Smith <csmith@udi.org>
Sent: Tuesday, November 15, 2022 4:39 PM
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>
Cc: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>; Michael Drummond <mdrummond@udi.org>
Subject: UDI Submission: Public Review of Energy Efficiency & GHG Emissions Proposals for the 2018 B.C. Building Code

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Good afternoon Bonnie,

Thank you very much for meeting with our team and Zachary May last month on the Energy Efficiency and GHG Emissions Proposals. Further to that discussion, we would like to share UDI's response to the BSSB consultation that was submitted last week along with a covering note summarizing some of the concerns raised during our October 28th meeting.

If you have any questions regarding the submission, please don't hesitate to reach out.

Thanks,
Cassandra

Cassandra Smith *(McColman)*
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November 15, 2022

Bonnie Ruscheinski
Acting Assistant Deputy Minister
Attorney General and Minister responsible for Housing
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2

Dear Ms. Ruscheinski:

Longer phase-in of the Energy Step Code and Municipal Greenhouse Gas Emission Regulations Would Support Housing Supply

Premier-designate David Eby has recently articulated that both climate change and housing policy will be two of his leading priorities. This note raises concerns that provincial policy conflicts could limit the effectiveness of both priorities if the current in-force timelines are maintained. We recommend that the timelines be extended until the following issues can be addressed.

1. Housing Targets

As municipalities adopt policies regulating GHG emissions in new buildings it will add another layer of complexity, municipal review and cost to construction. This will include all forms of new housing, slowing the delivery of homes in those jurisdictions.

Premier-designate David Eby has made public statements that legislation is being considered to modernize current development processes to boost housing supply. At the most recent UBCM conference there was open discussion by many municipal leaders regarding the possibility of the government implementing some form of enforceable housing targets. It could be argued that this possibility has been well socialized and therefore would be taken into account in new municipal policies – but without a firm understanding of what legislation and regulation may come forward – enabling municipal policies that could slow the province's housing goals would be counterproductive.

2. Status of Renewable Natural Gas

In December 2021, Fortis applied to the BCUC to revise its Renewable Natural Gas Program. The application filed proposed that new gas customers would automatically receive renewable gas. One question for the BCUC is whether strata corporations can be bound to RNG contracts if they use natural gas. In addition, the wording in the Best Practices Bulletin seems to give local governments the option of disallowing the use of RNG, although the Office has indicated that the new Regulation is to be fuel neutral. UDI recommends that the Government wait until the BCUC determines if strata councils can be bound by RNG contracts before proceeding with the proposed regulatory changes to the 2018 BCBC.

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3. BC Hydro – Need for Greater Alignment with BC Government Climate Change and Housing Priorities

With the reliance on electrification to meet BC's new construction GHG reduction targets – the Ministry of Housing must act as an interlocutor within the government to provide prescriptive actions to BC Hydro through an updated Mandate Letter. As outlined in the consultation process, UDI member experience suggests BC Hydro needs to address both its staffing capacity and local distribution infrastructure in fast-growing metropolitan areas. In the mid-term, a review of the electrical rate structure should be undertaken to incentivize electrification.

In the immediate term, UDI believes BC Hydro's connection fee policy should be aligned with Latecomers Agreements as outlined in the *Local Government Act*. With this policy, a municipality can still require a developer to incur the full cost of roads, water, sewage or drainage – but they provide a 15-year window for the original developer to recoup a portion of these fees from subsequent developments that piggyback on this infrastructure. The current BC Hydro policy is only 5 years in duration with annual reductions in potential benefits – raising the risk that owners of adjacent properties will simply wait out this timeline.

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November 10, 2022

Zachary May
Executive Director
Building Safety & Standards Branch (BSSB)
Office of Housing and Construction Standards (OHCS)
Ministry of Housing
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2

Dear Mr. May:

Re: UDI Response to Public Review of Energy Efficiency & Greenhouse Gas (GHG) Emissions Proposals for the 2018 B.C. Building Code (BCBC)

The Urban Development Institute (UDI) would like to thank you and Scott Williams for presenting the proposed changes to Provincial energy efficiency requirements, the amendments to *Energy Step Code* (*ESC*), and the Regulation that would empower local governments to establish GHG emission restrictions for new buildings, to our membership at our November 2, 2022 Webinar. Our members found your presentation very informative and continue to be engaged on this topic.

In addition to the webinar, we have reviewed the materials provided by BSSB on the proposed Regulation. UDI is concerned about the December timeframe for the implementation of the changes and believe that there are some issues that still need to be addressed in the proposed *Provincial policy bulletin for cleaner, more energy efficient new construction* (*Best Practices Bulletin*) and other supporting documents for local governments. We recommend that the implementation of the regulatory changes be paused until the issues can be resolved.

Need for Delay of the Implementation of the Regulation

These issues include housing delivery expectations, a critical B.C. Utilities Commission (BCUC) decision on Renewable Natural Gas (RNG) and several BC Hydro distribution issues, which are barriers to building electrification. More notice and communication regarding the changes would also support more effective industry adoption.

Provincial Housing Expectations for Local Governments

In recent months, the Province, in particular the Premier-designate, has made it clear that all levels of government, including municipalities will have to step-up to deliver more homes for British Columbians. If the OHCS Regulation is approved in December, local governments will be proceeding with consultations and making decisions on potentially significant changes to their energy efficiency and GHG emission reduction policies. If they are excessive, the cost impacts could undermine their ability to increase housing delivery in their communities. Fully understanding the expectations from the Province would be critical information for local governments as they establish the *ESC* step and

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GHG reduction targets, and many would likely proceed more cautiously if these requirements were understood.

UDI recommends that the Government wait until details about any future housing delivery expectations or requirements are clearly defined before proceeding with implementing the proposed regulatory changes to the 2018 BCBC. The Best Practices Bulletin needs to reference these objectives and how they might impact the new GHG emission powers being offered to local governments. This issue is particularly important given that under the *Best Practices Bulletin* there will be no limits on local governments in establishing *ESC* requirements and GHG reduction requirements (i.e., they can mandate the most stringent steps for both without providing any incentives).

BC Hydro Issues

There are several ongoing issues with BC Hydro that would be further exacerbated by new building electrification policies (and electric vehicle charging requirements, which are likely already mandated by local governments who would adopt the *Building Carbon Pollution Standard*), such as:

- BC Hydro's electrical extension fee policy is still in place, which BSSB rightly notes results in some "*… developers needing to pay significantly higher extension fees (i.e., the cost of new electrical service) for larger electrical services …,"* that *"… can be difficult to predict*;"
- BC Hydro's Tier 2 rate structure is still in place, which financially penalizes electrified buildings and electric vehicle charging;
- There are staffing shortages at BC Hydro in several regions such as the Capital Regional District that are delaying the delivery of housing; and
- Although, BC Hydro has indicated to BSSB that they will have the generating capacity to meet the electric vehicle charging and building electrification requirements for new and existing buildings, there are still issues with the capacity of local distribution. We are hearing from our members that there have been several reports in the Fraser Valley of electricity shortages. This is exacerbated by the lack of integration between BC Hydro and local governments regarding long range area planning that determines where future growth will be located in communities.

While we are pleased that BSSB is also advocating to BC Hydro and the Ministry of Energy, Mines and Low Carbon Innovation to quickly address these issues, UDI has been raising them for several years. ***We recommend that the Government delay the implementation of the proposed regulatory changes to the 2018 BCBC until here is an understood plan in place to address these hydro delivery issues.***

These issues also need to be identified in the Best Practices Bulletin. Currently, the only one specifically addressed in the *Bulletin* are the extension fees, and the solutions offered to local governments would be difficult for them to implement. Revising the electrical utility extension fees in the utility tariffs is beyond their purview. It is up to the Province, BC Hydro and the BCUC to resolve this problem, as are the issues regarding RNG. It is doubtful that the recommendation to establish a local building electrification fund will be utilized by municipalities as no details are provided on how it

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would work, and the measure may be considered a downloading of Provincial costs and responsibilities onto local governments.

OHCS needs to recommend that local governments discuss with BC Hydro the state of electrical infrastructure in the growth areas of their communities to assess how much capacity is available before making decisions on GHG reduction targets (and electric vehicle charging standards). Similarly, local governments on a go-forward basis need to closely work with BC Hydro on Official Community Plans and Area Plans to ensure the utility understands what infrastructure is needed across the municipality and in certain growing areas. This suggestion could also be included in the *Best Practices Bulletin*. Municipalities should be aware of potential BC Hydro staffing challenges that could slow reviews of new developments as well.

Renewable Natural Gas

UDI appreciates the clarification that local governments, at this time, have the ability to decide whether or not RNG can be used to meet their GHG reduction steps. We understand the Province's rationale for this approach because a key BCUC hearing on RNG has not concluded. This hearing is expected to determine if strata corporations can be bound by RNG contracts signed by developers and provide clarity to local governments regarding how RNG usage in buildings can be calculated and monitored.

However, this means in many local governments the only option to achieve the GHG emission targets would be electrification. Given the concerns noted above regarding BC Hydro, ***UDI recommends that the Government wait until the BCUC RNG hearing has concluded and the Commission has made decisions on whether strata councils can be bound by RNG contracts and how RNG usage can be calculated and monitored before proceeding with the proposed regulatory changes to the 2018 BCBC. If these issues are resolved by the Commission, UDI also recommends that the use of RNG be embedded in the Regulation, as an option that builders can utilize for their projects. This is especially important as the Province moves forward with its own GHG emission requirements. In addition, there will have to be updates to the Best Practices Bulletin and the Metrics Report.***

Notice

Despite the efforts of BSSB (including the presentation at the UDI webinar), we are concerned about the lack of knowledge regarding the proposed Regulation and its potential impact amongst builders. In particular, those who are operating in municipal jurisdictions that have not adopted the *ESC,* especially outside the Lower Mainland and the Capital Regional District.

The details of the Regulation were only released in late September. If it takes immediate effect in December, many proponents submitting building permit applications soon afterward will likely be surprised by the new Provincial energy efficiency requirements.

Even in jurisdictions with the *ESC* in place, there is another concern for Part 3 commercial builders - the proposed changes to the Provincial energy efficiency requirements, which are more stringent for Step 2 for office and retail projects. Architects, engineers and contractors have been using the *ESC* for guidance, and would have to make immediate adjustments to projects, if the new requirements

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came into force in December. This would be especially problematic for Part 3 builders who have been potentially designing their buildings for months – even years. In addition to delaying the approvals for their projects, there will be added costs to resubmit their designs to achieve the higher energy efficiencies.

While we recognize that this problem occurs with every code cycle, it was not clear how the Province would integrate the *ESC* with national codes, and the window between the notice of the changes on September 23rd and the implementation of them in December is a much smaller than previous code cycles.

UDI is pleased that you and BSSB staff have an understanding and appreciation of this issue. ***We recommend the implementation of the proposed regulatory changes to the 2018 BCBC be delayed allowing time for designers to adjust projects, and that the Province have an extensive communications outreach program to builders and their design/construction teams about the Provincial energy efficiency requirements.***

Best Practices Bulletin/Presentations

More information and direction are needed in the *Best Practices Bulletin* and presentations to guide local governments and builders on other matters. From an industry perspective, ***stronger language is needed than "… local governments are advised …," and clarity provided on the steps that will be taken if municipalities do not follow the Bulletin or advice from the Province (and Energy Step Code Council)***. Issues have occurred with some local governments already proceeding now to the highest *ESC* step with Zero-Carbon Ready requirements.

Timing of Municipal Requirements & Instream Protection

The timing of when municipal requirements can be imposed on builders is not clear. It is stated in the *Bulletin* that "… *local governments are advised to notify industry that they will be enforcing them at least 6 months prior to requirements coming into effect*." However, in Episode 5, a longer notice period is endorsed: "… *a six to 12-month notice period for local industry is strongly recommended, depending on the stringency of the carbon requirements being considered*." ***UDI agrees with the longer notice period (12 months) – especially if local governments move to the highest ESC step as well as implementing stringent GHG emission reduction requirements***.[1]

Clarity is also needed regarding how these timeframes are coordinated with municipally-led industry consultations. ***Ideally there are extensive discussions with industry prior to local governments determining (and providing notice regarding) what ESC and GHG reduction targets they want to mandate for builders – especially if local governments only need to provide six months' notice.***

Although there is stronger language in Episode 5, UDI is disappointed that BSSB states in the *Bulletin* that "… *a grace period for in-stream applications may be considered*," by local governments

[1] There may be missing information from Episode 5 as well. It is noted that there will be more information on the timeframes "… *in a little bit*," but no further information is shared.

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for the *Building Carbon Pollution Standard*. ***A stronger recommendation for in-stream protection is needed in the Bulletin – especially for local governments mandating the highest ESC step and/or stringent GHG reductions with only six months' notice. Advice needs to also be provided on how long the grace period for in-stream protection should be.***

Relaxation-type Approach

As with the grace period, little positive direction is given to local governments to utilize the relaxation-type approach that many are using now. Under this approach, local governments have offered two options to builders:

- meeting a higher *ESC* step; or
- meeting a lower step with a low carbon energy system.

UDI has strongly supported this approach, and we continue to be concerned that this option may not be utilized if local governments are given the ability to mandate any *ESC* step and GHG emission reduction target – without using incentives.

The issue is not addressed in the *Bulletin.* Although an example is provided in Episode 5, it is only noted that the option is still available, and "*Communities could require or incentivize lower carbon construction using the provincial approach*." **UDI recommends that the Province provide stronger encouragement in the *Best Practices Bulletin* for the continued use of the relaxation-type approach and other incentives.[2]**

Municipal Powers Beyond the Building Carbon Pollution Standard

It is stated in Episode 5 that the Province is providing flexibility with the *ESC* and the *Building Carbon Pollutions Standard* with the caveat that local governments "… *would have to use the provincial approach, as any existing technical building requirements that conflict with the BC Building Code will have no force or effect*." However, it is not clear why builders may lose the relaxation-type approach, noted above, when it is stated in Episode 4 that the door is open for local governments to impose other energy efficiency and GHG emissions requirements:

> "*The building carbon pollution standard does not regulate so-called "luxury loads", such as hot tubs, pools, heated driveways. Some local governments may wish to explore other ways of reducing the energy use of these luxury loads, including development permit authorities for energy conservation and GHG reduction*."

Some communities are exploring and even implementing policies to mandate/incent onsite renewable energy, heat pumps, fully electric buildings and embodied carbon reductions - in addition to the *ESC* and the *Building Carbon Pollution Standard.* It is not clear what the limits of municipal powers are regarding these issues. ***UDI recommends further advice be provided in the Best Practices Bulletin on the powers local governments have regarding energy conservation and***

[2] The Community C scenario in Episode 5 could include more details on how a local government using the relaxation-type approach can continue it in an appropriate manner under the new Regulation.

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GHG reductions. This should involve consultation with local governments, the building sector and other stakeholders.

It may also be necessary to amend the *Building Act*. UDI worked-on and endorsed the *ESC* because it was supposed to limit the number of new and differing municipal green building policies our members were facing that tested the limits of industry capacity and undermined our ability to deliver new housing as well as commercial and industrial projects.

The Need for more Provincial Supports

It is stated in bold in the Preface of the *Draft Building Carbon Pollution Standards for Part 3 buildings in British Columbia* (the *Metrics Report*) that:

> *"This document is meant to be an initial costing analysis by illustrating whether decarbonizing a hypothetical building is cost effective across climate zones in B.C. This document should not be considered an exhaustive costing study to meet the carbon pollution steps in your area. This analysis is not representative of all buildings in all situations. Local governments and the construction industry should conduct more detailed or specific costing analysis which builds on this initial analysis."*

UDI continues to recommend that the Province conduct the ongoing work to enhance this initial costing analysis[3] with further research and analyses as well as establishing a monitoring program of what the real costs are when high ESC step and low carbon projects are built.

We are pleased that resources are available to update the *Metrics Report*, as most local governments, even if the recommended regional approach is utilized, will not have resources or the interest in conducting further analysis in a substantive way. There is also little to no direction in the *Best Practices Bulletin* for local governments to conduct further costing analyses for their areas. It should not be up to the industry to conduct the analysis in place of regulators, and it is doubtful that estimates from industry reports would sway local decision making on future regulations.

The *Best Practices Bulletin* includes recommendations for municipalities to *"Seek to understand industry's readiness to implement these requirements. In particular, they should seek to understand the local challenges and opportunities to implement low-carbon building systems, especially heat pump space and water heating."* This is important as we have heard that in some jurisdictions the availability of heat pumps is limited.

However, we encourage the Province to take the lead with understanding and improving the availability of heat pumps in British Columbia especially since new buildings in B.C. will have to be zero carbon ready by 2030 under the *BCBC*, and one of the actions in the *CleanBC Roadmap* is to "*… focus on growing markets for, and speeding up the adoption of, technologies we know are ready for deployment, such as … heat pumps.*"[4]

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[3] Further suggestions are noted in Additional Comments section below.

[4] In the *2018 CleanBC Strategy* there was also a stated desire by 2030 to have 310,000 new residential heat pumps and 53 million m² of commercial floor space heated by heat pumps in the Province.

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For similar reasons, we encourage the Province to take a leadership role in ensuring that we have enough trained mechanical contractors and energy advisors in B.C. The issue should also be flagged in the *Best Practices Bulletin* for local governments to review. More resources for the training of builders and trades are needed – especially since the industry is already facing labour shortages.

The OHCS should also consider working with the Energy Step Code Council and the Local Government Peer Network to develop a model for the thermal conditioning permit proposed in the *Best Practices Bulletin*. Ideally, this approach could be extended to other forms municipalities utilize for the *ESC* and the *Building Carbon Pollution Standard*. This would help achieve the Province's objective of having permitting processes that are "… *simple to follow and administer*," as well as coordinated across local governments and inspection entities.

We support BSSB (with other Provincial entities) being given the resources to conduct this work and provide supports to local governments, or further delaying the implementation of the Building Carbon Pollution Standard Regulation should be considered. These issues are critical given how soon Provincial building carbon requirements will be implemented across the British Columbia.

Provincial and Broader Public Sector (BPS) Buildings

UDI has been a strong supporter of the Province and the Broader Public Sector (BPS) taking a leadership role with their new buildings. As we have stated in the past, this leadership was prevalent when the Leadership in Energy and Environmental Design (LEED) standard was introduced to Metro Vancouver, when the BPS incorporated it in their new buildings. This ensured that the design and construction sectors became familiar with LEED. It also allowed UDI and other organizations to educate their members on LEED case studies to show the benefits of the standard, how to reduce costs and avoid pitfalls.

BC Housing is a leader for its projects with regard to the *ESC* and other green building initiatives, and the Province is also committed to doing more through its *CleanBC Roadmap to 2030*:

- By "*Requiring all new public sector buildings to align with our climate goals beginning with performance standards (2023) and moving to zero-carbon new buildings (2027)*;" and
- With low carbon building materials by "… *supporting the development and implementation of embodied carbon targets for public sector buildings by 2030*," before they are applied to other new buildings.

However, UDI is disappointed that the BPS is still not adequately addressed under the *ESC* regime, when it is being applied across British Columbia. The Province and BPS could adopt a leadership role regarding energy efficiency, in advance of wider private sector adoption. ***UDI recommends that similar standards for ESC be developed for new BPS buildings as soon as possible***.

Additional Comments

FW: Follow-up Oct. 4 Call

From: Corpe, Cimarron OHCS:EX
To: Aman X OHCS:EX Gill (Aman.X.Gill@gov.bc.ca) <Aman.X.Gill@gov.bc.ca>, Gartner, Candice OHCS:EX <Candice.Gartner@gov.bc.ca>, Veilleux, Rebecca OHCS:EX <Rebecca.Veilleux@gov.bc.ca>, Mow, Monica OHCS:EX <Monica.Mow@gov.bc.ca>
Sent: November 30, 2022 3:27:57 PM PST
Attachments: image003.jpg, image007.jpg, image001.png, image002.png, image010.png, image008.png, image005.jpg, image004.jpg, image006.jpg, UDI Memo - Project Vulnerability.pdf, rennie_UDI Lower Mainland 2022_PDF.pdf

FYI

I filed the attachments on the Teams Program Design channel as the preso and memo can inform both the regulations and program design: UDI Reports

Cimarron Corpé
Director, Housing Secretariat

Ministry of Attorney General and Minister Responsible for Housing
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From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: Tuesday, November 29, 2022 1:47 PM
To: Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>; Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: FW: Follow-up Oct. 4 Call

These will be helpful background for our reg discussion, particularly around measurement timeframe

---

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, November 18, 2022 9:30 AM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Michael Drummond <mdrummond@udi.org>
Subject: Follow-up Oct. 4 Call

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Teri,

I hope you're keeping well, I'm sure things are busy leading into session next week. It took a bit longer than I had hoped but I still wanted to share the background that you had requested outlining some of the caveats to project approvals.

I'm also attaching a slide deck from Andrew Ramlo, VP Advisory at rennie Intelligence, who presented to our membership yesterday. It has some excellent demographic data, and data on the amount of homes that we would need to build in the Lower Mainland to meet projected demand (slides 52/54). I thought you might find this interesting.

On another note, I wanted to flag that we're looking at rescheduling our meeting with the Minister that was previously set for Dec. 5, for the new year, and have been in touch with administrative staff.

If anything else comes up please let us know.

Thanks,
Cassandra

Cassandra Smith *(McColman)*
Director, Policy and Public Affairs
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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Vancouver, British Columbia V6E 3S7 Canada
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www.udi.bc.ca

To: **Teri Collins, Assistant Deputy Minister, Office of Housing and Construction Standards**
From: **Urban Development Institute (UDI)**
Date: **November 17, 2022**
Re: **Project Vulnerability following Initial Council Approval**

Project Vulnerability following Initial Council Approval:

Issues that prevent housing developments from proceeding to construction

There is a misconception that once a project receives Third Reading or its rezoning approval that the project will undoubtedly advance to construction. The problem is – this is not the final step in a developer's journey to build a housing project. Changes made to the project at a Public Hearing or later as city staff and councils attempt to negotiate additional contributions can make projects economically unviable. When this happens, a developer will not apply for a building permit – even though the development has been approved.

The following examples outline how a more streamlined municipal approvals process that prioritize the delivery of housing over other city objectives is critical to increasing housing supply. In addition, examples of external risks are also explored as not all projects that fail to advance are the result of municipal processes.

Municipal Approval Risks

1. **Approved developments are no longer realistic because City demands are too high**

Projects aim to proceed to public hearing and secure an approval in a timely manner, resulting in situations where developers are under pressure to accept conditions that may be unrealistic.

Local governments exert onerous demands on new developments, because the decision of whether to approve new housing is ultimately left up to the Council. Requirements include high sustainability standards, funding for community amenities, new childcare facilities, housing fund contributions and construction of upgraded infrastructure or facilities, which can total in the tens of millions of dollars and add complexity to projects.

These added costs alone may prevent the project from advancing, or they may reduce the project's ability to withstand other changes, like construction cost escalations in the future. Many projects also include much market rental and below market homes, that will be delayed or simply not built if the project stalls.

2. **Approvals become unviable through changes made by Council at a meeting/public hearing**

All stakeholders have different objectives, local elected officials often propose changes to applications during Council meetings or public hearings if they believe it will improve the resulting development or provide a benefit to the community. Not all of these requests can feasibly be

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accommodated, and when the meeting concludes, the developer may receive a conditional approval that is not realistic to build.

Local governments have required additional amenities or architectural features that were not budgeted-for, or non-required uses, like expanded park space or more office space, at the expense of housing within the project. Councils have also made sweeping demands that alter the entire form of the development, like requiring the removal of several proposed stories, or eliminating a block of townhomes on a site.

These changes are not accounted-for when the developer plans, designs and budgets the project, and could require significant redesign at added cost and time.

3. **Approved projects do not receive building permits in a timely manner**

The development process can take several years from rezoning to construction, it's not uncommon for local government to increase various fees and charges over the course of a project's development.

In both Maple Ridge and Mission the municipal Development Cost Charge (DCC) rates for multi-family housing are proposed to increase substantially this year: more than 75% and 215% respectively. Metro Vancouver is introducing a new water charge that will add approximately $1.5 million to the average high-rise project. The provincially mandated in-stream protections require projects to receive their full Building Permit within 12 months of the rate change, however in some municipalities building permit wait times exceed that 12-month period. With the length of time it takes to receive municipal building permits, due to staffing capacity shortages and the increasing complexity of applications, projects that have already been approved will likely be hit with these higher costs. These can jeopardize new housing, causing developments to not move forward.

Had these charges been phased-in, or in-stream protections more realistic, the projects might have been able to absorb the costs.

4. **Approval is rescinded prior to Building Permit application**

Local Governments have the ability to rescind approvals prior to the Building Permit stage, and have shown that they can use that authority to significantly alter projects. The greatest risk is immediately following a municipal election, if there is a major shift in Council direction

Case Study: Lady Alexandra Proposal – White Rock
In 2018, White Rock Council rescinded its approval of a 12-storey housing development, which had already passed Public Hearing and rezoning approval. The Council chose to limit the height of the project to 6-storeys, resulting in the developer taking legal action against the City.

Case Study: Multiple development proposals – Township of Langley
Most recently, at the Township of Langley's first Council meeting since July 2022, the newly elected Mayor and Council voted to rescind the Third Reading Rezoning approval – one of which had already undergone a public hearing – of 2 townhome projects, which totaled 420 townhomes and 27 detached homes. While the motivation for this decision was to seek additional information on the proposals and discuss their density, this process to rescind an approval creates a large amount of

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uncertainty for both the affected projects, and any others that may currently be under development in the Township.

External Risks

5. **Difficulty accessing financing**

An approved project may not be able to begin construction if the developer is not able to secure development or construction financing at a rate that is within the allowances of their budget. As the Bank of Canada increases interest rates to combat inflation, it results in higher borrowing costs for developers. The volatility of these rates could be enough to render a project unviable if the development already had to accommodate added costs during the approval process.

Case Study: RCFI Program
This problem is particularly acute for purpose-built rental housing relying on the Federal Rental Construction Financing Initiative (RCFI). These projects are not able to determine their interest rate to borrow funds until they are ready to use the funding – typically after the project is approved. This results in unanticipated higher borrowing costs. In addition, many projects that have been approved for funding through this program are facing higher equity requirements, meaning that the developer is required to provide multiple millions of dollars more capital in order to access the balance of their funding. This combination of factors is rendering rental housing developments unbuildable for the time-being.

6. **Change in market conditions**

If buyer demand softens, the developer may not be able to meet their pre-sale quota (typically around 80% sold required by lenders) within the 12-month early marketing window prescribed by the *Real Estate Development Marketing Act (REDMA)*. The project will be paused as a result rather than jeopardize its ability to meet pre-sale requirements.

Market changes are caused by a variety of factors beyond the developer's control, for example:
- Global, regional or local economic disruptions;
- Immigration policy changes;
- Rising interest rates; and
- Demand-side government policies like the Mortgage Stress Test or Foreign Buyer Ban.

Pick a date: Feb in-person Energy Step Code Council meeting

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: bea.bains@fortisbc.com, ebaudinaud@communityenergy.bc.ca, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, GCarignan@communityenergy.bc.ca, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, rmathews@cnv.org, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, sean.pander@vancouver.ca, roberto@zebx.org, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, trothery@communityenergy.bc.ca, pauline@chbabc.org, lsampliner@portmoody.ca, zsegal@boma.bc.ca, dstathonikos@boma.bc.ca, Maxwell.Sykes@surrey.ca, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

Sent: January 10, 2023 1:44:32 PM PST

Attachments: 2023-02-xx agenda v1.docx

Hello, members of the Energy Step Code Council:

We're looking to book an in-person meeting this February in Vancouver at the BC Hydro head office: 333 Dunsmuir St.

This will be a hybrid meeting, so people who can't make it in-person can still participate fully.

As the new energy efficiency and building carbon pollution standards are finalized, we're hoping to discuss some of the issues raised during the public review process, including challenges with BC Hydro service connections and questions regarding local government consideration of renewable fuels as a low-carbon compliance option. As part of our discussion of BC Hydro service connections, BC Hydro staff will be joining the meeting to document the key concerns from Council representatives and workshop some potential process improvements.

Please pick your preferred date using the Doodle poll here: https://doodle.com/meeting/organize/id/aK1W8NMd

I've also attached a draft agenda. Let us know if you have other topics you wish to include in this or future meetings.

Best,
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code Council Meeting
Meeting Package

Date and Time of Meeting: XXX February XX, 2023 | Time: 10:00 a.m. to 4:00 p.m. Pacific Time

Venue if Attending in Person: BC Hydro Office – 333 Dunsmuir St., Vancouver, B.C.

Teleconference Line if Calling in:
Webinar Access if Calling In: MS Teams link
Chair: Zachary May, Building and Safety Standards Branch, Ministry of Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro
Meeting Materials

- Agenda (below)

Contacts if You Require Assistance

- Hugo Wong, BSSB – 236 478 1406 (call only); hugo.wong@gov.bc.ca

DRAFT AGENDA (as of Jan. 5, 2023)

Time	Topic	Speaker(s)	Purpose(s)
10:00	Welcome and Introductions	Zachary May, ESCC Chair	• Welcome participants • Theme: Logistics of reducing GHGs in new construction • Meeting technology overview (Hugo Wong) • Approval of agenda
10:15	Provincial Update	Zachary May	• Progress of energy efficiency and GHG language • Progress of national code harmonization, B.C.'s role in the national system
10:30	Reducing electrification barriers	Various, BC Hydro	• Neighbourhood grid capacity • Electrical extension fees • Industry capacity issues (flag for Ministries of Energy, Mines and Low-Carbon Innovation; Post-Secondary Education and Future Skills)
12:00	Lunch Break: Lunch provided on-site for in-person attendees		
1:00 p.m.	Local best practices for RNG	Step Code Peer Network	• Discuss options for local administration of RNG
2:30	Afternoon Break – Free discussion/breakout groups		
3:00	Roundtable	All	Adjourn meeting
4:00	Adjournment		

Commented [WHO1]: May be moved to afternoon depending on staff availability. I will confirm closer to the date.

Commented [WHO2]: There's room for about 20 in-person attendees, I believe. I will poll who's coming in-person in a separate email.

FW: Any thoughts?

From: May, Zachary OHCS:EX
To: Hoffman-McGaw, Trilby JERI:EX <Trilby.Hoffman-McGaw@gov.bc.ca>
Sent: January 11, 2023 8:28:01 PM PST
No luck at BSSB. See notes below.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Harding, Kevin OHCS:EX <Kevin.Harding@gov.bc.ca>
Sent: Wednesday, January 11, 2023 4:50 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Any thoughts?

I also don't immediately have anything I can bring to bear here. TSBC had tried to do some Chinese/South Asian outreach, but it mostly involved radio ads in safety campaigns, which were targeted through various communities' talk radio stations.

Richmond/Surrey's government may well be good points of contact, but in Richmond, that may just point you back to Onni or Concord Pacific

Kevin

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, January 11, 2023 4:43 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>; Harding, Kevin OHCS:EX <Kevin.Harding@gov.bc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Any thoughts?

No ideas- we tried very hard through various means in the accessibility consultation to reach south Asian builders at the request of MO. BC Housing was our best lead, but they did not have a list that was this specific. Andy and Shannon were point on those efforts if you have questions.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, January 11, 2023 2:08 PM
To: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>; Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>; Harding, Kevin OHCS:EX <Kevin.Harding@gov.bc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: Any thoughts?

[2023-01-11 1:12 PM] Hoffman-McGaw, Trilby JERI:EX:
Hi Zac, our minister of state is interested in reaching South Asian and Chinese developers/builders to let them know more about mass timber as part of a more inclusive economic approach. Do you have ideas about how best to reach people

from those communities? Do you have a sense of whether UDI is inclusive? Do you know of any other associations that could be a helpful starting point?

I suggested OMTI reach out to Vancouver, Richmond, or Surrey to see if they know of ways to reach this subset of builder/developers. Any other ideas?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Register: Feb. Energy Step Code Council meeting

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: bea.bains@fortisbc.com, ebaudinaud@communityenergy.bc.ca, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, GCarignan@communityenergy.bc.ca, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, jfisher@udi.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, rmathews@cnv.org, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, sean.pander@vancouver.ca, roberto@zebx.org, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, trothery@communityenergy.bc.ca, pauline@chbabc.org, lsampliner@portmoody.ca, dstathonikos@boma.bc.ca, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

Cc: Grass, William OHCS:EX <William.Grass@gov.bc.ca>, Stelzer, Bertine <Bertine.Stelzer@bchydro.com>

Sent: January 17, 2023 4:08:17 PM PST

Hi, everyone:

The next Energy Step Code Council meeting will be held on Feb. 13. It'll be a hybrid meeting, so in-person attendees can go to 333 Dunsmuir St., Vancouver B.C. Online attendees can use Microsoft Teams.

To participate (either in-person or remote), please register here:
https://teams.microsoft.com/registration/AFLbbw09ikqwNtNoXjWa3A,6HjikdpByEC4GvwbRLE7qg,L_GsbQ0esEaRvXAoiKZSMw,mode=read&tenantId=6fdb5200-3d0d-4a8a-b036-d3685e359adc

If the number of in-person attendees exceeds the room's capacity (it's about 20) I will email them separately to see if anyone could come remotely instead.

As I understand it, the windows don't open but HVAC should work well. Masks/respirators optional but recommended.

Looking forward to it!
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Register: Feb. Energy Step Code Council meeting

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Robyn.Wark@bchydro.com
Sent: January 18, 2023 4:04:04 PM PST
Attachments: PXL_20221216_162316716.jpg, PXL_20221216_162255536.jpg, image001.jpg, PXL_20221216_162338786.jpg

HI all,

I have emphasized to BC Hydro organizers that high-quality sound and audio are important. Iulia and Josh Power have chosen a room that is Microsoft Teams-enabled, meaning there are puck-shaped accessory microphones along the conference table to pick up the voices of those seated at the table.

I've attached photos Josh took for me which illustrate the space.

He says the table can fit 15-16, and if people line the outside of the room we can put in 20-25 (though those seated outside might not have their voices picked up as well).

I think we can have a good hybrid meeting experience this way. Are there other ways we can make it better? I'm open to it. I am committed to running a good hybrid meeting for once. I can monitor for hands online and ask in-room participants to bring their laptops and "raise their hands" virtually as well so the question queue is accurate.

Best,
Hugo

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, January 18, 2023 3:40 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Robyn.Wark@bchydro.com
Subject: FW: Register: Feb. Energy Step Code Council meeting

Hi Robyn,

Any thoughts on room, sound, attendees? The hybrid meeting option is definitely a challenge if we want real participation online.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: pauline@chbabc.org <pauline@chbabc.org>
Sent: Wednesday, January 18, 2023 3:33 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Register: Feb. Energy Step Code Council meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,

The date for this upcoming ESCC meeting is unfortunate, as Bob Deeks and Kelly Reid are both unable to attend. While it would be nice if the date could be changed, we are looking into sending alternates since the electrification discussion is a high priority for our association. Is it possible to confirm whether Ministry staff from EMLI or ENV will be in attendance?

Also, I'm wondering if there's any possibility for a larger room? Having participated in previous hybrid ESCC meetings, the audio quality for remote participants is often challenging and we would be encouraging in-person attendance from our representatives.

Regards,
Pauline Rupp
Director, Technical & Building Innovation

Canadian Home Builders' Association of BC
400-6400 Roberts Street, Burnaby, BC V5G 4C9
t. 604-432-7112 ext. 307
www.chbabc.org

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: January 17, 2023 4:08 PM
To: bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; rmathews@cnv.org; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Grass, William OHCS:EX <William.Grass@gov.bc.ca>; Stelzer, Bertine <Bertine.Stelzer@bchydro.com>
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mode=read&tenantId=6fdb5200-3d0d-4a8a-b036-d3685e359adc

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Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch

Office of Housing and Construction Standards
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca




How to use a
Teams meeting room
8:22 AM


How to use a
Teams meeting room
8:23 AM

RE: Register: Feb. Energy Step Code Council meeting

From: Wark, Robyn <Robyn.Wark@bchydro.com>
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: January 18, 2023 5:34:24 PM PST
Attachments: image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Great summary Hugo. WE hold hybrid meetings in that room all the time. I think it can be managed well, if Hugo is the rep for the on-line folks to ensure their thoughts and opinions are heard. I think it's great when everyone still uses chat (in and outside room).

Thx … R

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: 2023, January 18 4:04 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wark, Robyn <Robyn.Wark@bchydro.com>
Subject: [External] RE: Register: Feb. Energy Step Code Council meeting

Security Risk Assessment: Use Caution
The email is from <Hugo.Wong@gov.bc.ca> with a friendly name of "Wong, Hugo OHCS:EX" <Hugo.Wong@gov.bc.ca>

DO NOT click on links or open attachments unless you trust the sender and are expecting the link or attachment.
If you suspect this message to be phishing, please report it to BC Hydro Phishing Support

HI all,

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I've attached photos Josh took for me which illustrate the space.

He says the table can fit 15-16, and if people line the outside of the room we can put in 20-25 (though those seated outside might not have their voices picked up as well).

I think we can have a good hybrid meeting experience this way. Are there other ways we can make it better? I'm open to it. I am committed to running a good hybrid meeting for once. I can monitor for hands online and ask in-room participants to bring their laptops and "raise their hands" virtually as well so the question queue is accurate.

Best,
Hugo

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, January 18, 2023 3:40 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Robyn.Wark@bchydro.com
Subject: FW: Register: Feb. Energy Step Code Council meeting

Hi Robyn,

Any thoughts on room, sound, attendees? The hybrid meeting option is definitely a challenge if we want real participation online.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: pauline@chbabc.org <pauline@chbabc.org>
Sent: Wednesday, January 18, 2023 3:33 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Register: Feb. Energy Step Code Council meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,

The date for this upcoming ESCC meeting is unfortunate, as Bob Deeks and Kelly Reid are both unable to attend. While it would be nice if the date could be changed, we are looking into sending alternates since the electrification discussion is a high priority for our association. Is it possible to confirm whether Ministry staff from EMLI or ENV will be in attendance?

Also, I'm wondering if there's any possibility for a larger room? Having participated in previous hybrid ESCC meetings, the audio quality for remote participants is often challenging and we would be encouraging in-person attendance from our representatives.

Regards,
Pauline Rupp
Director, Technical & Building Innovation

Canadian Home Builders' Association of BC
400-6400 Roberts Street, Burnaby, BC V5G 4C9
t. 604-432-7112 ext. 307
www.chbabc.org

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: January 17, 2023 4:08 PM
To: bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; rmathews@cnv.org; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org;

lsampliner@portmoody.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Grass, William OHCS:EX <William.Grass@gov.bc.ca>; Stelzer, Bertine <Bertine.Stelzer@bchydro.com>
Subject: Register: Feb. Energy Step Code Council meeting

Hi, everyone:

The next Energy Step Code Council meeting will be held on Feb. 13. It'll be a hybrid meeting, so in-person attendees can go to 333 Dunsmuir St., Vancouver B.C. Online attendees can use Microsoft Teams.

To participate (either in-person or remote), please register here:
https://teams.microsoft.com/registration/AFLbbw09ikqwNtNoXjWa3A,6HjikdpByEC4GvwbRLE7qg,L_GsbQ0esEaRvXAoiKZSMw,mode=read&tenantId=6fdb5200-3d0d-4a8a-b036-d3685e359adc

If the number of in-person attendees exceeds the room's capacity (it's about 20) I will email them separately to see if anyone could come remotely instead.

As I understand it, the windows don't open but HVAC should work well. Masks/respirators optional but recommended.

Looking forward to it!
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

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FW: DRAFT CoV Embodied Carbon Guidelines and Design Report

From:	Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To:	Hutchinson, Jarrett JERI:EX <Jarrett.Hutchinson@gov.bc.ca>
Cc:	Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent:	January 19, 2023 10:28:37 AM PST
Attachments:	CoV Embodied Carbon Guidelines v0.2 - FINAL DRAFT.pdf, Embodied Carbon Design Report v0.3 - testing only.xlsx

Hi Jarrett,

As per the attached, the City of Vancouver has put a call out for review comments pertaining to their draft Embodied Carbon Guidelines.
I know that Jeremy was actively involved in the past, but wanted to touch base with you to see if there is anyone at OMTI that has had the chance to review or has been part of the development process.
CoV has requested that comments be provide by EOD tomorrow.

Thanks and hope all is well.

Cheers,

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Enright, Patrick <Patrick.Enright@vancouver.ca>
Sent: Monday, December 19, 2022 3:15 PM
To: Anthony Pak <anthony@priopta.com>; Zahra Teshnizi <zahra.teshnizi@mantledev.com>; Ryan Zizzo <ryan.zizzo@mantledev.com>; Bowick, Matthew <matthew.bowick@nrc-cnrc.gc.ca>; Jennifer O'Connor <jennifer.oconnor@athenasmi.org>; james.salazar@athenasmi.org; panu.pasanen@bionova.fi; z.berrada@hcma.ca; Robert.Cooney@nrc-cnrc.gc.ca; Lacasse, Michael <Michael.Lacasse@nrc-cnrc.gc.ca>; Phil.Northcott@c-change-labs.com; Manuela.Londono@perkinswill.com; Mark Hutchinson <MHutchinson@cagbc.org>; rbates@kierantimberlake.com; hgoodland@scius.ca; Graham.Twyford-Miles@stantec.com; Jeremy Field <jfield@integralgroup.com>; Chris Magwood <chris@buildersforclimateaction.org>; Peter Moonen s.22 ; Matt DALKIE <matt.dalkie@lafarge.com>; Jeff Fisher <jfisher@udi.org>; jcutbill@lateralagency.ca; diana@havan.ca; Morgan McDonald <Morgan.McDonald@ledcor.com>; ykulikov@fastepp.com; MacFadyen, Iain <iain.macfadyen@zgf.com>; Christopherson, Michelle <Michelle.Christopherson@wsp.com>; jake@urban-arts.ca; Megan Kalsman <mkalsman@uw.edu>; Mueller, Kika JERI:EX <Kika.Mueller@gov.bc.ca>; Caroline Butchart <caroline@zebx.org>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Elisabeth Baudinaud <ebaudinaud@communityenergy.bc.ca>; Ivan Lee <ILee@morrisonhershfield.com>; Natalie Douglas <ndouglas@nelson.ca>; Pander, Sean <sean.pander@vancouver.ca>; Schwebs, Saul <Saul.Schwebs@vancouver.ca>; Anderson, Kelly <Kelly.Anderson@vancouver.ca>; Lau, Kevin <Kevin.Lau@vancouver.ca>; McCall, Gregory <Gregory.McCall@vancouver.ca>; Williams, Leighton <Leighton.Williams@vancouver.ca>; Li, Charling <charling.li@vancouver.ca>; forest@reloadsustainable.com; kdoran@mass-group.org
Subject: DRAFT CoV Embodied Carbon Guidelines and Design Report

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Everyone,

As a member of our BM5 External Advisory Committee or as a stakeholder in embodied carbon, it is my pleasure to share with you our draft Embodied Carbon Guidelines. These guidelines are intended to standardize how embodied carbon calculations are carried out when demonstrating compliance with upcoming embodied carbon requirements in

the Vancouver Building By-law (for Part 3 buildings only), and with targets for City-owned buildings to pursue 40% reductions in embodied carbon. Thank you to everyone who provided input on the first draft, and I have endeavoured to incorporate your comments in this final draft.

I'm also happy to share a draft of our Embodied Carbon Design Report, to be used for submittals to the City. Thank you to anyone who has already provided input on this initial draft, and your comments will be included in the final draft. For those using this report at early design, or when using some software, I recognize some data may not be available, so the intention is the report is completed to the extent possible by the user.

Please feel free to share these with colleagues or anyone you feel may have comments to share. After receiving feedback, both documents will be published as version 1 by the end of January, for use in compliance with the Building By-law.

I invite you to review, and **please provide any comments you may have by EOD January 20th, 2023**. I invite you to reach out with questions at any time, and CLF Vancouver will be hosting a session on the topic on the morning of January 16th. Please send comments to me via email, with comments numbered for further reference.

Thank you to all of you for your efforts to reduce embodied carbon and help us advance this important City goal, each in your own way. I wish you all a restful and wonderful holiday break, and look forward to connecting when I return to the office after January 3rd.

Sincerely,

Patrick Enright, P.Eng | Senior Green Building Engineer
(he/him/his)
Sustainability Group | Planning, Urban Design & Sustainability | City of Vancouver
patrick.enright@vancouver.ca | 604.871.6158

For more information on green buildings, please visit http://vancouver.ca/zeroemissions

I am humbly thankful that I live and work on the territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səl̓ilwətaʔɬ / sel̓íl̓witulh (Tsleil-Waututh) nations.

Page 070 of 249 to/à Page 089 of 249

Withheld pursuant to/removed as

s.13 ; s.16

Paste raw data exported from LCA software below this line. Please also export Bill of Materials further below if separate from raw data export

Total wbLCA Results

Environmental Impact Indicators		Intensity w/o park.	Intensity w park.
Global Warming Potential (kgCO2e)	6,204,000	410	365
Acidification Potential (kgSO2e) (optional)		-	-
Eutrophication Potential (kgNe) (optional)		-	-
Ozone Depletion Potential (kgCFC-11e) (optional)		-	-
Smog Potential (kgO3e) (optional)		-	-
Total Primary Energy (MJ) (optional)		-	-

wbLCA Results by Stage and Element

Results by Element (kgCO2e)

Results by Stage (kgCO2e)

Category	Element / Common Name	OmniClass name / Search term	OmniClass number	A1-A3	A4	A5	B	B4-B5	C2	C3	C4	D	not biogenic carbon (optional)	ELEMENT TOTALS	% total	Element / Common Name
Substructure	**Foundations (required)**	Standard Foundations	21 13 10												0%	**Foundations**
	Below grade Walls (optional)	Walls for Subgrade Enclosures	21 29 10												0%	Below-grade Walls (optional)
	All other Substructure (optional)	N/A													0%	All other Substructure (optional)
Shell	**Beams and Columns (required)**	Floor Structural Frame - Column	23 13 10 10												0%	**Beams and Columns**
	Floors (required)	Floor Construction	23 13 10												0%	**Floor**
	Roofs (required)	Roof Construction	23 13 20												0%	**Roof**
	Stairs (optional)	Stairs	23 13 60												0%	Stairs (optional)
	Walls (required)	Exterior Walls	23 28 10												0%	**Walls**
	Windows (required)	Exterior Windows	23 28 20												0%	**Windows**
	All other Shell (optional)	N/A													0%	All other Shell (optional)
Interiors (optional)	Interiors (optional)	Interiors	03												0%	Interiors (optional)
Services (optional)	Mechanical, Electrical, Plumbing (MEP) (optional)	Services	04												0%	Mechanical, Electrical, Plumbing (MEP) (optional)
Equipment and Furnishings (optional)	Equipment and Furnishings (optional)	Equipment and Furnishings	05												0%	Equipment and Furnishings (optional)
Special Construction and Demolition (optional)	Demolition (optional)	Demolition	08 30												0%	Demolition (optional)
	All other Special Construction and Demolition (optional)	N/A													0%	All other Special Construction and Demolition (optional)
Sitework (optional)	Sitework (optional)	Sitework	07												0%	Sitework (optional)
	Unspecified OTHER (optional)	N/A													0%	Unspecified OTHER
		SUB-STAGE TOTALS												-		
		% total		0%	0%	0%	0%	8%	8%	0%	0%	0%	0%			
		STAGE TOTALS		Product			Use		End-of-Life			Beyond Building Life Cycle (optional)	not biogenic carbon (optional)			
		% total		0%			0%		8%			0%	0%			

Notes on Elements

does this really include beams?
floor may include below-grade floors (i.e. parkade floors)

Results by Resource Category / Material (as available from LCA software)

Material	Sub-Category / Search term	Global Warming Potential (kgCO2e)	ECI w/o park. (kgCO2e/m²)	ECI w park. (kgCO2e/m²)	% total	Unit	Quantity	Material Intensity w/o park. (unit/m²)	Material Intensity w park. (unit/m²)	ECI per unit (kgCO2e/unit)	Notes
Concrete	ready-mix		-	-	0%			-	-	-	
	concrete		-	-	0%			-	-	-	
Steel	steel bar		-	-	0%			-	-	-	
	steel		-	-	0%			-	-	-	
Insulation	rock wool insulation		-	-	0%			-	-	-	
	foam insulation		-	-	0%			-	-	-	
Aluminium	Aluminium cladding		-	-	0%			-	-	-	
Glass	curtain wall		-	-	0%			-	-	-	
Gypsum/Drywall/Plaster	gypsum		-	-	0%			-	-	-	
Plastics	plastic		-	-	0%			-	-	-	
Membranes	membrane		-	-	0%			-	-	-	
Wood	wood		-	-	0%			-	-	-	
Other	_ Other		-	-	0%			-	-	-	
	_ Other		-	-	0%			-	-	-	
	_ Other		-	-	0%			-	-	-	
	_ Other		-	-	0%			-	-	-	
	_ Other		-	-	0%			-	-	-	

the following tables calculate ECI's by stage and element, for information only

wbLCA Results by Stage and Element - Intensity w/o parkade

Results by Element (kgCO2e/m²)

Results by Stage (kgCO2e/m²)

Category	Element / Common Name	OmniClass name	OmniClass number	A1-A3	A4	A5	B	B4-B5	C2	C3	C4	D	not biogenic carbon (optional)	ELEMENT TOTALS	% total	Element / Common Name
Substructure	**Foundations (required)**	Standard Foundations	21 13 10												0%	**Foundations**
	Below grade Walls (optional)	Walls for Subgrade Enclosures	21 29 10												0%	Below-grade Walls (optional)
	All other Substructure (optional)	N/A													0%	All other Substructure (optional)
Shell	**Beams and Columns (required)**	Floor Structural Frame - Column	23 13 10 10												0%	**Beams and Columns**
	Floors (required)	Floor Construction	23 13 10												0%	**Floor**
	Roofs (required)	Roof Construction	23 13 20												0%	**Roof**
	Stairs (optional)	Stairs	23 13 60												0%	Stairs (optional)
	Walls (required)	Exterior Walls	23 28 10												0%	**Walls**
	Windows (required)	Exterior Windows	23 28 20												0%	**Windows**
	All other Shell (optional)	N/A													0%	All other Shell (optional)
Interiors (optional)	Interiors (optional)	Interiors	03												0%	Interiors (optional)
Services (optional)	Mechanical, Electrical, Plumbing (MEP) (optional)	Services	04												0%	Mechanical, Electrical, Plumbing (MEP) (optional)
Equipment and Furnishings (optional)	Equipment and Furnishings (optional)	Equipment and Furnishings	05												0%	Equipment and Furnishings (optional)
Special Construction and Demolition (optional)	Demolition (optional)	Demolition	08 30												0%	Demolition (optional)
	All other Special Construction and Demolition (optional)	N/A													0%	All other Special Construction and Demolition (optional)
Sitework (optional)	Sitework (optional)	Sitework	07												0%	Sitework (optional)
	Unspecified OTHER (optional)	N/A													0%	Unspecified OTHER
		SUB-STAGE TOTALS		-										-		
		% total		0%	0%	0%	0%	8%	8%	0%	0%	0%	0%			
		STAGE TOTALS		Product			Use		End-of-Life			Beyond Building Life Cycle (optional)	not biogenic carbon (optional)			
		% total		0%			0%		8%			0%	0%			

wbLCA Results by Stage and Element - Intensity w parkade

Results by Element (kgCO2e/m²)

Results by Stage (kgCO2e/m²)

Category	Element / Common Name	OmniClass name	OmniClass number	A1-A3	A4	A5	B	B4-B5	C2	C3	C4	D	not biogenic carbon (optional)	ELEMENT TOTALS	% total	Element / Common Name
Substructure	**Foundations (required)**	Standard Foundations	21 13 10												0%	**Foundations**
	Below grade Walls (optional)	Walls for Subgrade Enclosures	21 29 10												0%	Below-grade Walls (optional)
	All other Substructure (optional)	N/A													0%	All other Substructure (optional)
Shell	**Beams and Columns (required)**	Floor Structural Frame - Column	23 13 10 10												0%	**Beams and Columns**
	Floors (required)	Floor Construction	23 13 10												0%	**Floor**
	Roofs (required)	Roof Construction	23 13 20												0%	**Roof**
	Stairs (optional)	Stairs	23 13 60												0%	Stairs (optional)
	Walls (required)	Exterior Walls	23 28 10												0%	**Walls**
	Windows (required)	Exterior Windows	23 28 20												0%	**Windows**
	All other Shell (optional)	N/A													0%	All other Shell (optional)
Interiors (optional)	Interiors (optional)	Interiors	03												0%	Interiors (optional)
Services (optional)	Mechanical, Electrical, Plumbing (MEP) (optional)	Services	04												0%	Mechanical, Electrical, Plumbing (MEP) (optional)
Equipment and Furnishings (optional)	Equipment and Furnishings (optional)	Equipment and Furnishings	05												0%	Equipment and Furnishings (optional)
Special Construction and Demolition (optional)	Demolition (optional)	Demolition	08 30												0%	Demolition (optional)
	All other Special Construction and Demolition (optional)	N/A													0%	All other Special Construction and Demolition (optional)
Sitework (optional)	Sitework (optional)	Sitework	07												0%	Sitework (optional)
	Unspecified OTHER (optional)	N/A													0%	Unspecified OTHER
		SUB-STAGE TOTALS		-										-		
		% total		0%	0%	0%	0%	8%	8%	0%	0%	0%	0%			
		STAGE TOTALS		Product			Use		End-of-Life			Beyond Building Life Cycle (optional)	not biogenic carbon (optional)			
		% total		0%			0%		8%			0%	0%			

I=Indicative Estimate
C=Assembly Estimate
B=Design Estimate
A=As-Built Model

CITY OF VANCOUVER

Embodied Carbon Design Report

Part 3 Buildings

Comparison & Reductions

Overall Results

	Proposed	Baseline	Reduction from Baseline	
Total Embodied Carbon (kgCO2e)	5,414,636	6,200,000	785,364	12.7%
ECI w/o park. (kgCO2e/m2)	361	413	52	
ECI w park. (kgCO2e/m2)	319	365	46	

Build Less, Build Efficiently

	Proposed	Baseline	Reduction from Baseline	
Reduced Parking				
Parkade Area, real or scaled/assumed (m2)	2,000	2,000	-	0%
Concrete in substructure and/or parking structure (if available) (m3)			-	0%
Steel in substructure and/or parking structure (if available) (kg)			-	0%
Embodied Carbon from substructure and/or parking structure (if available) (kgCO2e)			-	0%
	-	-	-	
	-	-	-	
% of total	0%	0%	0%	
Reduced Overall Concrete and Steel				
All Concrete (if available) (m3)			-	0%
All Steel (if available) (kg)			-	0%
Embodied Carbon from Concrete and Steel (if available) (kgCO2e)			-	0%
	-	-	-	
	-	-	-	
% of total	0%	0%	0%	
Building and Material Re-use				
Re-used Floor Area (m2)			-	0%
Re-Used/avoided materials (kg) (if available)	0		-	0%
Embodied Carbon from re-used/avoided materials (if available) (kgCO2e)	0		-	0%
	-	-	-	
	-	-	-	
% of total	0%	0%	0%	
Demolition				
Demolished Floor Area (m2)			-	0%
Demolished materials (kg) (if available)			-	0%
Embodied Carbon from demolished materials (if available) (kgCO2e)			-	0%
	-	-	-	
	-	-	-	
% of total	0%	0%	0%	

Low Carbon Materials and Procurement

Design for Low-Carbon Assemblies and Materials

	Proposed			Baseline			Comparison	
	Typical Description by Element and major material or assembly	EPD Used (if available)	Carbon Intensity from EPD (if available) (kgCO2e/unit)	Typical Description by Element and major material or assembly	EPD Used (if available)	Carbon Intensity from EPD (if available) (kgCO2e/unit)	Notes on Differences (highlight key differences)	Reduction from Baseline assembly/ material (if units are comparable)
Foundation	Concrete, 25MPa GUL cem. with air entr. 30-40% FA	CRMCA 2017, Mix #9	236.07	Concrete, 25MPa GUL cem. with air entr. 15-29% FA	CRMCA 2017, Mix #5	266.72		11.5%
	steel rebar 490 lb/ft3			steel rebar 490 lb/ft3				0.0%
								0.0%
								0.0%
Beams and Columns	Ready-mix concrete, 40MPa GUL cem. without air entr. 15-29% FA (CRMCA)			Ready-mix concrete, 40MPa GUL cem. without air entr. 15-29% FA (CRMCA)				0.0%
	steel rebar 490 lb/ft3			steel rebar 490 lb/ft3				0.0%
								0.0%
								0.0%
Floors	Ready-mix concrete, 30MPa GUL cem. without air entr. 15-29% FA (CRMCA), 229mm thick			Ready-mix concrete, 30MPa GUL cem. without air entr. 15-29% FA (CRMCA), 229mm thick				0.0%
	Ready-mix concrete, 35MPa GUL cem. with air entr. 15-29% FA (CRMCA), 260mm thick			Ready-mix concrete, 35MPa GUL cem. with air entr. 15-29% FA (CRMCA), 260mm thick				0.0%
	steel rebar 490 lb/ft3			steel rebar 490 lb/ft3				0.0%
								0.0%
Roofs								0.0%
								0.0%
								0.0%
								0.0%
Exterior Walls	steel stud walls 24" O/C			steel stud walls 24" O/C				0.0%
	concrete block walls			concrete block walls				0.0%
	steel and aluminium cladding			steel and aluminium cladding				0.0%
	rock wool insulation			rock wool insulation				0.0%
Windows	aluminium curtain walls			aluminium curtain walls				0.0%
	spray foam insulation			spray foam insulation				0.0%
								0.0%
								0.0%
Interiors (optional)								0.0%
								0.0%
								0.0%
								0.0%
								0.0%

Low Carbon Concrete (from Federal Embodied Carbon Disclosure Template)

Ready-Mix Concrete on Project		Project Mix Strengths	Project Mix Volumes	Benchmark GHG Calculations			GHG Calculations for Project Mixes		GHG Emissions Reduction		
Building/Structure Elements using Ready-Mix Concrete (e.g. Walls, Foundation ...)	Special Application Requirement? (Yes/No)	Compressive Strength (MPa) (@ 28 days unless special application)	Volume (m^3)	CRMCA Mix Design or EPD Reference Number	GWP (kg CO_2/m^3) of the Regional Strength Class Benchmark Mix (from the CRMCA EPD)	Baseline GHG emissons per mix based on Regional Strength Class Benchmarks (tonnes CO_2)	EPD or Mix Design Reference Number for the Mix Provided (from the CRMCA or Facility EPD)	GWP (kg CO_2/m^3) of the Mix Provided	GHG Emissions per mix Provided (tonnes CO_2)	GHG Emissions reduced from the baseline per mix Provided (tonnes CO_2)	Percentage GHG Emissions Reduction per mix from the baseline
Project Totals	N/A	N/A	-	N/A	N/A	-	N/A	N/A	-	-	-

Reduction in Embodied Carbon GHG Emissions Related to Ready-Mix Concrete Provided on the Project (tonnes)	0	Percentage Reduction of Embodied Carbon GHG Emissions Related to Ready-Mix Concrete Provided on the Project	0

CITY OF VANCOUVER

Embodied Carbon Design Report

Part 3 Buildings

Compliance

Whole-Building Reduction Required

Projected Date of first Building Permit application (YYYY-MM-DD)	2025-01-01	*if completing in advance of BP application, provide best available projected date. If unsure, use 2025-01-01*		
On or After 2023-07-01	Yes	2023-07-01		
On or After 2025-01-01	Yes	2025-01-01		
Building Height (in storeys)	7			
1-6 storeys	No			
If 1-6 storeys, are wood-frame or encapsulated mass timber construction permitted? (2025 VBBL ref. 10.4.1.2)			base reduction required	**10%**
One Responsible Materials Category achieved? (2025 VBBL ref. 10.4.1.3)			Reduction required	**10%**

Whole-Building Reduction Achieved (from results sheets)

	Proposed	Baseline		
Total Embodied Carbon (kgCO2e)	5,414,636	6,200,000	Reduction achieved	12.7%
Embodied Carbon Intensity (ECI, kgCO2e/m²) - w/o park.	361	413		
Embodied Carbon Intensity (ECI, kgCO2e/m²) - w park.	319	365		
Zero Emissions Construction Site Adjustment	No		adjustment	0%
			Reduction achieved (for compliance)	**12.7%**

Biogenic Carbon

	Proposed	Baseline		
Net Biogenic Carbon (tCO2e)	0	0		
Net Biogenic ECI (kgCO2e/m²) - w/o parkade	-	-		
Net Biogenic ECI (kgCO2e/m²) - w parkade	-	-		
Net Embodied Carbon (tCO2e)	5,414,636	6,200,000		
Net ECI (kgCO2e/m²) - w/o parkade	-	-		
Net ECI (kgCO2e/m²) - w parkade	-	-	Reduction achieved - w biogenic carbon	12.7%

Whole-Building Reduction Required

Reduction required	**10%**

Whole-Building Reduction Achieved

Reduction achieved (for compliance)	**12.7%**

Embodied Carbon Design Report

Part 3 Buildings

Project and wbLCA Info

Instructions

Please complete one design report per building.
Please complete all fields that apply, using information that represents the current stage of design.
For fields that do not apply or for which there is no information yet, please enter "N/A" or leave blank.
For questions relating to this design report please email green.buildings@vancouver.ca

Project Information

Project Address			
Secondary Address			
Project Working Title / Name			
Buildnig Description and Major Occupancies			
Heating Demand (TEDI) Design Target (kWh/m²)		Heating Demand (TEDI) of Current Design (kWh/m²)	
Gross Floor Area excluding Parkade Area (proposed) (m²)	15,000	# of units (if residential)	
Gross Floor Area including Parkade Area (proposed) (m²)	17,000	# of bedrooms (if available)	
Parkade Area (m²)	2,000		
Building Height (in storeys)	7	*from Compliance sheet*	
Projected Date of first Building Permit application	2025-01-01	*from Compliance sheet*	

whole-building Life Cycle Assessment (wbLCA) Information

Location	Vancouver
Assessment timing / Application type	Design Development / pre-BP
Approximate Class of Assessment	C Assembly Estimate
Service life of building in assessment (yrs)	60
Assessment Software:	OneClickLCA
Software version:	unknown

Elements Included in wbLCA

Foundations	Yes	Exterior Walls	Yes
Floors	Yes	Windows	Yes
Roofs	Yes	Mechanical, Electrical, Plumbing (MEP) (optional)	No
Beams and Columns	Yes	Interiors / Partitions (optional)	Yes

Life Cycle Stages Included in wbLCA

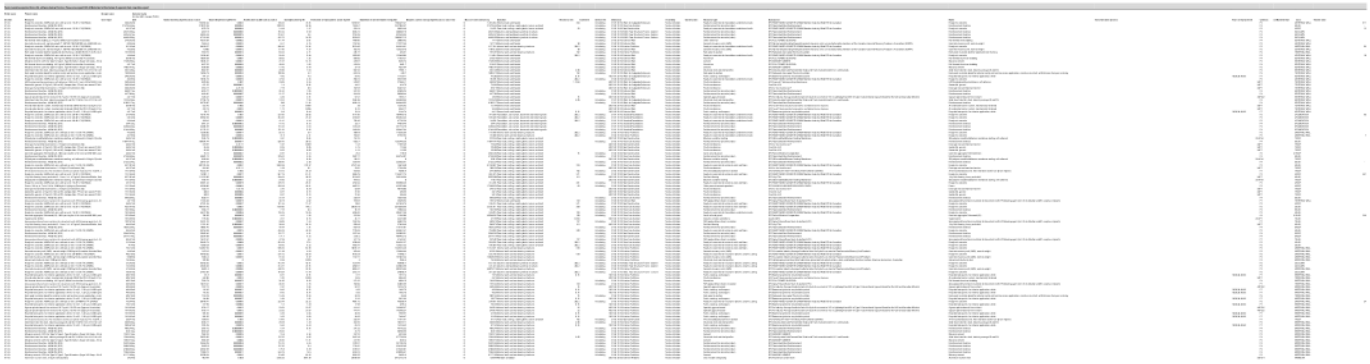
A1-A3 Product Stage	Yes	B2-B4 Use Stage	Yes
A4-A5 Construction Stage	Yes	C1-C4 End-of-Life Stage	Yes
D Beyond Building Life Cycle Stage (optional, not used for compliance)	No	Biogenic Carbon (optional, not used for compliance)	No

wbLCA Compliance Summary

Reduction required	**10%**
Reduction achieved (for compliance)	**12.7%**

Practitioner Information

Practitioner Name	Patrick Enright		
Date	1/1/2025		
These results have been created using the COV Embodied Carbon Guidelines version:	0.1		
Company	City of Vancouver	Phone Number	604-871-6158
		Email	patrick.enright@vancouver.ca



Total wbLCA Results

Environmental Impact Indicators		Intensity w/o park	Intensity w park
Global Warming Potential (kgCO2e)	5,414,636	361	313
Acidification Potential (kgSO2e) (optional)		-	-
Eutrophication Potential (kgNe) (optional)		-	-
Ozone Depletion Potential (kgCFC-11e) (optional)		-	-
Smog Potential (kgO3e) (optional)		-	-
Total Primary Energy (MJ) (optional)		-	-

wbLCA Results by Stage and Element

Results by Element (kgCO2e)

Results by Stage (kgCO2e)

Category	Element / Common Name	OmniClass name / Search term	OmniClass number	A1-A3	A4	A5	B3	B4-B5	C2	C3	C4	D	not biogenic carbon (optional)	ELEMENT TOTALS	% total	Element / Common Name	Notes on Elements
				Product			Use		End-of-Life			Beyond Building Life Cycle (optional)					
Substructure	**Foundations (required)**	Standard Foundations	21 13 10	202,764	8,097	-	-	9,984	878	-	-	-		219,134	4%	**Foundations**	does this really include beams?
	Below-grade Walls (optional)	Walls for Subgrade Enclosures	21 20 10	274,836	5,037	-	-	15,068	7,150	707	64	-		306,271	6%	Below-grade Walls (optional)	floor may include beams, and may include below-grade Floors (i.e. parkade floors)
	All other Substructure (optional)	N/A		-	-	-	-	-	-	-	-	-		-	0%	All other Substructure (optional)	
Shell	**Beams and Columns (required)**	Floor Structural Framing - Columns	23 13 10 30	340,516	9,384	-	-	-	10,234	904	-	-		370,913	7%	**Beams and Columns**	
	Floors (required)	Floor Construction	23 13 10	1,790,359	50,221	-	-	129,141	43,016	4,412	643	-		2,014,364	37%	**Floor**	
	Roofs (required)	Roof Construction	23 13 20	418,863	10,380	-	-	30,819	7,097	706	127	-		468,193	9%	**Roof**	
	Stairs (optional)	Stairs	23 13 30	-	-	-	-	-	-	-	-	-		-	0%	Stairs (optional)	
	Walls (required)	Exterior Walls	23 26 10	162,176	5,936	-	-	3,293	2,594	244	133	-		171,917	3%	**Walls**	
	Windows (required)	Exterior Windows	23 26 20	492,764	980	-	-	469,368	4,449	61	-	-		977,623	18%	**Windows**	
	All other Shell (optional)	N/A		-	-	-	-	-	-	-	-	-		-	0%	All other Shell (optional)	
Interiors (optional)	Interiors (optional)	Interior	23	830,106	25,470	-	-	39,777	20,581	1,959	151	-		868,103	16%	Interiors (optional)	
Services (optional)	Mechanical, Electrical, Plumbing (MEP) (optional)	Services	23	-	-	-	-	-	-	-	-	-		-	0%	Mechanical, Electrical, Plumbing (MEP) (optional)	
Equipment and Furnishings (optional)	Equipment and Furnishings (optional)	Equipment and Furnishings	25	-	-	-	-	-	-	-	-	-		-	0%	Equipment and Furnishings (optional)	
Special Construction and Demolition (optional)	Demolition (optional)	Demolition	23 30	-	-	-	-	-	-	-	-	-		-	0%	Demolition (optional)	
	All other Special Construction and Demolition (optional)	N/A		-	-	-	-	-	-	-	-	-		-	0%	All other Special Construction and Demolition (optional)	
Sitework (optional)	Sitework (optional)	Sitework	27	-	-	-	-	-	-	-	-	-		-	0%	Sitework (optional)	
	Unspecified OTHER (optional)	N/A		-	-	-	-	-	-	-	-	-		-	0%	Unspecified OTHER	
			SUB-STAGE TOTALS	4,470,482	122,682	-	-	707,167	103,514	9,733	1,118	-	-	5,414,636			
			% total	82%	2%	0%	0%	13%	2%	0%	0%	0%	0%				
				Product			Use		End-of-Life			Beyond Building Life Cycle (optional)	not biogenic carbon (optional)				
			STAGE TOTALS			4,593,084		707,167			114,385	-	-				
			% total			85%		13%			2%	0%	0%				

Results by Resource Category / Material (as available from LCA software)

Material	Sub-Category / Search term	Global Warming Potential (kgCO2e)	EC3 w/o park (kgCO2e/m²)	EC3 w park (kgCO2e/m²)	% total	Unit	Quantity	Material Intensity w/o park (unit/m²)	Material Intensity w park (unit/m²)	EC3 per unit (kgCO2e/unit)	Notes
Concrete	ready-mix	2,470,596	165	146	46%	m3	7,719	0.5	0.5	321	EC3 says BC average is 369 kgCO2e/m3, 'achievable' is 300 kgCO2e/m3
	concrete	2,020,440	175	155	38%	m3	6,301	0.6	0.5	280	EC3 says BC average is 369 kgCO2e/m3, 'achievable' is 300 kgCO2e/m3
Steel	steel bar	980,544	66	58	18%	kg	956,398	63.4	56.9	1.0	EC3 says Canadian average is 1.43 kgCO2e/kg, 'achievable' is 1.1 kgCO2e
	steel	1,110,410	74	65	21%	kg	905,006	60.7	57.9	1.1	EC3 says Canadian average is 1.69 kgCO2e/kg, 'achievable' is 1.1 kgCO2e
Insulation	rock wool insulation	22,998	2	1	0%	m2	3,544	0.2	0.2	6	EC3 says Canadian average is 3 kgCO2e/m2, conservative is 4.81 kgCO2e
	foam insulation	44,641	4	4	1%	m2	2,648	0.2	0.2	24	
Aluminum	Aluminum cladding	20,589	2	2	0%	m2	1,407	0.1	0.1	19	
Glass	curtain wall	977,645	65	58	18%	m2	3,424	0.2	0.2	286	glass is contained within aluminium curtain wall
Gypsum/Drywall/Plaster	gypsum	-	-	-	0%			-	-	-	
Plastics	plastic	-	-	-	0%			-	-	-	
Membranes	membrane	-	-	-	0%			-	-	-	
Wood	wood	-	-	-	0%			-	-	-	
Other	...Other	-	-	-	0%			-	-	-	
	...Other	-	-	-	0%			-	-	-	
	...Other	-	-	-	0%			-	-	-	
	...Other	-	-	-	0%			-	-	-	
	...Other	-	-	-	0%			-	-	-	

the following tables calculate EOI's by stage and element, for information only

wbLCA Results by Stage and Element - Intensity w/o parkade

Results by Element (kgCO2e/m²)

Results by Stage (kgCO2e/m²)

Category	Element / Common Name	OmniClass name	OmniClass number	A1-A3	A4	A5	B3	B4-B5	C2	C3	C4	D	not biogenic carbon (optional)	ELEMENT TOTALS	% total	Element / Common Name
				Product			Use		End-of-Life			Beyond Building Life Cycle (optional)				
Substructure	**Foundations (required)**	Standard Foundations	21 13 10	14	1	-	-	-	0	0	-	-	-	15	4%	**Foundations**
	Below-grade Walls (optional)	Walls for Subgrade Enclosures	21 20 10	18	1	-	-	1	0	0	0	-	-	20	6%	Below-grade Walls (optional)
	All other Substructure (optional)	N/A		-	-	-	-	-	-	-	-	-	-	-	0%	All other Substructure (optional)
Shell	**Beams and Columns (required)**	Floor Structural Framing - Columns	23 13 10 30	23	1	-	-	-	1	0	-	-	-	25	7%	**Beams and Columns**
	Floors (required)	Floor Construction	23 13 10	119	4	-	-	9	3	0	0	-	-	134	37%	**Floor**
	Roofs (required)	Roof Construction	23 13 20	28	1	-	-	2	1	0	0	-	-	31	9%	**Roof**
	Stairs (optional)	Stairs	23 13 30	-	-	-	-	-	-	-	-	-	-	-	0%	Stairs (optional)
	Walls (required)	Exterior Walls	23 26 10	11	0	-	-	0	0	0	0	-	-	11	3%	**Walls**
	Windows (required)	Exterior Windows	23 26 20	32	0	-	-	33	0	0	-	-	-	65	18%	**Windows**
	All other Shell (optional)	N/A		-	-	-	-	-	-	-	-	-	-	-	0%	All other Shell (optional)
Interiors (optional)	Interiors (optional)	Interiors	23	53	2	-	-	3	1	0	0	-	-	58	16%	Interiors (optional)
Services (optional)	Mechanical, Electrical, Plumbing (MEP) (optional)	Services	23	-	-	-	-	-	-	-	-	-	-	-	0%	Mechanical, Electrical, Plumbing (MEP) (optional)
Equipment and Furnishings (optional)	Equipment and Furnishings (optional)	Equipment and Furnishings	25	-	-	-	-	-	-	-	-	-	-	-	0%	Equipment and Furnishings (optional)
Special Construction and Demolition (optional)	Demolition (optional)	Demolition	23 30	-	-	-	-	-	-	-	-	-	-	-	0%	Demolition (optional)
	All other Special Construction and Demolition (optional)	N/A		-	-	-	-	-	-	-	-	-	-	-	0%	All other Special Construction and Demolition (optional)
Sitework (optional)	Sitework (optional)	Sitework	27	-	-	-	-	-	-	-	-	-	-	-	0%	Sitework (optional)
	Unspecified OTHER (optional)	N/A		-	-	-	-	-	-	-	-	-	-	-	0%	Unspecified OTHER
			SUB-STAGE TOTALS	298	9	-	-	47	7	1	0	-	-	361		
			% total	83%	2%	0%	0%	13%	2%	0%	0%	0%	0%			
				Product			Use		End-of-Life			Beyond Building Life Cycle (optional)	not biogenic carbon (optional)			
			STAGE TOTALS			356		47			4	-	-			
			% total			85%		13%			2%	0%	0%			

wbLCA Results by Stage and Element - Intensity w parkade

Results by Element (kgCO2e/m²)

Results by Stage (kgCO2e/m²)

Category	Element / Common Name	OmniClass name	OmniClass number	A1-A3	A4	A5	B3	B4-B5	C2	C3	C4	D	not biogenic carbon (optional)	ELEMENT TOTALS	% total	Element / Common Name
				Product			Use		End-of-Life			Beyond Building Life Cycle (optional)				
Substructure	**Foundations (required)**	Standard Foundations	21 13 10	12	0	-	-	-	0	0	-	-	-	13	4%	**Foundations**
	Below-grade Walls (optional)	Walls for Subgrade Enclosures	21 20 10	16	1	-	-	1	0	0	0	-	-	18	6%	Below-grade Walls (optional)
	All other Substructure (optional)	N/A		-	-	-	-	-	-	-	-	-	-	-	0%	All other Substructure (optional)
Shell	**Beams and Columns (required)**	Floor Structural Framing - Columns	23 13 10 30	21	1	-	-	-	1	0	-	-	-	22	7%	**Beams and Columns**
	Floors (required)	Floor Construction	23 13 10	106	3	-	-	8	3	0	0	-	-	118	37%	**Floor**
	Roofs (required)	Roof Construction	23 13 20	25	1	-	-	2	0	0	0	-	-	28	9%	**Roof**
	Stairs (optional)	Stairs	23 13 30	-	-	-	-	-	-	-	-	-	-	-	0%	Stairs (optional)
	Walls (required)	Exterior Walls	23 26 10	16	0	-	-	0	0	0	0	-	-	16	5%	**Walls**
	Windows (required)	Exterior Windows	23 26 20	28	0	-	-	29	0	0	-	-	-	58	18%	**Windows**
	All other Shell (optional)	N/A		-	-	-	-	-	-	-	-	-	-	-	0%	All other Shell (optional)
Interiors (optional)	Interiors (optional)	Interiors	23	47	1	-	-	2	1	0	0	-	-	52	16%	Interiors (optional)
Services (optional)	Mechanical, Electrical, Plumbing (MEP) (optional)	Services	23	-	-	-	-	-	-	-	-	-	-	-	0%	Mechanical, Electrical, Plumbing (MEP) (optional)
Equipment and Furnishings (optional)	Equipment and Furnishings (optional)	Equipment and Furnishings	25	-	-	-	-	-	-	-	-	-	-	-	0%	Equipment and Furnishings (optional)
Special Construction and Demolition (optional)	Demolition (optional)	Demolition	23 30	-	-	-	-	-	-	-	-	-	-	-	0%	Demolition (optional)
	All other Special Construction and Demolition (optional)	N/A		-	-	-	-	-	-	-	-	-	-	-	0%	All other Special Construction and Demolition (optional)
Sitework (optional)	Sitework (optional)	Sitework	27	-	-	-	-	-	-	-	-	-	-	-	0%	Sitework (optional)
	Unspecified OTHER (optional)	N/A		-	-	-	-	-	-	-	-	-	-	-	0%	Unspecified OTHER
			SUB-STAGE TOTALS	293	7	-	-	42	6	1	0	-	-	319		
			% total	92%	2%	0%	0%	13%	2%	0%	0%	0%	0%			
				Product			Use		End-of-Life			Beyond Building Life Cycle (optional)	not biogenic carbon (optional)			
			STAGE TOTALS			376		42			7	-	-			
			% total			85%		13%			2%	0%	0%			

FW: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183

From: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Sent: January 19, 2023 3:10:53 PM PST
Attachments: AGENDA UDI Exec Committee_Minister Rankin - Tues Sept 20 2022.pdf, 626117 - AssocDM Bullets - Meeting with UDI - Mar 15.pdf

Hi Zac,

Another last-minute request has been sent out by the MO for an MRK meeting on Tuesday, Jan 24, this one with the Urban Development Institute. The MO asked for bullets by the end of today, but "if not I think verbal will work too." I'll leave that up to you as I appreciate they are asking for the impossible.

Details are highlighted in the thread below.

Kind regards
Cory

From: Newman, Debbie OHCS:EX <Debbie.Newman@gov.bc.ca>
Sent: January 19, 2023 2:54 PM
To: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>; Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
Cc: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183
Importance: High

Hi there – here is some background on UDI… new MRK mtg request for Tues, Jan 24th @ 10 a.m. If it's possible for rough bullets to be pulled together by end of day then great. If not I think verbal will work too.
Let me know what you think and I'll eApp over if we're doing bullets.
Thank you!

From: Newman, Debbie OHCS:EX
Sent: Thursday, January 19, 2023 2:51 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: RE: Briefing Note CLIFF ID 636183

And the meeting I was thinking of contained an agenda from UDI but it might help the drafter. This would be Bindi, right?

From: Newman, Debbie OHCS:EX
Sent: Thursday, January 19, 2023 2:42 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: FW: Briefing Note CLIFF ID 636183

Here are bullets from Angela Cooke from March 2022 but I will look for something more recent. I know there was a briefing in the Fall w/UDI but not sure we did materials.

From: Wilkins, Molly <Molly.Wilkins@gov.bc.ca>
Sent: Thursday, January 19, 2023 2:40 PM
To: Newman, Debbie OHCS:EX <Debbie.Newman@gov.bc.ca>
Cc: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>; Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: Briefing Note CLIFF ID 636183

Either a pre-brief or materials needed in advance to the meeting- whatever works best for the DMO. meeting with CEO, Anne McMullin and Board Chair. Jan 24th 10:00-11:00am. Introductory meeting via MS Teams.

Housing-MO **Referral Slip for ID:636183** 2023/01/19

Log Type: **Briefing Note**	*Action:* **BN-Meeting Note**	*Due:* **2023/02/02**
Batch:	*Subaction:*	

Cassandra Smith
Urban Development Institute
Phone: 604-661-3032
Email: csmith@udi.org

Written:	2023/01/19	*Entered By:*	mwilkins
Received:	2023/01/19	*Resp Type:*	
Due:	2023/02/02		
Approved:		*Approved By:*	
Closed:		*File No.:*	

Branch Rsp: *X-Ref:*
Issue: *Drafter:*

Subject

Either a pre-brief or materials needed in advance to the meeting- whatever works best for the DMO. meeting with CEO, Anne McMullin and Board Chair. Jan 24th 10:00-11:00am. Introductory meeting via MS Teams.

Referral *Housing-MO -> Housing-MO*

From:	Housing-MO	*Sent:*	2023/01/19	*Status:*	Accepted	*Ref Action:*	Briefing Note
To:	Housing-MO	*Received:*	2023/01/19	*Reason:*		*Subaction:*	
Assign To:		*Completed:*		*Due:*		*File No.:*	

Referral *Housing-MO -> Housing-MO -> Deputy Minister of Housing*

From:	Housing-MO	*Sent:*	2023/01/19	*Status:*	Pending	*Ref Action:*	Briefing Note
To:	Deputy Minister of Housing	*Received:*		*Reason:*		*Subaction:*	
Assign To:		*Completed:*		*Due:*		*File No.:*	

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
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Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
www.udi.bc.ca

UDI Executive Committee Meeting with Minister Murray Rankin
Tuesday, September 20, 2022
9:20 am – 10:00 am
UDI Boardroom/Zoom

Agenda

1. **Welcome & Introductions**
    - 1.1. Roundtable Introductions
    - 1.2. Highlights from previous discussions
    - 1.3. Priorities for the Fall legislative Session

2. **Maximum Allowable Rent Increase for 2023**
    - 2.1. Impacts for new rental supply
    - 2.2. UDI Report – No Vacancy: Challenges & Opportunities for New Rental Housing Construction

3. **Other Discussion**

Cliff: 626117
Date Prepared: March 8, 2022

MINISTRY OF ATTORNEY GENERAL
Building and Safety Standards
MEETING BULLETS

PURPOSE: MEETING Bullets for Angela Cooke
Associate Deputy Minister

Meeting with: Urban Development Institute, Pacific (UDI) on March 15, 2022

Issue:
Introducing greenhouse gas (GHG) intensity targets to the BC Building Code

BACKGROUND

- UDI represents developers of condominiums, offices, or other large buildings.
- Most UDI members are in the Capital Region and Lower Mainland, so they are most concerned with policies that impact those regions.
    - Many UDI members are in the City of Vancouver, which uses the Vancouver Building By-Law (VBBL), not the BC Building Code (Code).
    - The VBBL has additional energy efficiency and GHG requirements compared to the Code.
    - UDI members want consistent requirements across jurisdictions.
- To date, local governments have used powers in the Local Government Act and Community Charter to incentivize lower-emission new buildings by requiring higher levels of energy efficiency via the BC Energy Step Code[1], but lowering them if a low-carbon energy system is installed, e.g., electric heat pump.
    - UDI supports this approach, as it gives developers flexibility to meet local requirements in the most cost-effective way for their project.
- Some builders are concerned that inconsistency among local government requirements or approaches can create confusion when working in multiple jurisdictions. Local requirements can also change during the years-long approvals or design phase of a building, which can impact its design and cost.
- Ministry staff are developing changes to the Code to establish requirements that will enable local governments to directly regulate GHG emissions from buildings. This meets a mandate letter commitment to enable local governments to set their own carbon pollution standards and the approach is consistent with ministerial direction[2].
- Concurrently, building regulations will also be amended to require buildings to be 20 per cent more energy efficient by the end of 2022, meeting a long-standing CleanBC commitment.
- Estimated timeline – both initiatives:
    - **Present:** Ministry staff develop draft Code language and drafting instructions for minor changes to the Building Act General Regulation
    - **Spring 2022:** Six weeks of public review for the Code language

[1] See Attachment 2 for an overview of the BC Energy Step Code.
[2] See Attachment 3 for AG DBN 621336 – Carbon Pollution Standards – AG signed.

    - **Summer/Fall 2022:** Prepare regulatory changes for deposit and coming into effect by end of 2022.
- Once in effect, local governments will be able to reference and enforce the new GHG tiers by amending their building or zoning bylaws.
- Many local governments have directed their staff to act quickly during this council term to reduce emissions wherever possible, including in the building sector.
- On March 10, 2022, UDI wrote to ministry staff, concerned that local governments may choose to implement GHG targets this summer. They would prefer these changes come later, such as January 2023.
- Although Code language will be available, local elections are scheduled for October 2022, and local governments typically avoid significant bylaw changes such as bringing in new GHG standards in the summer, leading up to elections.
- New local governments are expected to be formed in early 2023. UDI may feel this timeline creates uncertainty, as a new government may have different views.
- In consultation with UDI and other industry partners about their research priorities, ministry staff have procured and shared with UDI a significant volume of technical and costing analysis based on simulated buildings, to assess potential costs to comply with proposed standards and inform engagement.
- UDI requested even more analysis be procured and shared, but Ministry staff believe further analysis would not provide additional context. Staff recommended that industry analyze in-stream and recently finished projects, guided by the analysis, to understand potential "real-world" implications.

KEY MESSAGES

- We want to continue working with UDI to reduce operational carbon emissions from buildings without negatively impacting the development sector.
- These GHG tiers will build industry capacity and market readiness as we work towards the CleanBC Roadmap goal of zero-carbon new buildings by 2030.
- We are hoping Code language for GHG reductions will be deposited this summer so local governments can use that language to consult with their communities. Our local government partners advise it is unusual for local governments to pass substantive bylaw changes so close to their local elections in October.
- There will be time through summer and fall for local governments and industry to conduct further technical and costing analysis and community consultation.
- Local governments have their own ambitious climate goals, as does the Province. We have developed measures that our local government partners indicate provide an acceptable balance of stringency and flexibility.
- We appreciate how much builders and developers value consistency. The menu of four GHG tiers reflects consensus among industry, local governments, utilities, and other Energy Step Code Council[3] partners about the appropriate balance of flexibility and rigour to avoid infinite permutations of local requirements.
- We are grateful for UDI's ongoing participation and input in development of local government best practice guidance materials. Intended to support availability of

[3] See Attachment 2 for an overview of the Energy Step Code Council.

the new standards, these will emphasize the importance of regional coordination among local governments respecting requirements and processes.

Prepared by:
Hugo Wong
Policy Analyst
Building and Safety Standards
236 478 1406

Approved by:
Teri Collins
Assistant Deputy Minister
Office of Housing and Construction Standards
250-216-2218

Attachment(s)
Attachment 1: Biography of meeting attendees
Attachment 2: Overview of the BC Energy Step Code
Attachment 3: AG DBN 621336 – Carbon Pollution Standards – AG signed

Attachment 1: Biographies

Cassandra McColman, Director, Policy and Public Affairs

Cassandra McColman has worked at UDI since 2018, first in policy and research before rising to her current position in October 2021. She has a BA in International and Global Studies from Simon Fraser University.

Jeff Fisher, Vice President and Senior Policy Advisor

Jeff Fisher has worked at UDI since 2004. Prior to joining UDI, Fisher was a Senior Policy Advisor with the Association of Municipalities of Ontario. In this capacity, he was involved in numerous issues including Building Code reform, the development of a new Ontario Municipal Act, pension governance, labour issues and emergency services. Fisher has also worked in the Legislative Assemblies of Ontario and British Columbia and at the Canadian Urban Institute. He holds a Bachelor degree in Political Science from the University of Toronto and a Master in Urban Regional Planning from Queen's University.

- The Building and Safety Standards Branch (BSSB) has a long working relationship with Fisher, as he was involved with the creation of the Energy Step Code in 2017. He is a member of the Energy Step Code Council and has contributed to development of the GHG intensity targets being discussed today.

Mike Drummond, Vice President, Government Relations and Communications

Drummond leads the Urban Development Institute's corporate and public affairs team including communications, stakeholder relations, government affairs, and strategic planning.

Attachment 2: Overview of the BC Energy Step Code

The BC Energy Step Code builds energy efficiency into the fabric of a building (its walls, windows, doors, roof, etc.), and emphasizes certain concepts, such as minding the details of construction, reducing air leaks, and more cooperation between the builders and the design teams so a building can be made more energy efficient in a cost-effective way.

It requires builders to meet a specific energy efficiency target, but does not specify the materials and methods required to achieve them. That gives builders the flexibility to meet a target in a way that is affordable or practical for them. It also introduces quality assurance processes to validate the energy efficiency of a building.



Figure 1: This implementation timeline for the BC Energy Step Code shows that minimum energy efficiency requirements for buildings will rise over time.

The provisions of the BC Energy Step Code are located in Part 9.36. and 10.2.2.3. of Division B of the BC Building Code.

Policy rationale

The BC Energy Step Code previews the energy efficiency requirements of the future and gives local governments and builders the chance to learn and adapt to these changes far in advance before these changes become mandatory.

It was introduced in 2017, with the goal that by 2022 all new buildings would be more energy efficient as a baseline requirement (see Figure 1). Over time, the Lower Steps will fall away, so that by 2032, all buildings will meet the top Step (Step 4 for large buildings and Step 5 for small buildings). This approach will be replicated when creating new greenhouse gas emissions requirements.

The Energy Step Code Council

The Energy Step Code Council, an advisory body, meets at least quarterly and supports local governments and industry as they implement the BC Energy Step Code. It serves as a “bridge” between governments, industry, local governments, and utilities, to identify and resolve implementation issues, provide support and resources, and ensure everyone uses the regulation prudently. UDI is a founding member of the Council.

Cliff: 621336
Date Prepared: October 1, 2021
Date Decision Required: December 20, 2021

MINISTRY OF ATTORNEY GENERAL
OFFICE OF HOUSING AND CONSTRUCTION STANDARDS
DECISION BRIEFING NOTE

PURPOSE: For DECISION of David Eby, QC
Attorney General and Minister Responsible for Housing

ISSUE:
Balancing flexibility and consistency in carbon pollution standards for new buildings.

DECISION REQUIRED / RECOMMENDATION:
Option 1 (Recommended). Establish tiered carbon pollution requirements that local governments may choose to adopt and enforce in the short term with the number of available tiers reducing incrementally over time, starting in 2024.

SUMMARY:
- Ministry staff seek direction about the degree of flexibility local governments should be given as part of proposed regulation of carbon pollution from new buildings.
- The Ministry Mandate Letter indicates that enabling local governments to implement their own standards is desirable, however, Ministry staff are aware of concerns that opt-in tiered standards can create inconsistency and confusion in the sector, which can negatively impact affordability and sector productivity.

BACKGROUND:
The Ministry Mandate Letter commits to "supporting local governments to set their own carbon pollution performance standards for new buildings." Ministry staff received direction in February 2021 to develop Provincial building regulations for local governments to voluntarily adopt, rather than enabling them to develop their own (Attachment 1). Ministry staff have been consulting with local government, industry, utility, and provincial government stakeholders on options for the proposed regulation and anticipate recommendations for the Minister's consideration in the coming months.

As part of the CleanBC Roadmap 2030 (Roadmap), the Province announced a commitment to zero carbon new buildings as a minimum requirement by 2030. Ministry staff anticipate the carbon pollution standard under development for local governments will serve as the model for the Provincial commitment. The goal of zero carbon is assumed to mean an all-electric or renewable natural gas building, which is as close to zero carbon as possible using currently available energy sources.

Stakeholders have indicated support for a tiered approach to carbon pollution standards, similar to the *Energy Step Code*, with universal support[1] for a "measure-only" first tier[2] and incremental performance levels between current industry practice and near zero carbon construction thereafter. A tiered approach aligns with the Roadmap commitment to establish carbon pollution requirements that transition incrementally

[1] Notably, Canadian Home Builders Association-BC and Urban Development Institute requested it.
[2] This tier involves a calculation based on the intended design of the structure and included equipment. This will not require physical testing of the structure (e.g., airtightness testing. Because no particular result must be achieved local governments and industry can optimize their interaction in a low consequence environment.

toward zero carbon in 2024, 2027, and 2030. While 2022 is not identified in the Roadmap, introducing the regulatory changes well in advance of enforceable minimum standards supports market transformation and industry and local government readiness.

Local government legislation gives them authority to determine how they administer bylaws and the *BC Building Code* (Code). Because local governments cannot be required to enforce these standards, a balance is needed between Provincial requirements flexible enough that local governments see them as viable, and a path for builders that evolves to a consistent standard.

This subject matter falls under concurrent authority given to local governments by the *Local Government* Act and *Community Charter*. Pursuant to these Acts, local governments may exercise their bylaw making powers for purposes including the reduction of greenhouse gas emissions. Several local governments in the Lower Mainland and Southern Vancouver Island have already established carbon pollution policies through planning and land-use authorities. These are outside the *Building Act* restrictions on local building requirements. Under the *Building Act*, having regulated a building activity in the Code otherwise renders a local government's contradictory or more stringent standard for the same building activity of no effect.

DISCUSSION:

A tiered approach to carbon pollution standards modelled on the *Energy Step Code* is a compromise between the interest of local governments in flexibility and the interest of industry in consistency. It would provide several tiers that local governments could voluntarily require in bylaws or policies. Over time, minimum provincial requirements would come into force, reducing the number of tiers available and ensuring that all communities are subject to a consistent minimum requirement.

The success possible with a tiered approach modelled on the *Energy Step Code* is demonstrated by the significant number of local governments that adopted it prior to the provincial minimum in 2022. This early adoption has supported market capacity for the 2022 requirements, which improves the likelihood of success when minimum provincial requirements come into force.

It is also an endorsement of the Energy Step Code's degree of flexibility. Pursuant to local government legislation, local governments choose if and how to enforce the Code. With too few tiers, local governments are incented to continue using authorities derived from outside the *Building Ac*t, increasing the variability of requirements among jurisdictions. Alternatively, local governments may elect not to enforce requirements for the subject matter at all.

Industry stakeholders, such as the Homebuilders' Association of Vancouver (HAVAN), have raised concerns with a voluntary tiered approach creating a patchwork of requirements if each local government selects different tiers. This patchwork creates confusion for builders which is believed to lead to delays and increased project costs, although this assumption has not been quantified.

Any of the proposed options has the potential to achieve the Province's commitment to zero carbon new buildings as a minimum requirement by 2030. s.13

s.13

INDIGENOUS PEOPLES CONSIDERATIONS:
The restriction of local governments' ability to implement contradictory building requirements under Section 5 of the *Building Act* and Section 2.2(3) of the *Building Act General Regulation* does not apply to Treaty First Nations. Specific consultation with Indigenous communities and Treaty First Nations is not considered to be within scope of this initiative.

GBA+ OR DIVERSITY AND INCLUSION IMPLICATIONS: None identified.

OPTIONS:
Option 1 (Recommended): Establish tiered carbon pollution requirements that local governments may choose to adopt and enforce in the short term with the number of available tiers reducing incrementally over time, starting in 2024. The standard may start with as many as 4 performance tiers, which would be reduced over time as the provincial minimum transitions towards a zero-carbon tier.

	TIER 1	TIER 2	TIER 3	TIER 4
2022	✓ Provincial Minimum*	✓Available Provincial Standard	✓Available Provincial Standard	✓Available Provincial Standard
2024	× Not an Available Provincial Standard	✓ Provincial Minimum*	✓Available Provincial Standard	✓Available Provincial Standard
2027	× Not an Available Provincial Standard	× Not an Available Provincial Standard	✓ Provincial Minimum*	✓Available Provincial Standard
2030	× Not an Available Provincial Standard	× Not an Available Provincial Standard	× Not an Available Provincial Standard	✓ Provincial Minimum*

**subject to local government authority to determine how and if the Code is administered.*

Pros:

- s.13
-
-
-

Cons:

- s.13

Option 2: s.13

s.13

Option 3: s.13

s.13

OTHER MINISTRIES IMPACTED/CONSULTED:

Ongoing consultation with Ministry of Environment (Climate Action Secretariat), Ministry of Energy, Mines, and Low Carbon Innovation, and Ministry of Municipal Affairs.



DATE: December 15, 2021

Richard J. M. Fyfe, QC
Deputy Attorney General and
Deputy Minister Responsible for Housing

Recommended Option APPROVED

DATE: December 16, 2021

David Eby, QC
Attorney General and
Minister Responsible for Housing

Prepared by:
Tiffany Warkentin
Manager, Policy and Regulation
Building and Safety Standards Branch
250 883-1584

Approved by:
Cheryl May
Assistant Deputy Minister
Office of Housing and Construction Standards
250 812-3345

Attachments (1)

1. *613094 AG DBN – Supporting LGs Establishing Carbon Pollution Standards*

Attachment 1

Cliff: 613094
Date Prepared: January 26, 2021
Date Decision Required: February 28, 2021

MINISTRY OF ATTORNEY GENERAL
BUILDING AND SAFETY STANDARDS BRANCH
DECISION BRIEFING NOTE

PURPOSE: For DECISION of David Eby, QC
Attorney General and
Minister Responsible for Housing

ISSUE: Options for Fulfilling Mandate to Support Local Governments to Establish Carbon Pollution Standards for New Construction.

RECOMMENDATION:
Option 1: Establish carbon pollution requirements through a provincial building regulation for local governments to voluntarily apply.

SUMMARY:
- In November 2020, the Minister's Mandate Letter included direction to build on the government's work to require cleaner buildings by supporting local governments to set their own carbon pollution performance standards for new buildings.
- This Mandate Letter commitment can be satisfied by either establishing provincial standards for local governments to voluntarily adopt, or by allowing local governments the authority to establish their own requirements without input or oversight by the Province.

BACKGROUND:
The Minister's Mandate Letter provides direction to "build on our government's work to require new buildings and retrofits to be more energy efficient and cleaner by supporting local governments to set their own carbon pollution performance standards for new buildings."

The *Building Act* limits Local Authorities to establish their own technical building requirements for carbon pollution and energy efficiency, requiring them to use the voluntary Energy Step Code in the BC Building Code (BCBC), which addresses energy efficiency but not carbon pollution.

DISCUSSION:
Supporting local governments to establish their own carbon pollution standards can be accomplished by one of two ways under the *Building Act*: 1) establish requirements through a provincial building regulation for local authorities to voluntarily apply; or 2) establish the regulation of greenhouse gas emissions by local authorities as an unrestricted matter under the *Building Act.*

Establishing provincial standards for carbon pollution through a provincial building regulation would address the specific requests of local governments and UBCM to take this specific action, although provincial standards also limit local governments to the options made available in regulation. The process of establishing a standardized provincial approach would engage a full range of stakeholders, including local governments, energy utilities, developers and homebuilders. s.13

s.13

Establishing the regulation of greenhouse gas emissions as an unrestricted matter under the *Building Act* would provide local governments with maximum flexibility to establish their own standards. s.13

s.13

INDIGENOUS PEOPLES CONSIDERATIONS:

The restriction of local governments' ability to regulate carbon pollution under Section 5 of the *Building Act* and Section 2.2(3) of the *Building Act General Regulation* does not apply to Treaty First Nations. Specific consultation with Indigenous communities and Treaty First Nations is not considered to be within the appropriate scope of this initiative.

OPTIONS:

Option 1 (Recommended): Establish carbon pollution requirements in a provincial building regulation for local governments to voluntarily apply.

Option 2: s.13

s.13

Cliff: 613094
Date Prepared: January 26, 2021
Date Decision Required: February 28, 2021

OTHER MINISTRIES IMPACTED/CONSULTED:

- Ministry of Environment (Climate Action Secretariat)
- Ministry of Energy, Mines, and Low Carbon Innovation
- Ministry of Municipal Affairs



DATE:

February 10, 2021

Richard J. M. Fyfe, QC
Deputy Attorney General and
Deputy Minister Responsible for Housing

OPTION _1_ APPROVED

DATE:

February 22, 2021

David Eby, QC
Attorney General and
Minister Responsible for Housing

Prepared by:
Zachary May
Director, Strategic Policy
Building and Safety Standards Branch
778-679-9641

Approved by:
Cheryl May
A/Associate Deputy Minister
Housing, Construction Standards, and Multiculturalism

ALERT - eApprovals Item ID: 65576 - Item Forwarded - Due 2023-01-20

From: JPSS eApprovals <donotreply@sp.gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: January 20, 2023 9:00:50 AM PST

Scott, Cory OHCS:EX [Assignee] forwarded an eApprovals item to May, Zachary for action

Comment: Hi Zac, meeting bullets for MRK mtg with UDI, due today. Please pass around as required, thanks!

#: 636183

Title: MRK mtg bullets for mtg w Urban Development Institute (UDI) on Jan 24

Full Name:

Due Date: 1/20/2023

Category: Briefing Note - Meeting Note

Go to item...

RE: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183

From: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>, Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>
Cc: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Sent: January 20, 2023 9:03:46 AM PST

Hi everyone,

Just a heads up that the MO has now requested formal bullets and I just sent the eApp to Zac. Please compile the bullets in the eApp and pass around as required. They are hoping to have this back, ADM approved, by the end of the day.

Thanks for everyone's speedy replies!

Kind regards
Cory

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: January 20, 2023 8:55 AM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>; Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>
Cc: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Subject: RE: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183

I have just added some bullets into Jessica's content.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Sent: Friday, January 20, 2023 8:34 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>
Cc: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Subject: RE: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183

Hi Cory – I've pulled a few bullets if they're helpful context.

Cheers
Jessica

General

- The Urban Development Institute (UDI) is a non-profit association of the development industry in British Columbia (B.C.). Its mandate is to promote efficient urban growth, good planning and development practices, transit investment, affordable housing, and high quality commercial and industrial developments.

- UDI is often invited to participate in provincial consultations as representatives of B.C.'s development industry.

Related Engagement

- The Ministry consults with UDI on numerous initiatives related to housing and construction including, for example:
  - Residential rental tenure zoning (2018)
  - Development Approvals Process Review – stakeholder consultation (2019)
  - Proposed amendments to the *Local Government Act* and *Vancouver Charter* related to pre zoning and development finance (work underway)
  - **Proposed amendments to the BC Building Code related to energy efficiency and carbon pollution – stakeholder consultation in fall 2022 and regulation anticipated by end of January 2023**

- UDI is also a member of MUNI's Development Finance Review Committee, which is a multi stakeholder group chaired by the ministry that provides advice related to development finance
- UDI is also a member of the Ministry's Energy Step Code Council, a multi-stakeholder advisory body providing feedback and advice on the development of CleanBC energy efficiency and carbon pollution requirements for buildings.

Key issues:

Building Code

- UDI is generally supportive of improving standards in the BC Building Code, but has noted the importance of aligning Provincial and Local Government policies related to buildings.
- UDI has raised issues related to BC Hydro permits and fees for new developments, and the Ministry is facilitating a workshop in February for BC Hydro to present solutions to reduce costs and timelines for developers.

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: January 20, 2023 6:50 AM
To: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>; Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Cc: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Subject: Re: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183

Goes and Jessica may also have some items. Maybe a call with all three of us this morning to brief… Bindi?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, January 20, 2023 6:48:15 AM
To: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
Cc: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Subject: Re: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183

Hi Cory,

Just catching this now. I can provide a verbal briefing. Is that to Bindi?

Also, can you track down the note prepared for Bonnie's meeting with UDI in November for context? There were some housing issues in that note we should flag.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
Sent: Thursday, January 19, 2023 3:10:53 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Subject: FW: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183

Hi Zac,

Another last-minute request has been sent out by the MO for an MRK meeting on Tuesday, Jan 24, this one with the Urban Development Institute. The MO asked for bullets by the end of today, but "if not I think verbal will work too." I'll leave that up to you as I appreciate they are asking for the impossible.

Details are highlighted in the thread below.

Kind regards
Cory

From: Newman, Debbie OHCS:EX <Debbie.Newman@gov.bc.ca>
Sent: January 19, 2023 2:54 PM
To: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>; Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
Cc: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: New MRK briefing on Urban Development Institute (UDI) FW: Briefing Note CLIFF ID 636183
Importance: High

Hi there – here is some background on UDI… new MRK mtg request for Tues, Jan 24th @ 10 a.m. If it's possible for rough bullets to be pulled together by end of day then great. If not I think verbal will work too.
Let me know what you think and I'll eApp over if we're doing bullets.
Thank you!

From: Newman, Debbie OHCS:EX
Sent: Thursday, January 19, 2023 2:51 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: RE: Briefing Note CLIFF ID 636183

And the meeting I was thinking of contained an agenda from UDI but it might help the drafter. This would be Bindi, right?

From: Newman, Debbie OHCS:EX
Sent: Thursday, January 19, 2023 2:42 PM
To: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>
Subject: FW: Briefing Note CLIFF ID 636183

Here are bullets from Angela Cooke from March 2022 but I will look for something more recent. I know there was a briefing in the Fall w/UDI but not sure we did materials.

From: Wilkins, Molly <Molly.Wilkins@gov.bc.ca>
Sent: Thursday, January 19, 2023 2:40 PM
To: Newman, Debbie OHCS:EX <Debbie.Newman@gov.bc.ca>
Cc: Alexander, Jessica C OHCS:EX <Jessica.Alexander@gov.bc.ca>; Papadopoulos, Nikki OHCS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: Briefing Note CLIFF ID 636183

Either a pre-brief or materials needed in advance to the meeting- whatever works best for the DMO. meeting with CEO, Anne McMullin and Board Chair. Jan 24th 10:00-11:00am. Introductory meeting via MS Teams.

Housing-MO **Referral Slip for ID:636183** 2023/01/19

Log Type: **Briefing Note**	*Action:* **BN-Meeting Note**	*Due:* **2023/02/02**
Batch:	*Subaction:*	

Cassandra Smith
Urban Development Institute
Phone: 604-661-3032
Email: csmith@udi.org

Written:	2023/01/19	*Entered By:*	mwilkins
Received:	2023/01/19	*Resp Type:*	
Due:	2023/02/02		
Approved:		*Approved By:*	
Closed:		*File No.:*	

Branch Rsp: *X-Ref:*
Issue: *Drafter:*

Subject

Either a pre-brief or materials needed in advance to the meeting- whatever works best for the DMO. meeting with CEO, Anne McMullin and Board Chair. Jan 24th 10:00-11:00am. Introductory meeting via MS Teams.

Referral *Housing-MO -> Housing-MO*

From:	Housing-MO	*Sent:*	2023/01/19	*Status:*	Accepted	*Ref Action:*	Briefing Note
To:	Housing-MO	*Received:*	2023/01/19	*Reason:*		*Subaction:*	
Assign To:		*Completed:*		*Due:*		*File No.:*	

Referral *Housing-MO -> Housing-MO -> Deputy Minister of Housing*

From:	Housing-MO	*Sent:*	2023/01/19	*Status:*	Pending	*Ref Action:*	Briefing Note
To:	Deputy Minister of Housing	*Received:*		*Reason:*		*Subaction:*	
Assign To:		*Completed:*		*Due:*		*File No.:*	

UDI Meeting Notes

From:	Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
To:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc:	King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Sent:	January 20, 2023 9:23:08 AM PST
Attachments:	633553-ADM-MBN- OHCS UDI Follow up to Oct 3 Meeting.pdf

Hi Zac,

I've tracked down the Oct 28 follow-up meeting between Bonnie and UDI, but cannot yet find any materials for the original Oct 3 meeting. I'll keep looking and let you know…

Cory Scott | Documents Coordinator
Assistant Deputy Minister Bindi Sawchuk
Housing, Land Use & Policy Division
Ministry of Housing
Ph: 778-405-3465 Email: Cory.Scott@gov.bc.ca

Cliff: 633553
Date Prepared: October 27, 2022

MINISTRY OF ATTORNEY GENERAL AND MINISTRY RESPONSIBLE FOR HOUSING OFFICE OF HOUSING AND CONSTRUCTION STANDARDS MEETING BRIEFING NOTE

PURPOSE: MEETING Note for Bonnie Ruscheinski,
A/Assistant Deputy Minister
Office of Housing and Construction Standards

MEETING WITH: Jeff Fisher, Vice President and Senior Policy Advisor, Urban Development Institute – Pacific (UDI) on October 28, 2022, at 11 a.m.

ISSUE:

UDI has concerns about proposed opt-in operational carbon reduction standards for new construction.

KEY MESSAGES:

- We are grateful for UDI's continuing contributions to standards development that further our goals for cleaner, more energy efficient building.
- We know consistent local implementation is important to the development industry. UDI's participation in developing best practices to support local governments to effectively implement these new changes is welcome.
- While our stated goal is to complete this regulatory change before the end of the year, we are inviting feedback to ensure that we have a thoughtful plan for implementation.
- Building and Safety Standards Branch (BSSB) staff are looking forward to discussing these changes with your members on November 2, 2022.

BACKGROUND:

- Government is committed to making all new buildings 20 per cent more energy efficient by 2022, and introducing an operational carbon pollution standard (CPS) for local government opt-in.
- The CPS will be implemented like the BC Energy Step Code, so local governments can opt into any of four stringency levels.
    - To meet zero-carbon new construction commitments by 2030, the minimum standard will increase in stringency, reducing available opt-in levels, in 2024, 2027, and 2030 as described in the CleanBC Roadmap to 2030.
- UDI mainly represents developers of large buildings in the Lower Mainland and Vancouver Island and supports cleaner, more efficient new buildings generally.
- UDI has shared a draft copy of their feedback to the public review of the proposed changes to the BC Building Code (BCBC) in advance of this meeting (see Attachment).
- UDI advocates for delaying implementation of these changes on the basis of:
    1. Impacts to local governments' ability to achieve impending housing targets.
    2. Absence of decision from the BC Utilities Commission (BCUC) on FortisBC's renewable natural gas (RNG) tariff proposal and corresponding uncertainty

about how or if local governments will recognize this decarbonized fuel source when implementing the new standards.
3. Absence of a clear plan from BC Hydro to address high extension (of service) fees and tier two rates, staff capacity to process new developments' requests for services, and potential shortfalls in its generating capacity.
4. Insufficient time for local governments to prepare for the changes and the potential implications for instream permit applications.

In addition to the request for delay, UDI requests:

A. Explicit provincial direction to local governments about how they must implement and enforce these standards.
B. Even more detailed and granular costing analysis and establishment of a reporting program to track actual capital costs of high-performance buildings.
C. Direct provincial intervention to improve the availability of heat pumps and other high-performance technologies in BC.
D. Development of comparable requirements for public sector buildings.

Costing:

- BSSB has published detailed estimates illustrating that reducing carbon emissions from buildings can be affordable, especially if all developers will be required to meet the same requirements. However, the analysis was based on simulations of hypothetical buildings, not actual buildings. The development industry will need to conduct their own case studies and analysis to determine the most cost-effective ways to meet new code requirements for individual projects.

Renewable natural gas (RNG):

- A decision on FortisBC's proposal before the BCUC is not anticipated before 2023.
- Per the *Building Act*, building regulations, including the BCBC, have the same force and effect as a local government bylaw. Local governments choose how and if to administer and enforce it.
- The proposed CPS does not limit use of RNG. However, it also does not require local governments to accept it.
- After a request from FortisBC that the Province require local governments to recognize RNG in their enforcement of the CPS, ADM Les MacLaren, Ministry of Energy, Mines, and Low Carbon Innovation, conferred with the Ministry of Municipal Affairs and confirmed the Province has no appetite to interfere with local governments' autonomy in this regard.

Consistency:

- A single province-wide standard would not accommodate differing states of readiness among and within regions to implement a CPS.
- By offering a limited number of CPS levels for local governments to choose from, we honour our mandate to support local governments to set their own standards while limiting the impact of potential short-term inconsistencies.
- Best practice implementation guidance for local governments has been developed and will be refined based on public review feedback. We respect local governments' autonomy to administer and enforce the BCBC.

- A peer network for local governments to coordinate and collaborate on matters including implementation has been established through the Energy Step Code Council.
- BSSB will continue to work through the Energy Step Code Council to develop best practice guidance for local governments that addresses the concerns of UDI and other industry stakeholders. This use of voluntary guidelines endorsed by all stakeholders, while not legally enforceable, has been effective in informing local government implementation policies and minimizing negative outcomes for the development industry.

INDIGENOUS PEOPLES CONSIDERATIONS:

- This meeting does not directly impact indigenous peoples. Any lessons learned about effective energy efficiency or and carbon regulation will be included in future indigenous engagement on the topic.

GBA+ OR DIVERSITY AND INCLUSION IMPLICATIONS:

- There are no direct or indirect GBA+ or diversity and inclusion implications identified at this time.

OTHER MINISTRIES IMPACTED/CONSULTED:

- Ministry of Energy, Mines and Low Carbon Innovation (Ongoing)
- Ministry of Environment and Climate Change Strategy – Climate Action Secretariat (Ongoing)

PREPARED BY:
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Senior Policy Analyst
Building and Safety Standards Branch
236 478 1406

APPROVED October 27, 2022, BY:
Zachary May
Executive Director
Building and Safety Standards Branch
778-679-9641

ATTACHMENT:
Draft UDI Response to ESC Regulatory Changes 2022

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DRAFT

November 4, 2022

Zachary May
Executive Director
Building Safety & Standards Branch (BSSB)
Office of Housing and Construction Standards (OHCS)
Ministry of Housing
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2

Dear Mr. May:

Re: UDI Response to Public Review of Energy Efficiency & Greenhouse Gas (GHG) Emissions Proposals for the 2018 B.C. Building Code (BCBC)

The Urban Development Institute (UDI) would like to thank you and BSSB staff for presenting the proposed changes to Provincial energy efficiency requirements, the amendments to *Energy Step Code* (*ESC*), and the Regulation that would empower local governments to establish GHG emission restrictions for new buildings to our membership at our November 2, 2022 *BC Building Code Proposals - What You Need To Know Webinar*.

In addition to the *Webinar*, we have reviewed the materials provided by BSSB on the proposed Regulation. UDI is concerned about the December timeframe for the implementation of it as well as some issues that still need to be addressed in the proposed *Provincial policy bulletin for cleaner, more energy efficient new construction* (*Best Practices Bulletin*) and other supporting documents for local governments.

Need for Delay of the Implementation of the Regulation

We recommend delaying the implementation of the Regulation as there are a number of issues that need to be further addressed, including potential housing legislation, a critical B.C. Utilities Commission (BCUC) decision on Renewable Natural Gas (RNG) and several BC Hydro issues, which are barriers to building electrification. More notice and communication regarding the changes is also needed for the industry.

Potential Provincial Housing Requirements for Local Governments

In a CBC Metro Matters interview with Premier-Designate David Eby, the issue of upcoming "… *legislation on housing targets and forcing municipalities to act* …," was discussed. While UDI has been a long-standing advocate of this type of approach to address housing supply and affordability issues, it is not known what requirements will be imposed on local governments.

If the OHCS Regulation is approved in December, local governments will be proceeding with consultations and making decisions on potentially significant changes to their energy efficiency and GHG emission reduction policies. If they are excessive, the cost impacts could undermine their ability to meet future Provincial housing requirements. Fully understanding these expectations would be critical information for local governments as they establish the *ESC* step and GHG reduction steps, and many would likely proceed more cautiously if these requirements were understood. ***UDI recommends that the Government wait until details about future legislated housing delivery requirements and regulations are released before proceeding with the proposed regulatory changes to the 2018 BCBC. When it is announced, the Best Practices Bulletin needs to reference the changes and how they might impact the new GHG emission powers being offered to local governments.*** This issue is particularly important given that under the *Best Practices Bulletin* there will be no limits on local governments in establishing *ESC* requirements and GHG reduction requirements (i.e., they can mandate the highest step for both without providing any incentives).

Renewable Natural Gas

There is also little clarity on another key issue for the GHG proposals – how RNG will be addressed. As noted in the *Draft Building Carbon Pollution Standards for Part 3 buildings in British Columbia* Report, "*… there is no mechanism available … to ensure low-carbon energy will be used for the life of the building*." We are awaiting a BCUC decision on whether strata corporations can be bound to RNG contracts if they use natural gas. Local governments are concerned that stratas can switch to less expensive regular natural gas even if developers sign contracts for RNG. This could be why the language in the documentation provided by OHSC was confusing regarding the status of RNG. Wording in the *Best Practices Bulletin* seems to give local governments potentially the option of disallowing the use of RNG, although the Office has indicated that the new Regulation is to be fuel neutral. ***UDI recommends that the Government wait until the BCUC determines if strata councils can be bound by RNG contracts before proceeding with the proposed regulatory changes to the 2018 BCBC.***

BC Hydro Issues

Having an RNG option is critical to our members because there have been ongoing issues with BC Hydro that would be further exacerbated by new building electrification policies (and electrical vehicle charging requirements, which are likely already mandated by local governments who would adopt the *Building Carbon Pollution Standard*), including:

- BC Hydro's electrical extension fees policy is still in place, which BSSB rightly notes results in some "*… developers needing to pay significantly higher extension fees (i.e., the cost of new electrical service) for larger electrical services …,"* that *"… can be difficult to predict*;"
- BC Hydro's Tier 2 rates are still in place, which financially penalizes fully electrified buildings;
- There are staffing shortages at BC Hydro in regions such as the Capital Regional District that are delaying the delivery of housing; and
- Although, BC Hydro has indicated to BSSB that they will have the generating capacity to meet the electric vehicle charging and building electrification requirements for new and existing buildings, there are still issues with the capacity of local distribution. We are hearing from our

members that there have been several reports in the Fraser Valley, especially Langley, regarding brownouts and a shortage of electricity. This is exacerbated by the lack of integration between BC Hydro and local governments regarding long range area planning in which decisions are being made about where future growth will be located in communities.

UDI recommends that the Government delay the implementation of the proposed regulatory changes to the 2018 BCBC until here is an understood plan in place to address these hydro infrastructure issues.

These issues also need to be identified in the Best Practices Bulletin. Currently, the only one specifically addressed in the *Bulletin* is the extension fees, and the solutions offered to local governments would be difficult for them to implement. Revising the electrical utility extension fees in utility tariffs is beyond their purview. It is up to the Province, BC Hydro and the BCUC to resolve this problem, as are the issues regarding RNG (see above). It is doubtful that the recommendation to establish a local building electrification fund will be utilized by municipalities as no details are provided on how it would work, and the measure will likely be considered a downloading of Provincial costs and responsibilities onto local governments.

OHCS needs to recommend that local governments discuss with BC Hydro the state of electrical infrastructure in the growth areas of their communities to assess how much load is available before making decisions on GHG reduction targets (and electric vehicle charging standards). Similarly, local governments on go forward basis need to closely work with BC Hydro on Official Community Plans and Area Plans to ensure the utility understands what infrastructure is needed across the municipality and in certain growing areas. This suggestion could also be included in the *Best Practices Bulletin*. Municipalities should also be encouraged to enquire about potential BC Hydro staffing challenges that could slow reviews of new developments as well.

Notice

Despite the efforts of BSSB, we are also concerned about the lack of knowledge in the industry in municipal jurisdictions that have not adopted the *ESC* (especially outside the Lower Mainland and the Capital Regional District) regarding the proposed regulation, which was just released in late September, and its impact on projects. The new Regulation will take immediate effect for those submitting building permit applications. Many will likely be surprised by the new Provincial energy efficiency requirements. – especially those with Part 3 projects

Even in jurisdictions with the *ESC* in place, there is another concern for Part 3 commercial builders the proposed changes to the Provincial energy efficiency requirements, which will immediately increase for Step 2 for office and retail projects in December. Designers and contractors have been using the *ESC* for guidance, and now may have to make adjustments to projects. This is especially problematic for Part 3 builders who have been potentially designing their buildings for years. In addition to delaying the approvals for their projects, there will be added costs to resubmit their designs to achieve the higher energy efficiencies.

While we recognize that this problem occurs with every code cycle, it was not clear how the Province would mesh the *ESC* with Federal codes, and the window between the notice of the changes on September 23rd and the implementation of them in December is a much smaller than previous code cycles.

UDI recommends that implementation of the proposed regulatory changes to the 2018 BCBC be delayed allowing time for designers to adjust projects, and that the Province have an extensive communications outreach program to builders and their design/construction teams about the Provincial energy efficiency requirements.

Best Practices Bulletin/Presentations

More information and direction are needed in the *Best Practice Bulletin* and presentations to guide local governments and builders on other matters. From an industry perspective, ***stronger language is needed than "… local governments are advised …," and clarity is needed regarding what steps will be taken if municipalities do not follow the Bulletin or advice from the Province (and Energy Step Code Council)***. Issues have occurred with some local governments already proceeding now to the highest *ESC* step with zero carbon requirements.

Timing of Municipal Requirements & Instream Protection

The timing of when municipal requirements can be imposed on builders is not clear. It is stated in the *Bulletin* that "*… local governments are advised to notify industry that they will be enforcing them at least 6 months prior to requirements coming into effect*." However, in Episode 5, a longer notice period is endorsed: "*… a six to 12-month notice period for local industry is strongly recommended, depending on the stringency of the carbon requirements being considered*." ***UDI agrees with the longer notice period (12 months) – especially if local governments move to the highest ESC step as well as implementing stringent GHG emission reduction requirements***.[1]

Clarity is also needed regarding how these timeframes are coordinated with municipal consultations with industry. ***Ideally there are extensive discussions with industry prior to local governments determining (and providing notice regarding) what ESC and GHG reduction targets they want to mandate for builders – especially if local governments only need to provide six months notice.***

Although there is stronger language in Episode 5, UDI is also disappointed that BSSB states in the *Bulletin* that "*… a grace period for in-stream applications may be considered*," by local governments for the *Building Carbon Pollution Standard*. ***A stronger recommendation for in-stream protection is needed in the Bulletin – especially for local governments mandating the highest ESC step and/or stringent GHG reductions with only six months notice. Advice needs to also be provided on how long the grace period for in-stream protection should be.***

[1] There may be missing information from Episode 5 as well. It is noted that there will be more information on the timeframes "*… in a little bit*," but no further information is shared.

Relaxation-type Approach

As with the grace period, little positive direction is given to local governments to utilize the relaxation-type approach that many are using now, prior to the proposed Regulation. Under this approach, local governments have offered two options to builders:

- meeting a higher *ESC* step; or
- meeting a low step with a low carbon energy system.

UDI has strongly supported this approach, and we continue to be concerned that this option may not be utilized if local governments are given the ability to mandate any *ESC* step and GHG emission reduction target – without using incentives. The Province is not even encouraging the continued use of the relaxation-type approach. The issue is not addressed in the *Bulletin*. Although an example is provided in Episode 5, it is only noted that the option is still available, and "*Communities could require or incentivize lower carbon construction using the provincial approach*." **UDI recommends that the Province provide stronger encouragement in the *Best Practices Bulletin* for the continued use of the relaxation-type approach and other incentives.**[2]

Municipal Powers Beyond the Building Carbon Pollution Standard

It is stated in Episode 5 that the Province is providing flexibility with the *ESC* and the *Building Carbon Pollutions Standard* with the caveat that local governments "*… would have to use the provincial approach, as any existing technical building requirements that conflict with the BC Building Code will have no force or effect*." However, it is not clear why builders may lose the relaxation-type approach, noted above, when it is stated in Episode 4 that the door is open for local governments to impose other energy efficiency and GHG emissions requirements:

> "*The building carbon pollution standard does not regulate so-called "luxury loads", such as hot tubs, pools, heated driveways. Some local governments may wish to explore other ways of reducing the energy use of these luxury loads, including development permit authorities for energy conservation and GHG reduction*."

Some communities are exploring and even implementing policies to mandate/incent onsite renewable energy, heat pumps, fully electric buildings and embodied carbon reductions - in addition to the *ESC* and the *Building Carbon Pollution Standard*. It is not clear what the limits of municipal powers are regarding these issues. ***UDI recommends further advice be provided in the Best Practices Bulletin on the powers local governments have regarding energy conservation and GHG reductions. This should involve consultation with local governments, the building sector and other stakeholders.***

[2] The Community C scenario in Episode 5 could include more details on how a local government using the relaxation-type approach can continue it in an appropriate manner under the new Regulation.

The Need for more Provincial Supports

It is stated in bold in the Preface of the *Draft Building Carbon Pollution Standards for Part 3 buildings in British Columbia* (the *Metrics Report*) that:

> "*This document is meant to be an initial costing analysis by illustrating whether decarbonizing a hypothetical building is cost effective across climate zones in B.C. This document should not be considered an exhaustive costing study to meet the carbon pollution steps in your area. This analysis is not representative of all buildings in all situations. Local governments and the construction industry should conduct more detailed or specific costing analysis which builds on this initial analysis*."

UDI continues to recommend that the Province conduct the ongoing work to enhance this initial costing analysis[3] with further research and analyses as well as a establishing a monitoring program of what the real costs are when high ESC step and low carbon projects are built. Most local governments, even if the recommended regional approach is utilized (especially outside urban centres), will not have resources or the interest in conducting further analysis in a substantive way. There is also little to no direction in the *Best Practices Bulletin* for local governments to conduct further costing analyses for their areas. It should also not be up to the industry to conduct the analysis in place of regulators, and it is doubtful that estimates from industry reports would sway local decision making on future regulations.

The *Best Practices Bulletin* includes the need for municipalities to *"Seek to understand industry's readiness to implement these requirements*. *In particular, they should seek to understand the local challenges and opportunities to implement low-carbon building systems, especially heat pump space and water heating*." This is important as we have heard that in some jurisdictions the availability of heat pumps is limited. ***However, the Province, again, needs to take the lead with understanding and improving the availability of heat pumps in British Columbia*** especially since new buildings in B.C. will have to be net-zero carbon by 2030 under the *BCBC*, and one of the actions in the *CleanBC Roadmap* is to "*… focus on growing markets for, and speeding up the adoption of, technologies we know are ready for deployment, such as … heat pumps*."[4]

For similar reasons, the Province needs to take a leadership role in ensuring that we have enough trained mechanical contractors and energy advisors across the Province. The issue should also be flagged in the *Best Practices Bulletin* for local governments to review.

The OHCS should also consider working with the Energy Step Code Council and the Local Government Peer Network to develop a model for the thermal conditioning permit proposed in the *Best Practices Bulletin*. Ideally, this approach could be extended to other forms municipalities utilize for the *ESC* and the *Building Carbon Pollution Standard*. This would help achieve the Province's objective of having permitting processes that are "*… simple to follow and administer*," as well as coordinated across local governments and inspection entities.

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[3] Further suggestions are noted in Additional Comments section below

[4] In the *2018 CleanBC Strategy* there was also a stated desire by 2030 to have 310,000 new residential heat pumps and 53 million m² of commercial floor space heated by heat pumps in the Province.

BSSB (with other Provincial entities) needs to be given the resources to conduct this work and provide supports to local governments, or delaying the implementation of the Building Carbon Pollution Standard Regulation should be considered. These issues are critical given how soon Provincial building carbon requirements will be implemented across the British Columbia.

Provincial and Broader Public Sector (BPS) Buildings

UDI has been a strong supporter of the Province and the Broader Public Sector (BPS) taking a leadership role with their new buildings. As we have stated in the past, this leadership was prevalent when the Leadership in Energy and Environmental Design (LEED) standard was introduced to Metro Vancouver, when the BPS incorporated it in their new buildings. This ensured that the design and construction became familiar with LEED. It also allowed UDI and other organizations to educate their members on LEED case studies to show the benefits of the standard, how to reduce costs and avoid pitfalls.
BC Housing is a leader for its projects with regard to the *ESC* and other green building initiatives, and the Province is also committed to doing more through its *CleanBC Roadmap to 2030*:

- By "*Requiring all new public sector buildings to align with our climate goals beginning with performance standards (2023) and moving to zero-carbon new buildings (2027)*;" and
- With low carbon building materials by "*… supporting the development and implementation of embodied carbon targets for public sector buildings by 2030*," before they are applied to other new buildings.

However, UDI is disappointed that the BPS is still not adequately addressed under the *ESC* regime, when it is being applied across British Columbia. If the Province and the BPS want to show leadership regarding climate change, they should be doing more with their new buildings than the private sector – not less. ***UDI recommends that similar standards for ESC be developed for new BPS buildings as soon as possible***.

Additional Comments

- UDI supports local governments working the District Energy (DE) providers to establish emissions factors for the DE systems because of the language in the *Best Practices Bulletin* that municipalities "*Not establish GHG targets for buildings that cannot reasonably be achieved by buildings compelled to connect to district energy systems*." However, the Province will soon be establishing its own GHG targets for new construction, and it is not clear how these targets will work with emissions factors established by local governments and DE providers. As municipalities such as Burnaby are now considering developing new DE systems, this issue needs to be addressed as soon as possible.

- It is not clear from the episodes and *Bulletin* about whether it is up to the builder or municipality to decide which type of airtightness test is to be used (e.g., Normalized Leakage Area, Normalized Air Leakage Rate or air changes per hour). UDI would prefer that decisions on airtightness testing methods be left to builders.

- In terms of communications, we're pleased that the Province is participating in virtual events such as the UDI webinar on November 2nd as well as holding its own Live Q/A on October 13th. However, these communication efforts need to also occur after the Regulation has been approved. We would also recommend that the Province develop a Q/A document to address questions as they arise at events or through discussions with stakeholders.

- As discussed at the September Energy Step Code Council meeting ***UDI recommends that the OHCS add new episodes to review the findings in the Part 3 and Part 9 technical analyses.*** Our members are also going to want to understand the strategies and solutions they can utilize to reduce costs and risks.

- Further work is needed to address some of the issues that were left unaddressed in the current Metrics *Report*, such as:

    - Heat pump domestic hot water heaters not being modelled in the study;
    - The costs of meeting the higher steps of the *ESC* need to be incorporated with the costs of meeting the steps of the *Building Carbon Pollution standard*, as many municipalities will do both.
    - Costing information for all climate zones (other than 4 and 7a) for office, retail and hotels need to be provided;
    - Costing information for the highest steps for retail and hotels for all climate zones need to be provided, as the GHG reduction targets are more stringent for office and retail, but the incremental costs in the *Report* seem higher;
    - Including more "*Highlights from analysis*" for the various building archetypes; and
    - Providing details on the ten lowest cost incremental capital cost options.[5]

- The *Metrics Report* and the *Best Practices Bulletin* also need to be updated when new costing information is available and key decisions are made, such as the BCUC decision on RNG.

- Although this is not an issue for UDI members, the proposed decarbonization path for the Fort Nelson area, which has a high carbon emitting electricity grid, is not clear. OHCS is proposing a prescriptive path to reduce GHG emissions in new buildings for the area that is supposed to be simple and practical. However, all that is noted under the prescriptive path for the various steps is builders are to decarbonize - space heating; space heating and hot water; or the full building. It is not stated how this would be done and whether there is a cost-effective way of accomplishing this. OHCS may want to consider exempting the Fort Nelson area from the GHG requirements in the proposed Regulation – and potentially future Provincial GHG requirements.

[5] In addition, the base costs need to be included for Step 4 on the High-rise residential table for Climate Zone 4 as well as modelling for electric vehicle charging, which is required by many of the local governments that will be utilizing the *Building Carbon Pollution Standard*. The latter is critical if it increases the Tier 2 rates of buildings and units.

Conclusion

RE: Register: Feb. Energy Step Code Council meeting

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To: pauline@chbabc.org
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: January 23, 2023 2:06:37 PM PST

Hi Pauline,

Thanks for your message. It would have been nice to have Bob and Kelly there, and alternates are welcome.

Typically Katherine Muncaster from EMLI and Adrian Mohareb from ENV attend. They have not yet RSVP'ed but I can follow up with them. I also heard someone say that CHBA might be meeting with BC Hydro and EMLI separately to discuss electrification issues?

I have emphasized to BC Hydro organizers that high-quality video and audio are important for remote participants. We've chosen a room that is Microsoft Teams-enabled, meaning there are puck-shaped accessory microphones along the conference table to pick up the voices of those seated at the table. It's not the auditorium that past meetings have been held in. There's also a room camera with optical zoom that can pan around the room with a remote.

I will ask in-room participants to bring their laptops and "raise their hands" virtually just like the remote participants so the question queue is accurate and participation is more equal.

My contacts in Hydro say the table can fit 15-16, and if people line the outside of the room we can put in 20-25 (though those seated outside might not have their voices picked up as well).

Basically, our option is smaller room with better hybrid experience (the current room), or larger room with worse hybrid experience (the auditorium).

Please let me know if there are other ways that can make the hybrid experience better so not everyone has to travel far and wide to be there.

Best,
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
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Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

From: pauline@chbabc.org <pauline@chbabc.org>
Sent: Wednesday, January 18, 2023 3:33 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Register: Feb. Energy Step Code Council meeting

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Hugo,

The date for this upcoming ESCC meeting is unfortunate, as Bob Deeks and Kelly Reid are both unable to attend. While it would be nice if the date could be changed, we are looking into sending alternates since the electrification discussion is a high priority for our association. Is it possible to confirm whether Ministry staff from EMLI or ENV will be in attendance?

Also, I'm wondering if there's any possibility for a larger room? Having participated in previous hybrid ESCC meetings, the audio quality for remote participants is often challenging and we would be encouraging in-person attendance from our representatives.

Regards,
Pauline Rupp
Director, Technical & Building Innovation

Canadian Home Builders' Association of BC
400-6400 Roberts Street, Burnaby, BC V5G 4C9
t. 604-432-7112 ext. 307

www.chbabc.org

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: January 17, 2023 4:08 PM
To: bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; rmathews@cnv.org; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Grass, William OHCS:EX <William.Grass@gov.bc.ca>; Stelzer, Bertine <Bertine.Stelzer@bchydro.com>
Subject: Register: Feb. Energy Step Code Council meeting

Hi, everyone:

The next Energy Step Code Council meeting will be held on Feb. 13. It'll be a hybrid meeting, so in-person attendees can go to 333 Dunsmuir St., Vancouver B.C. Online attendees can use Microsoft Teams.

To participate (either in-person or remote), please register here:
https://teams.microsoft.com/registration/AFLbbw09ikqwNtNoXjWa3A,6HjikdpByEC4GvwbRLE7qg,L_GsbQ0esEaRvXAoiKZSMw,mode=read&tenantId=6fdb5200-3d0d-4a8a-b036-d3685e359adc

If the number of in-person attendees exceeds the room's capacity (it's about 20) I will email them separately to see if anyone could come remotely instead.

As I understand it, the windows don't open but HVAC should work well. Masks/respirators optional but recommended.

Looking forward to it!
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Register: Feb. Energy Step Code Council meeting

From: pauline@chbabc.org
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: January 24, 2023 10:25:54 AM PST

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,

I appreciate the considerations to improve remote participation, and empathize with the challenges of balancing the hybrid experience.

We currently have two alternates registered for the ESCC meeting who will be joining Joe Hart: Rick Mann, IOM Property Group (HAVAN) and my colleague Carmina Tupe at CHBA BC.

BC Hydro did invite CHBA BC and UDI to a separate meeting to discuss electrification items in advanced of the ESCC meeting. It's encouraging to see the conversation being escalated and moving forward.

Thanks for your (and the BSSB team's) work on this,
Pauline Rupp
Director, Technical & Building Innovation

Canadian Home Builders' Association of BC
400-6400 Roberts Street, Burnaby, BC V5G 4C9
t. 604-432-7112 ext. 307
www.chbabc.org

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: January 23, 2023 2:07 PM
To: pauline@chbabc.org
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Register: Feb. Energy Step Code Council meeting

Hi Pauline,

Thanks for your message. It would have been nice to have Bob and Kelly there, and alternates are welcome.

Typically Katherine Muncaster from EMLI and Adrian Mohareb from ENV attend. They have not yet RSVP'ed but I can follow up with them. I also heard someone say that CHBA might be meeting with BC Hydro and EMLI separately to discuss electrification issues?

I have emphasized to BC Hydro organizers that high-quality video and audio are important for remote participants. We've chosen a room that is Microsoft Teams-enabled, meaning there are puck-shaped accessory microphones along the conference table to pick up the voices of those seated at the table. It's not the auditorium that past meetings have been held in. There's also a room camera with optical zoom that can pan around the room with a remote.

I will ask in-room participants to bring their laptops and "raise their hands" virtually just like the remote participants so the question queue is accurate and participation is more equal.

My contacts in Hydro say the table can fit 15-16, and if people line the outside of the room we can put in 20-25 (though those seated outside might not have their voices picked up as well).

Basically, our option is smaller room with better hybrid experience (the current room), or larger room with worse hybrid experience (the auditorium).

Please let me know if there are other ways that can make the hybrid experience better so not everyone has to travel far and wide to be there.

Best,
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

From: pauline@chbabc.org <pauline@chbabc.org>
Sent: Wednesday, January 18, 2023 3:33 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Register: Feb. Energy Step Code Council meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,

The date for this upcoming ESCC meeting is unfortunate, as Bob Deeks and Kelly Reid are both unable to attend. While it would be nice if the date could be changed, we are looking into sending alternates since the electrification discussion is a high priority for our association. Is it possible to confirm whether Ministry staff from EMLI or ENV will be in attendance?

Also, I'm wondering if there's any possibility for a larger room? Having participated in previous hybrid ESCC meetings, the audio quality for remote participants is often challenging and we would be encouraging in-person attendance from our representatives.

Regards,
Pauline Rupp
Director, Technical & Building Innovation

Canadian Home Builders' Association of BC
400-6400 Roberts Street, Burnaby, BC V5G 4C9
t. 604-432-7112 ext. 307
www.chbabc.org

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: January 17, 2023 4:08 PM
To: bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; jfisher@udi.org; MGatensby@aibc.ca;

Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; rmathews@cnv.org; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Grass, William OHCS:EX <William.Grass@gov.bc.ca>; Stelzer, Bertine <Bertine.Stelzer@bchydro.com>
Subject: Register: Feb. Energy Step Code Council meeting

Hi, everyone:

The next Energy Step Code Council meeting will be held on Feb. 13. It'll be a hybrid meeting, so in-person attendees can go to 333 Dunsmuir St., Vancouver B.C. Online attendees can use Microsoft Teams.

To participate (either in-person or remote), please register here:
https://teams.microsoft.com/registration/AFLbbw09ikqwNtNoXjWa3A,6HjikdpByEC4GvwbRLE7qg,L_GsbQ0esEaRvXAoiKZSMw,mode=read&tenantId=6fdb5200-3d0d-4a8a-b036-d3685e359adc

If the number of in-person attendees exceeds the room's capacity (it's about 20) I will email them separately to see if anyone could come remotely instead.

As I understand it, the windows don't open but HVAC should work well. Masks/respirators optional but recommended.

Looking forward to it!
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Office of Housing and Construction Standards
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Invitation to comment on draft report: R2B: Realizing Resilient Buildings

From:	Wilma Leung <wileung@bchousing.org>
To:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, bea.bains@fortisbc.com, ebaudinaud@communityenergy.bc.ca, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, Patrick Caraher <pcaraher@ahma-bc.org>, GCarignan@communityenergy.bc.ca, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, Jeff Fisher <jfisher@udi.org>, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, mlohmann@communityenergy.bc.ca, Madden, John (C+CP) <j.madden@ubc.ca>, Lisa.Mak@bchydro.com, rmathews@cnv.org, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, jowen@surrey.ca, sean.pander@vancouver.ca, roberto@zebx.org, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, Ron Rapp <ron@havan.ca>, kelly@hkrbuilders.com, trothery@communityenergy.bc.ca, pauline@chbabc.org, lsampliner@portmoody.ca, zsegal@boma.bc.ca, dstathonikos@boma.bc.ca, Sykes, Maxwell <Maxwell.Sykes@surrey.ca>, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, Ralph Wells <ralph.wells@ubc.ca>, Tyler Wightman <tyler.wightman@boabc.org>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Warkentin, Tiffany AG:EX <Tiffany.Warkentin@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc:	Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>, Carter, Devon ENV:EX <Devon.Carter@gov.bc.ca>
Sent:	February 1, 2023 12:59:40 PM PST
Attachments:	image001.png, R2B Recommendations Report [20230131].docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon everyone!

I'm reaching out to the Energy Step Code Council community to invite you to share your comments and perspectives on the draft recommendations from this exciting research project.

The **R2B** Project "**Realizing Resilient Buildings**: Research on the **Barriers and Enablers for Climate Adaptation and Resilience in the Building Sector in B.C.'s Local Government Context**" is co-funded by the province and BC Housing, and aims at building knowledge and alignment on removing barriers and providing enablers to make it easier and most cost-effective to build low-carbon climate-adapted resilient buildings in B.C.

Your input (received on or before **Friday, February 10th**) will help us refine the recommendations and develop a toolkit. The toolkit will be designed primarily for use by local governments but also for reference by industry and many others who have a role to play. Please feel free to forward this report for input by other relevant parties but keep me posted so I am aware. Note that the consultants are also working on a separate short report that focuses on barriers / enablers specific to Indigenous communities.

We are very grateful for your contribution, and we look forward to your comments.

Thank you, Huy chexw & Hay ce:p q̓ə,
Wilma

To honour the truth, I acknowledge that I live and work on the shared, ancestral and unceded homelands of the hən̓q̓əmin̓əm̓ and Sḵwxwú7mesh-speaking people who have been caring for these lands, along with the waters and all that is above and below, since time immemorial. As a newcomer to the Salish Coast, I am on a journey to reciprocate by working towards reconciling with all our relations here and beyond.

Wilma Leung (she/her/hers) | Senior Manager, Technical Research & Education | BC Housing
wileung@bchousing.org | Mobile: 604-218-1095 | www.bchousing.org/research-centre



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Page 139 of 249 to/à Page 214 of 249

Withheld pursuant to/removed as

s.13

RE: Invitation to comment on draft report: R2B: Realizing Resilient Buildings

From: Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: February 2, 2023 1:32:46 PM PST
Attachments: image001.png

FYI - I am on BC Housings Advisory Working Group for this project. However, we weren't provided a copy of this draft before Wilma circulated it.

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: Thursday, February 2, 2023 1:31 PM
To: Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
Subject: RE: Invitation to comment on draft report: R2B: Realizing Resilient Buildings

Hey Nicole,

It would be good to coordinate a response. I hope to have some time to look at this next week.

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: Wilma Leung <wileung@bchousing.org>
Sent: Wednesday, February 1, 2023 1:00 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; Patrick Caraher <pcaraher@ahma-bc.org>; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; Jeff Fisher <jfisher@udi.org>; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; mlohmann@communityenergy.bc.ca; Madden, John (C+CP) <j.madden@ubc.ca>; Lisa.Mak@bchydro.com; rmathews@cnv.org; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; Ron Rapp <ron@havan.ca>; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; Sykes, Maxwell <Maxwell.Sykes@surrey.ca>; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; Ralph Wells <ralph.wells@ubc.ca>; Tyler Wightman <tyler.wightman@boabc.org>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Warkentin, Tiffany AG:EX <Tiffany.Warkentin@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>; Carter, Devon ENV:EX <Devon.Carter@gov.bc.ca>
Subject: Invitation to comment on draft report: R2B: Realizing Resilient Buildings

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We are very grateful for your contribution, and we look forward to your comments.

Thank you, Huy chexw & Hay ce:p q̓ə,
Wilma

To honour the truth, I acknowledge that I live and work on the shared, ancestral and unceded homelands of the hən̓q̓əmin̓əm̓ and Sḵwxwú7mesh-speaking people who have been caring for these lands, along with the waters and all that is above and below, since time immemorial. As a newcomer to the Salish Coast, I am on a journey to reciprocate by working towards reconciling with all our relations here and beyond.

Wilma Leung (she/her/hers) | Senior Manager, Technical Research & Education | BC Housing
wileung@bchousing.org | Mobile: 604-218-1095 | www.bchousing.org/research-centre

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FW: Seeking input on policy considerations in the National Codes

From: May, Zachary OHCS:EX
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: February 2, 2023 3:58:23 PM PST
Attachments: Codes Board Policy Recommendations for consultation - Posted.pdf, Consultation Overview.pdf, Consultation sur les recommandations stratégiques du comité des codes - affiché.pdf, Aperçu de la consultation.pdf

Can we add this to the agenda for the 13th.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: Thursday, February 2, 2023 9:49 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: FW: Seeking input on policy considerations in the National Codes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Zach, do we need to discuss this at the ESCC meeting next week?

From: CBHCC Secretary / Secretaire CCHCC <CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca>
Sent: February 2, 2023 9:26 AM
Subject: Seeking input on policy considerations in the National Codes

Le français suit l'anglais

Dear Stakeholder,

The CBHCC is seeking input from stakeholders, experts, code users, and the general public on the draft policy recommendations for developing and implementing greenhouse gas emissions provisions in the National Model Codes before finalizing the policy framework. The draft policy recommendations are available on the website here: https://cnrc.teamwork.com/app/tasks/37694438

The draft policy recommendations will be provided to the relevant standing committee(s) for discussion.

- Consultation wave 1 begins on February 3, 2023 and ends on March 30, 2023.
- Consultation wave 2 is planned to begin in March 2023 and end in May 2023. Note that this consultation period is subject to change as the CBHCC is still working on the draft policy recommendations for wave 2.

Instructions for providing input

To provide input on the policy recommendations, please follow the steps below:

1. Download the policy recommendations on TeamWork here: https://cnrc.teamwork.com/app/tasks/37694438
2. Submit comments to the CBHCC Secretary by email and attach any supportive material: CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca
3. Your comments will be reviewed by the Working Group on Climate Change Mitigation who will report to the CBHCC.

****

Aux parties intéressées,

Le CCHCC souhaite obtenir l'avis de parties intéressées, d'experts, d'utilisateurs des codes et du grand public sur les recommandations stratégiques provisoires en vue de l'élaboration et de la mise en œuvre de dispositions relatives aux émissions de gaz à effet de serre dans les codes modèles nationaux avant de parachever le cadre stratégique. Les recommandations stratégiques provisoires sont disponibles sur TeamWork à partir du lien suivant : https://cnrc.teamwork.com/app/tasks/37694438

Les recommandations stratégiques provisoires seront fournies aux comités permanents concernés à des fins de discussion.

- La première vague de consultation commence le 3 février 2023 et se termine le 30 mars 2023.
- Il est prévu que la deuxième vague de consultation commencera en mars 2023 et se terminera en mai 2023. Il est à noter que cette période de consultation pourrait être modifiée puisque les travaux du CCHCC sur les recommandations stratégiques provisoires sont en cours.

Soumettre des commentaires

Pour donner votre avis sur les recommandations stratégiques, veuillez suivre les étapes suivantes :

1. Télécharger les recommandations stratégiques sur TeamWork à partir du lien suivant : https://cnrc.teamwork.com/app/tasks/37694438
2. Soumettre vos commentaires au secrétariat du CCHCC par courriel et joindre tout document justificatif : CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca
3. Vos commentaires seront examinés par le GT-ACC, qui en fera rapport au CCHCC.

Sefton Hyde-Clarke
Secretary, Canadian Board for Harmonized Construction Codes (CBHCC)
Manager, Code Development System, Codes Canada
National Research Council Canada / Government of Canada
CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca / www.nationalcodes.nrc.gc.ca

Secrétaire, Comité canadien de l'harmonisation des codes de construction (CCHCC)
Gestionnaire, Système d'élaboration des codes, Codes Canada
Conseil national de recherches Canada / Gouvernement du Canada
CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca / www.codesnationaux.cnrc.gc.ca

Consultation on Draft Policy Framework for Climate Change Mitigation

Background

The Canadian Board for Harmonized Construction Codes (CBHCC) has agreed that the National Model Codes include an objective for greenhouse gas (GHG) emissions to enable provincial and territorial regulation, and this objective should be incorporated into the 2025 codes. This objective would include regulation of both operational and embodied carbon with operational being addressed in the 2025 codes and embodied carbon in the 2030 codes.

In the initial stages of developing this policy framework, provinces and territories (PTs) noted a number of elements for consideration, including:

1. principles and factors that all PTs agree on (e.g. ultimate goal and net zero emission definition, emission factors);
2. the need to accommodate the breadth of PT fuel policies, plans and individual PT targets, and coordinate with elements that extend beyond the boundary of the code;
3. regional differences (e.g. ability to fuel switch, availability of low embodied carbon materials in Northern and remote areas);
4. the boundary of operational emissions (e.g. address scope 1 only? Or address both scope 1 and scope 2 emissions?)2 and embodied emissions (i.e. determine standard method of analysis);
5. impact on affordability (e.g. interplay between energy efficiency and GHG requirements with respect to operational GHG emissions);
6. development and availability of data (e.g. better granularity of emission factors for operational carbon, better availability of Environmental Product Declarations for embodied carbon, standard method of analysis for embodied carbon);
7. implementation approach (e.g. phased approach, flexible approach to address specific needs of PTs);
8. adoption and implementation considerations including market readiness, training, capacity-building (monitoring, reviewing and enforcement), and developing tools to enable PTs to harmonize.

Prior to the transition to the new Harmonized Code Development System, the Canadian Commission on Building and Fire Codes (CCBFC) agreed to ask the standing committees to start working on developing technical requirements that would address GHG emissions in parallel to the ongoing policy work to:

a. address the 8 policy elements identified by PTs, and
b. develop language for a new GHG objective.

A federal, provincial, and territorial Working Group on Climate Change Mitigation (WG-CCM) was struck to consider the 8 policy elements identified by PTs. The 8 policy elements were triaged based on their relevance to the parallel technical work by the standing committees.

Triage of Policy Elements

The CBHCC agreed to address the policy elements as follows:

First wave of policy elements (included in this consultation package):

- ✓ Policy element 1: principles and factors that CBHCC members agree on
- ✓ Policy element 4: the boundary of operational emissions and embodied emissions
- ✓ Policy element 7: implementation approach

Second wave of policy elements (future consultation):

- Policy element 2: the need to accommodate the breadth of PT fuel policies, plans and individual PT targets, and coordinate with elements that extend beyond the boundary of the code
- Policy element 3: regional differences
- Policy element 5: impact on affordability
- Policy element 6: development and availability of data
- Policy element 8: adoption and implementation considerations including market readiness, training, capacity-building, and developing tools to enable PTs to harmonize

Consultation Periods

The CBHCC is seeking input from stakeholders, experts, code users, and the general public on the draft policy recommendations before finalizing the policy framework. The draft policy recommendations are available on TeamWork here: https://cnrc.teamwork.com/app/tasks/37694438

The draft policy recommendations will be provided to the relevant standing committee(s) for discussion.

Consultation wave 1 begins on February 3, 2023 and end on March 30, 2023.

Consultation wave 2 is planned to begin in March 2023 and end in May 2023. Note that this consultation period is subject to change as the CBHCC is still working on the draft policy recommendations.

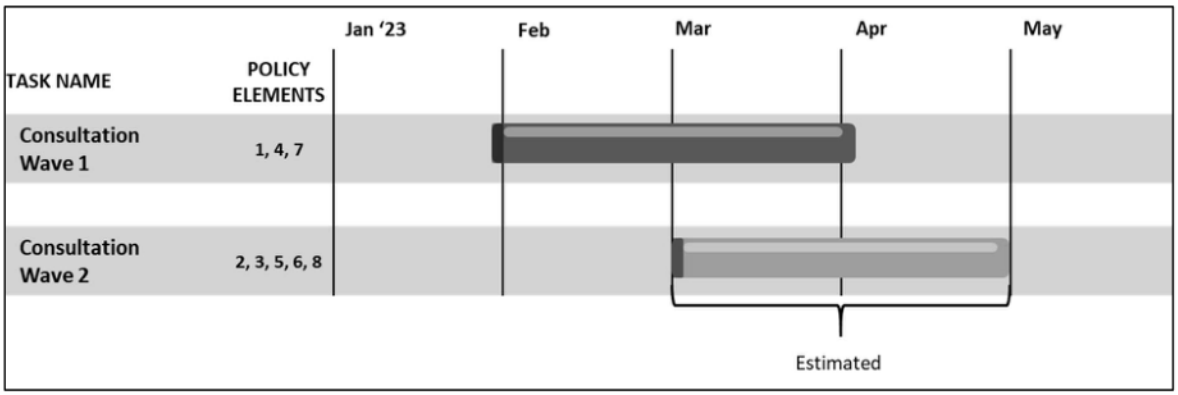

Figure 1: Estimated timeline for wave 1 and 2 consultation periods

Instructions for providing input

To provide input on the policy recommendations, please follow the steps below:

1. Download the policy recommendations on TeamWork here: https://cnrc.teamwork.com/app/tasks/37694438
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3. Your comments will be reviewed by the Working Group on Climate Change Mitigation who will report to the CBHCC.

RE: Seeking input on policy considerations in the National Codes

From: May, Zachary OHCS:EX
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: February 2, 2023 3:58:35 PM PST

Good catch. Happy to raise on the 13th.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: Thursday, February 2, 2023 9:49 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: FW: Seeking input on policy considerations in the National Codes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Zach, do we need to discuss this at the ESCC meeting next week?

From: CBHCC Secretary / Secretaire CCHCC <CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca>
Sent: February 2, 2023 9:26 AM
Subject: Seeking input on policy considerations in the National Codes

Le français suit l'anglais

Dear Stakeholder,

The CBHCC is seeking input from stakeholders, experts, code users, and the general public on the draft policy recommendations for developing and implementing greenhouse gas emissions provisions in the National Model Codes before finalizing the policy framework. The draft policy recommendations are available on the website here: https://cnrc.teamwork.com/app/tasks/37694438

The draft policy recommendations will be provided to the relevant standing committee(s) for discussion.

- Consultation wave 1 begins on February 3, 2023 and ends on March 30, 2023.
- Consultation wave 2 is planned to begin in March 2023 and end in May 2023. Note that this consultation period is subject to change as the CBHCC is still working on the draft policy recommendations for wave 2.

Instructions for providing input

To provide input on the policy recommendations, please follow the steps below:

1. Download the policy recommendations on TeamWork here: https://cnrc.teamwork.com/app/tasks/37694438
2. Submit comments to the CBHCC Secretary by email and attach any supportive material: CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca
3. Your comments will be reviewed by the Working Group on Climate Change Mitigation who will report to the CBHCC.

****

Aux parties intéressées,

Le CCHCC souhaite obtenir l'avis de parties intéressées, d'experts, d'utilisateurs des codes et du grand public sur les recommandations stratégiques provisoires en vue de l'élaboration et de la mise en œuvre de dispositions relatives aux émissions de gaz à effet de serre dans les codes modèles nationaux avant de parachever le cadre stratégique. Les recommandations stratégiques provisoires sont disponibles sur TeamWork à partir du lien suivant : https://cnrc.teamwork.com/app/tasks/37694438

Les recommandations stratégiques provisoires seront fournies aux comités permanents concernés à des fins de discussion.

- La première vague de consultation commence le 3 février 2023 et se termine le 30 mars 2023.
- Il est prévu que la deuxième vague de consultation commencera en mars 2023 et se terminera en mai 2023. Il est à noter que cette période de consultation pourrait être modifiée puisque les travaux du CCHCC sur les recommandations stratégiques provisoires sont en cours.

Soumettre des commentaires

Pour donner votre avis sur les recommandations stratégiques, veuillez suivre les étapes suivantes :

1. Télécharger les recommandations stratégiques sur TeamWork à partir du lien suivant : https://cnrc.teamwork.com/app/tasks/37694438
2. Soumettre vos commentaires au secrétariat du CCHCC par courriel et joindre tout document justificatif : CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca
3. Vos commentaires seront examinés par le GT-ACC, qui en fera rapport au CCHCC.

Sefton Hyde-Clarke
Secretary, Canadian Board for Harmonized Construction Codes (CBHCC)
Manager, Code Development System, Codes Canada
National Research Council Canada / Government of Canada
CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca / www.nationalcodes.nrc.gc.ca

Secrétaire, Comité canadien de l'harmonisation des codes de construction (CCHCC)
Gestionnaire, Système d'élaboration des codes, Codes Canada
Conseil national de recherches Canada / Gouvernement du Canada
CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca / www.codesnationaux.cnrc.gc.ca

RE: BC Hydro Document for the ESCC

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To: Berkhout, Tom <Tom.Berkhout@bchydro.com>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Wark, Robyn <Robyn.Wark@bchydro.com>
Sent: February 7, 2023 1:45:29 PM PST

By end of today. Thanks for the reminder.

Hugo

From: Berkhout, Tom <Tom.Berkhout@bchydro.com>
Sent: Tuesday, February 7, 2023 1:44 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wark, Robyn <Robyn.Wark@bchydro.com>
Subject: RE: BC Hydro Document for the ESCC

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Hugo,

Can you give me an ETA on when the BC Hydro document will be shared with the ESCC members? We're on a call with UDI and CHBA and they are wondering how soon they will be able to see it.

Thanks,

Tom

Tom Berkhout | Building Electrification, Strategic Implementation

BC Hydro
333 Dunsmuir Street,
Vancouver, BC V6B 5R3

M 250 880 1636
E tom.berkhout@bchydro.com

bchydro.

From: Berkhout, Tom
Sent: Monday, February 6, 2023 8:09 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wark, Robyn <Robyn.Wark@bchydro.com>
Subject: BC Hydro Document for the ESCC
Importance: High

Hi Hugo,

Can you please share the attached document with the members of the Energy Step Code Council. It is intended to help prepare them for next weeks' ESCC meeting and Hydro's 90 minute presentation? We had committed to getting this to the Council members a week prior to the Feb 13th meeting so the sooner it can go out the better. When sharing can you please remind members of the protocol for using materials shared via the ESCC. I believe it is something to the effect of using it to inform their members or something to that effect.

I should have a slide deck to you for Monday's presentation by EOD Wednesday (Feb 8).

Cheers,

Tom

Tom Berkhout | Building Electrification, Strategic Implementation

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Bullet points of other considerations - EE and GHGs

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: February 7, 2023 2:01:30 PM PST

Hey Zac,

As we discussed last week, please see below a few items in relation to EE and GHGs that may come up in tomorrows meeting with Minister Kahlon:

Energy Efficiency

- Small homes in cold climates and cost disparities in comparison to larger homes - a methodology was developed through the research project (Focal Engineering and Bernhardt) to reduce cost burden through relaxations in metrics – refinement may be needed. CHBA has been contacted to look into the data base they have of real projects to help verify approach.
- Log Homes – research completed to verify that there are many ECM options to meet Step 3 for the homes studied. Changes to the BCBC 2023 will be looked at in more detail.

GHGs

- GHGs and supplemental heat for homes in cold climates – Some concerns were raised regarding meeting the more stringent GHG metrics for homes in cold climates given that they may be required to use more supplemental heat when employing heat pump technology. This has been somewhat addressed by the fact that back-up heat is excluded, so a secondary system could be used. Also, this is opt-in initially which give some degree of latitude to LGs as to how to enforce the GHG metrics, and have the ability to take a more relaxed approach. As this regulation evolves, we can further identify the issues and work towards solutions prior to mandatory requirements.
- As raised by UDI, more comprehensive costing analysis should be undertaken with revisions to the Metrics Report. Also, less GHG intensive technologies should be looked at as part of the expanded study (ie HP DHW). We will be discussing additional analysis and research with the SCC on Monday.
- Further development of the NBC/NECB regarding GHGs will help to inform the evolution of this standard.

Ongoing work to support EE and GHG changes in code:

- Part 9 and Part 3 calculators along with supporting educational material
- Current discussions with partners such as BCHousing and the Step Code Council to address, collaboratively, any training, training materials, studies etc
- Opportunities through the National Code Acceleration Fund

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

Energy Step Code Council meeting updates, materials

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	bea.bains@fortisbc.com, ebaudinaud@communityenergy.bc.ca, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, GCarignan@communityenergy.bc.ca, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, rmathews@cnv.org, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, jowen@surrey.ca, sean.pander@vancouver.ca, roberto@zebx.org, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, trothery@communityenergy.bc.ca, pauline@chbabc.org, lsampliner@portmoody.ca, zsegal@boma.bc.ca, dstathonikos@boma.bc.ca, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Cc:	hudson.giesbrecht@bchydro.com, frank.lin@bchydro.com, angela.cho@bchydro.com, kevin.lim-kong@bchydro.com, altaf.hussain@bchydro.com, iulia.jurgea@bchydro.com, Rick.mann@iompropertygroup.com, Keith.Anderson@bchydro.com, ranjeet.gill@bchydro.com, james@brightfuture.studio, carmina@chbabc.org, robert.chin@bchydro.com, Tom.Berkhout@bchydro.com
Sent:	February 7, 2023 2:10:10 PM PST
Attachments:	BC Hydro - Improving customer connections for a cleaner future.pdf, Consultation Overview.pdf, Codes Board Policy Recommendations for consultation - Posted.pdf

Hello, members of the Energy Step Code Council:

We look forward to meeting this coming Monday, Feb. 13. I wanted to provide some logistical updates and meeting materials (attached).

In-person registration is now closed as we have reached capacity for the meeting rooms at BC Hydro. However, we can still accept more virtual attendees.

We have booked two meeting rooms to accommodate in-person attendees. **Attendees may go to either Meeting Room 1 on the 13th floor or Meeting Room 1 on the 7th floor.** Zac and I will be on the 13th floor. I encourage any attendees who have travelled far to come here to go to the 13th floor, and anyone who's primarily listening to go to the 7th floor. But, as long as you're seated at a conference table, the mics will pick you up and you may participate fully no matter which room you're in.

A selection of sandwiches, year-round salad and coffee/tea will arrive at about 11:45 a.m. at the 13th floor conference room. It will be provided by the Dirty Apron (read the PDF menu) and should accommodate the food preferences/requirements indicated by guests on the registration form. We can all mingle there during the lunch hour.

A few reminders:

- **For in-person attendees:** bring your laptop, tablet or phone to "raise your hand" during the meeting and read questions from remote participants. Mute your mic and speakers to eliminate audio feedback.
- **For all attendees:** if you have questions about electrical extension issues you wish to ask BC Hydro staff, please email them to me at hugo.wong@gov.bc.ca **before noon on Thurs. Jan. 9** so I can pass them on and they can do any technical research if required.

I'll send a more fulsome agenda and other materials soon. In the meantime, please review the attachments. The BC Hydro package should remain within your organizations and are not to be shared publicly.

Hugo

Hugo Wong (he/him)

Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Improving customer connections for a cleaner future

Prepared for the BC Energy Step Code Council

February 2023

BC Hydro
Power smart

INTRODUCTION

This document is intended to provide background information ahead of BC Hydro's presentation to the BC Energy Step Code Council on February 13, 2023, where we'll present and take questions on five key areas of our business: electricity supply, extension policy, distribution capacity, connection timelines, and distribution standards.

At that meeting, the Council will be considering implementation approaches for the forthcoming Carbon Pollution Standard. BC Hydro's ability to connect new customers quickly and efficiently is a key part of successful implementation of the Standard.

We understand that we have an important role to play in meeting the province's climate and electrification goals. After reading this document and meeting with us, we're confident that you'll have a better understanding of our ability to support the Carbon Pollution Standard and other future electrification through our plentiful clean electricity resources. You'll also understand the changes we're actively working on to improve our customer connections process, including:

- Improving the end-to-end customer experience, including better communication, more cost certainty, and reduced project timelines.
- Advancing our infrastructure so we are ready for connection requests.
- Increasing our capacity to support higher number of connections each year.

1. OUR ROLE IN MEETING THE PROVINCE'S CLIMATE GOALS

In B.C., we're seeing clear evidence of the impacts of a changing climate, including more intense storms, more alternating periods of drought and floods, and more forest fires. A key driver of climate change is energy use, specifically the burning of fossil fuels.

B.C. has legislated targets for reducing greenhouse gas emissions: 40% below 2007 levels by 2030, 60% by 2040, and 80% by 2050. BC Hydro has a key role to play in meeting these ambitious and necessary climate change goals. The electricity we generate is 98% clean and renewable, however, it represents less than 20% of the energy used in B.C., with 10% coming from biomass and the remaining 70% from fossil fuels.

In fall 2021, we released our Electrification Plan that outlines how we plan to invest over $260 million to advance electrification in the building, transportation, and industrial sectors to help meet the province's climate targets.

Electrification means replacing technologies that are powered by fossil fuels like gasoline, diesel, and natural gas with alternatives that use electricity. This includes switching to an electric vehicle, replacing gas furnaces with electric heat pumps, and replacing diesel equipment used by industries with electric equipment.

At the same time, we need to continue to encourage energy efficiency so that we make smart use of our clean electricity and grid. Combining the Energy Step Code and Carbon Pollution Standard is a great example of this integrated approach.

2. SUFFICIENT SUPPLY

We have 30 hydroelectric plants in the province and in the coming years, we'll be adding another large hydroelectric facility to our system.

When it comes online, Site C will provide British Columbians with an additional 1,100 megawatts of firm capacity and produce about 5,100 gigawatt hours of clean electricity each year. That's about 8% of our current supply, or enough to power nearly half a million homes or 1.7 million electric vehicles per year.

While we're confident that we have enough power to meet the medium-term electrification needs of the province, we're carefully monitoring demand trends to understand when new clean electricity generation resources will be needed. Fortunately, B.C. has excellent potential for generating more clean electricity through wind and solar, while having our hydroelectric facilities continue to serve as the backbone of our system.

Our hydroelectric facilities can ramp up or ramp down quickly in response to changing demand and act like big batteries by storing potential energy (water) behind the dam. This is particularly important as we consider a future with more wind and solar, which are not

always available when you need them. We anticipate that batteries will also be an important part of our future grid to manage peak demands at the utility, distribution, and customer level.

3. DISTRIBUTION EXTENSION POLICY

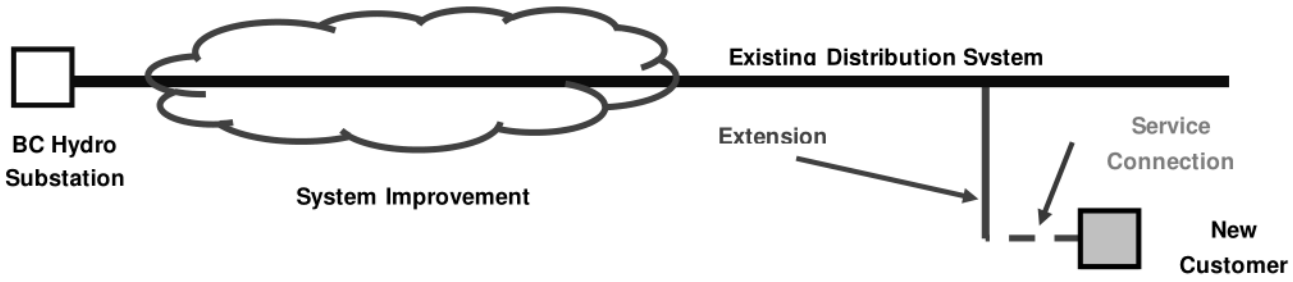
Our current Distribution Extension Policy has been in place since 2008 and outlines the responsibilities of both the customer and BC Hydro when it comes to connecting new or increased load on our distribution system. We're currently reviewing the policy and assessing options for updating it to ensure it best meets the needs of us and our customers. Over the coming months, we'll be engaging more broadly with customers to gather feedback on potential updates to the policy.

The following section provides background information on our existing extension policy, issues raised by customers about the policy, and three potential options we're considering for updating it.

3.1 Extension Policy 101

Our current Extension Policy is outlined in Section 8 of our Electric Tariff. The Tariff describes the responsibilities of BC Hydro and our customers when a distribution extension is required to serve new or increased customer load. Our current policy is based on the principle of cost causation, i.e., allocating the costs of new or upgraded infrastructure to those who first initiate them.

An example of a distribution extension is illustrated below:



As per Section 8, infrastructure requirements to facilitate new connections are defined into three main categories:

- **Service connection:** This is typically the last section of wire or cable that connects a customer to the distribution system.
- **Extension:** An "extension" is an addition to, or the increased capacity, of BC Hydro's electric distribution system that's required to serve a new or increased customer load. The extension is generally the infrastructure required to connect a customer with the closest point of the distribution system that will serve the load. Loads far away from the existing system will have higher extension costs as more infrastructure has to be constructed to connect the customer.
- **System improvement costs:** These system upgrades are typically upstream from the extension and address local capacity constraints on the distribution system. System improvement needs are assessed when service is requested by the customer and, if applicable, are only allocated for load requests that are larger than 500 kVA. Since each assessment depends on the state of the existing system at the time of request, any load can trigger the need for system improvement. However, the larger the load being requested, the higher the probability that it will trigger the immediate need for a system improvement because each distribution feeder has a finite capacity.

As discussed above, a customer that requests new load or an addition to an existing load, is allocated the cost of their service connection, extension, and any applicable system improvement costs that are required to service this request. In recognition of the incremental future revenue to BC Hydro of the new or increased load and to help offset customer connection costs, we contribute $1,475 per single-family dwelling added, and $200 per kilowatt of the estimated billed demand from a commercial customer on the General Service Rate.

the current policy outlines that the "pioneer customer" can apply to contributions of subsequent connecting customers. A more detailed explanation and illustration can be found in this brochure [PDF].

The policy outlines that if the pioneer customer pays for the distribution system extension and then a subsequent customer(s) connects to that extension within five years, the pioneer customer can apply for a partial extension fee refund.

3.2 Feedback on our current Extension Policy

Over the years, we've received feedback from customers about our current Extension Policy. The two main concerns we've heard are around the cost uncertainty and "free riders", which we discuss in more detail in this section.

Free riders

The current policy assigns the costs related to extensions and system improvements to the pioneer customer, i.e., the customer who's project first initiates the required upgrades, offset by BC Hydro contributions. To the extent these upgrades result in additional capacity, subsequent customers can benefit from the expanded system capacity without paying for it. While the extension policy allows the pioneer customer to recover some costs from future customers, in practice, this hasn't been effective in addressing this issue.

Cost uncertainty

Customers applying to connect to our system want more upfront certainty of the costs associated with their connection. The issue of cost uncertainty can be broken down into the following areas:

- **Unpredictable extension costs**: In general, greenfield developments far from existing infrastructure will cost more than brownfield developments or greenfield developments adjacent to existing loads because the distribution system must be extended further to reach these development sites.
- **Unpredictable system improvement costs:** It's difficult for any customer to predict associated system improvement costs. These costs depend on many factors such as size of load, types of upgrades required, and area capacity, which aren't directly visible to the customer and are highly location dependent.
- **Non-connection-related costs:** Costs to comply with municipal requirements or the conditions of a development permit, such as undergrounding existing overhead infrastructure can also add to costs. If the overhead infrastructure being converted to underground also serves adjacent customers, costs can escalate quickly because additional system changes may be needed for us to continue to serve existing adjacent customers. As this additional infrastructure is over and above what we require to provide service to the location, the added cost isn't eligible to be offset by the Extension Tariff's revenue contribution provision.

3.3 Alternative Extension Policy options

Given the issues identified above, we're in the process of reviewing our existing Extension Policy and assessing options to update it. Based on feedback received to date and the results of our jurisdictional review, we've explored and modelled the following four options:

1. Update our maximum contribution towards an extension.
2. Update our contribution and simplify the recovery of system improvement costs.
3. Update our contribution and simplify the recovery of all connection costs (extension and system improvements).
4. No connection fees.

Option 1: Increasing BC Hydro's financial contribution

BC Hydro's contribution towards customer connection costs is currently set at $1,475 per single-family dwelling and $200 per kilowatt of estimated billing demand for commercial customers on the General Service Rate. We're in the process of updating our cost assumptions and expect that this will result in an increase to our financial contribution. A higher financial contribution from us would then increase the number of customers whose extension fees are covered, and reduce the amount paid by those customers that don't have their costs completely covered.

This option will decrease customer connection costs by providing all new customers with an increased utility contribution to the overall project cost. However, it doesn't address the free rider and the cost unpredictability issues discussed above.

Option 2: Increasing BC Hydro's contribution and introducing average system improvement costs

In addition to updating our financial contribution, this option recognizes that all customers contribute towards the need for system improvements and includes an averaged system improvement cost recovery approach that would spread these costs more evenly across all new customers.

As a first step, we'd aggregate the cost of all system improvement costs incurred over a predefined period. It would then calculate an average customer system improvement fee. For residential loads, the fee would be on a per single-family dwelling basis. For general service customers, the fee would be on a kilowatt basis. A new customer would then be charged a fee proportional to the load being requested by that customer (i.e., small customer loads would be assessed smaller fees and larger loads would be assessed proportionally larger fees). In addition, we'd provide a financial contribution that's proportional to the customer load.

An added benefit to customers of this averaged system improvement cost recovery structure is that we'd have greater flexibility to pre-build infrastructure in regions of high growth to help speed up customer connections in those regions.

Option 2 will result in a higher financial contribution from us and help address the free rider and cost predictability issues for the system improvement component. However, these issues would still persist for the extension cost component.

Key question: Through upcoming customer engagement, we'll be asking for customer input on a reasonable and acceptable limit to the scope of infrastructure eligible under this option. For example, in a scenario where a small load requires several million dollars of system improvement costs, is it appropriate to only recover the $/kW system improvement fee which, when the fee is reviewed and recalculated, will cause the overall fee to increase.

Option 3: Increasing BC Hydro's contribution and introducing average system improvement and extensions costs

Building on Option 2, rather than charging each customer their own individual extension cost, all customers that request new or increased service are instead assessed and charged a unitized connection fee based on requested load (per single-family dwelling for residential and per kilowatt for commercial loads).

Option 3 embraces a more postage stamp approach to customer connections. A unitized connection fee would help to provide more predictable costs for customers, allowing them to better estimate their overall costs. This option also addresses the free rider issue as it removes the cost causation principle.

Key question: Through upcoming customer engagement, we'll ask for customer input on reasonable and acceptable limits to the scope of infrastructure eligible under this option. Similar to Option 2, we want customer feedback on whether thresholds for participation in this option should be established based on factors such as the distance and/or load of an extension request. For example, if this option incents increased quantities of high-cost connections to proceed, the unitized connection fee will need to be increased to recover those costs.

Option 4: No connection fees

This option would have our existing ratepayers pay for all fees related to new connections. We strongly believe in keeping our rates low for our existing customers is important and the principle of cost causation at a high level is appropriate and reasonable. Therefore, this option isn't under serious consideration.

4. CAPACITY

We have around 1,500 distribution feeders and about 230 substations serving our distribution customers. In most areas we have sufficient capacity to connect new customers in a reasonable timeframe. However, there are certain high growth areas where load is

increasing faster than the time required to complete distribution capital projects to add capacity. Depending on load, location, and timing of a customer project, distribution system capacity may not be immediately available.

We've undertaken a number of measures to reduce potential delays caused by localized capacity constraints, including:

- Updating our feeder loading planning criteria in high growth areas to increase the capacity available for new customers and advance the construction of new feeders. In the past five years, we have constructed 35 new distribution feeders and have 18 new distribution feeders under construction.
- Advancing major underground egress corridors projects to establish the underground infrastructure required to serve upcoming load growth. There are approximately 130 km of new major underground distribution civil infrastructure under construction. Building this infrastructure in advance will help to reduce the timeline to connect new customer projects.
- Ensuring spare feeder positions are available in high growth area substations to enable quick deployment of new feeders for large customers. We have increased our distribution capital budget by $100 million for Fiscal 2024 to help accelerate construction of new distribution feeders and duct banks.
- Implementing feeder level Demand Side Management to make expanded use of our existing available capacity.
- Advancing voltage conversion work to 25 kV in 12 kV areas. This doubles feeder capacity and enables larger secondary services by increasing the largest pad mount transformer size available for secondary services from 500 kVA to 1,500 kVA. Voltage conversion projects in Richmond, Surrey, Port Coquitlam, and Langley are nearing completion. There are also voltage conversion projects underway in Victoria, North Vancouver (Capilano), North Burnaby, Coquitlam, and Downtown Vancouver.
- Offering capacity feasibility reviews for major customers to provide early indication to our customers on the availability of capacity and the expected work scope and timelines.

Even with all these activities, customers and developers are always encouraged to engage with us early us to provide more time to plan and build the required infrastructure. The earlier a customer applies for service, the better chance we have of meeting customer expectations for timelines.

5. CONNECTION TIMELINES

We complete around 27,000 connections each year that don't require design work. In these cases, we have very fast connection times, averaging seven days once permits are received. The ability to apply for these fast service connections and to check their status using an online portal has been welcomed by contractors and customers.

Despite these improvements, we've heard from some customers that our connection timelines need to improve. More specifically, connection delays are creating frustration and challenges for customer projects and a general lack of consistent communication from us makes it difficult for customers to plan accordingly.

The timeline challenges we're experiencing are with more complex projects that require the work of our designers in 29 local district offices around the province. We complete around 4,800 of these types of connections each year.

Over the last two years, an increase in the number of connection requests for high-complexity projects, and staffing challenges have contributed to longer timelines.

We're committed to making connection timelines shorter and improving our communications with customers to make it easier for them to plan the critical steps of their projects that rely on the timing of these connections. To do this, we're making changes to our policies and procedures, which we provide more detail on below.

5.1 Resourcing and training

Achieving a more appropriate staffing level and the continued strategic use of our contractor resources will improve our ability to meet our customers' connection needs in a timely manner.

Over the past year, we've increased our designers and customer connections staffing at local offices across the province by over 50 people. We're focusing on training a high number of new hires.

5.2 Improving our end-to-end process

We're committed to making our end-to-end design process more efficient. Our analysis of the design process and the prioritization of recommended solutions was completed in December 2022. The implementation of these solutions has been ongoing since January 2023.

Design Lite was one of the key streamlined processes identified through our design services strategic review. The program reduces design effort for simple projects, helping to free up time for our designers to focus on more complex, higher risk projects thereby reducing customer connection timelines. The streamlined process for these less complex projects is already resulting in shorter design timelines for projects that meet the criteria and are able to be included. Provincial rollout for the Design Lite process has started and will be complete by the end of this year.

For specialized connection requests we're creating a new work delivery model with specialized teams and project managers. For example, we now have a specialized team in place for telecom carrier connections and are expanding the scope of our EV connection delivery team provincially. These new delivery models will reduce customer connection timelines and improve customer service for specialized connection requests.

5.3 Communications and customer experience

We recently implemented a new customer intake process, including customer onboarding and technical information gathering. By improving the quality of project and technical information we receive through this process, our designers can initiate and complete design work sooner. Experienced customers and contractors who are familiar with the process and the project information requirements will move through the intake process more quickly without additional wait times. Customers requiring a technical discussion with a designer will be referred to a local design office without delay. Our provincial rollout of our new customer intake process will be complete by the end of March 2023.

We're also actively updating available information and guidance for customers on our website. Increasing the availability of self-serve information on our website will help customers to find the information they need for their projects more easily and, in many instances, will answer their questions without the need to contact their designer. These web-based improvements and information packages are being developed in parallel and are planned to be in use starting in September 2023.

Starting in April 2023, we'll begin a pilot to introduce scheduled communication with our customers. Through this service, a representative will proactively reach out to customers if there's a change in planned field work. This will better inform customers of impacts to their schedules without them having to reach out to a field crew or designer. We're aiming to roll this out province wide by the end of the year.

6. DISTRIBUTION STANDARDS

Another concern customers have raised related to customers connections is our use of specific distribution standards. More specifically, customers have told us that our requirements should align more with industry standards where practical, and that we need to listen more to the ideas that customers bring forward for improving our existing standards.

We know that clear service connection requirements make it easier to get the job done right the first time. This is why we're continually reviewing and updating our standards to make it easier for customers to advance their projects. For example, last year we introduced several new standards, including:

- Standards for underground service connections that align the requirements for trench base and cover on private property with the BC Electrical Code. Customers can now use the same base and cover material for BC Hydro and BC Electrical Code work done on private property.
- Improved details for standalone kiosks and pedestals in response to growing customer demand.

- Standards for large secondary services align with industry products and CSA C22.2 standards.

As for upcoming updates and standards, these include the new 320 A service to support growing loads. This service will serve a 200 A panel plus a 125 A panel. The 320 A service is planned for release by summer 2023, subject to the availability of 320 A meters and sockets. The new 320 A service size will support customers to connect growing loads.

Many of the changes in standards listed above are the direct result of customer feedback we've received. We're committed to continuing to engage with customers, act on feedback, and communicate when our standards are updated. For example, we're currently seeking customer feedback on other topics, including gravel requirements on public property and our impact on boulevard allowances/widths.

Customers can also opt in to be notified when new or revised standards are released. Recently updated standards can also be found at bchydro.com/distributionstandards.

Finally, in addition to hearing and sharing information directly with our customers, we're actively engaging with industry groups including the Canadian Home Builders Association of BC, the Electrical Contractors Association of BC, municipalities, Technical Safety BC, and equipment manufacturers.

7. CONCLUSION

As noted in the introduction, this document is intended to provide background information ahead of a presentation to the members of the BC Energy Step Code Council on February 13, 2023.

In this document we've provided information on six areas of our business, including electrification, supply, extension policy, distribution capacity, connection timelines, and distribution standards, that are particularly relevant to the new construction sector.

We look forward to answering questions and sharing discussion with the Energy Step Code Council, as we work together towards successful implementation of the Carbon Pollution Standard.

Consultation on Draft Policy Framework for Climate Change Mitigation

Background

The Canadian Board for Harmonized Construction Codes (CBHCC) has agreed that the National Model Codes include an objective for greenhouse gas (GHG) emissions to enable provincial and territorial regulation, and this objective should be incorporated into the 2025 codes. This objective would include regulation of both operational and embodied carbon with operational being addressed in the 2025 codes and embodied carbon in the 2030 codes.

In the initial stages of developing this policy framework, provinces and territories (PTs) noted a number of elements for consideration, including:

1. principles and factors that all PTs agree on (e.g. ultimate goal and net zero emission definition, emission factors);
2. the need to accommodate the breadth of PT fuel policies, plans and individual PT targets, and coordinate with elements that extend beyond the boundary of the code;
3. regional differences (e.g. ability to fuel switch, availability of low embodied carbon materials in Northern and remote areas);
4. the boundary of operational emissions (e.g. address scope 1 only? Or address both scope 1 and scope 2 emissions?) and embodied emissions (i.e. determine standard method of analysis);
5. impact on affordability (e.g. interplay between energy efficiency and GHG requirements with respect to operational GHG emissions);
6. development and availability of data (e.g. better granularity of emission factors for operational carbon, better availability of Environmental Product Declarations for embodied carbon, standard method of analysis for embodied carbon);
7. implementation approach (e.g. phased approach, flexible approach to address specific needs of PTs);
8. adoption and implementation considerations including market readiness, training, capacity-building (monitoring, reviewing and enforcement), and developing tools to enable PTs to harmonize.

Prior to the transition to the new Harmonized Code Development System, the Canadian Commission on Building and Fire Codes (CCBFC) agreed to ask the standing committees to start working on developing technical requirements that would address GHG emissions in parallel to the ongoing policy work to:

a. address the 8 policy elements identified by PTs, and
b. develop language for a new GHG objective.

A federal, provincial, and territorial Working Group on Climate Change Mitigation (WG-CCM) was struck to consider the 8 policy elements identified by PTs. The 8 policy elements were triaged based on their relevance to the parallel technical work by the standing committees.

Triage of Policy Elements

The CBHCC agreed to address the policy elements as follows:

First wave of policy elements (included in this consultation package):

- ✓ Policy element 1: principles and factors that CBHCC members agree on
- ✓ Policy element 4: the boundary of operational emissions and embodied emissions
- ✓ Policy element 7: implementation approach

Second wave of policy elements (future consultation):

- Policy element 2: the need to accommodate the breadth of PT fuel policies, plans and individual PT targets, and coordinate with elements that extend beyond the boundary of the code
- Policy element 3: regional differences
- Policy element 5: impact on affordability
- Policy element 6: development and availability of data
- Policy element 8: adoption and implementation considerations including market readiness, training, capacity-building, and developing tools to enable PTs to harmonize

Consultation Periods

The CBHCC is seeking input from stakeholders, experts, code users, and the general public on the draft policy recommendations before finalizing the policy framework.

The draft policy recommendations will also be provided to the relevant standing committee(s) for discussion.

Consultation wave 1 begins on February 6, 2023 and end on March 30, 2023.

Consultation wave 2 is planned to begin in March 2023 and end in May 2023. Note that this consultation period is subject to change as the CBHCC is still working on the draft policy recommendations.

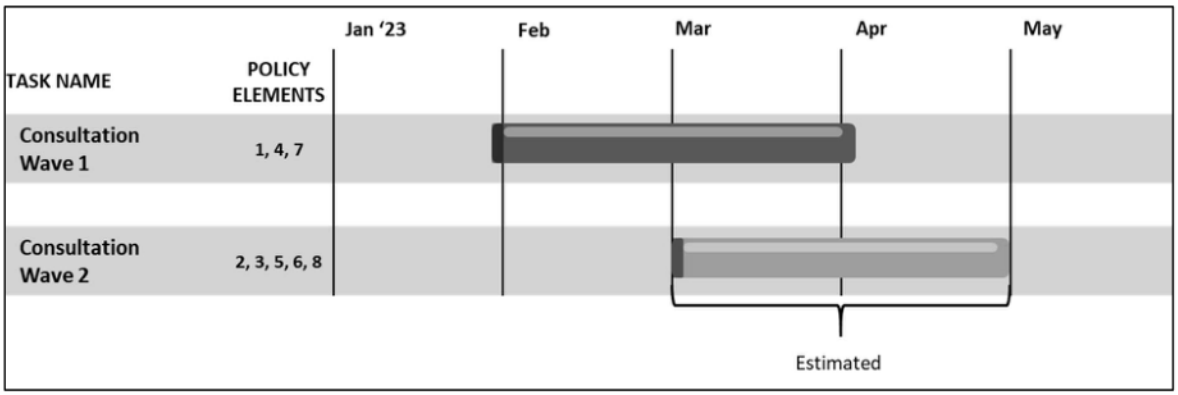


Figure 1: Estimated timeline for wave 1 and 2 consultation periods

Instructions for providing input

To provide input on the policy recommendations, please follow the steps below:

1. Download the policy recommendations here: CBHCC Policy Recommendations for consultation
2. Submit comments to the CBHCC Secretary by email and attach any supportive material: CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca
3. Your comments will be reviewed by the Working Group on Climate Change Mitigation who will report to the CBHCC.

Policy Considerations for Developing and Implementing Greenhouse Gas Emissions Provisions in the National Model Codes

DRAFT VERSION FOR STAKEHOLDER CONSULTATION

Introduction

This paper identifies and examines policy considerations related to the development and implementation of code provisions related to a greenhouse gas (GHG) emissions objective for new houses and buildings in Canada ("GHG emissions codes"). Draft policy positions reviewed by the Canadian Board for Harmonized Codes (CBHCC) are presented, which will serve to inform code development.

An updated version of this paper will include the following, along with any additions to existing sections:

- interplay of other FPT policy and programs related to GHG emissions
- regional differences
- impact on affordability
- development and availability of data, and
- adoption and implementation considerations including market readiness, training, capacity-building, and developing tools to enable PTs to harmonize.

Background

The National Model Codes currently contain an energy efficiency objective and related requirements for the design and construction of new buildings and houses. In the 2020 editions of the National Energy Code of Canada for Buildings (NECB) and National Building Code of Canada (NBC), energy efficiency tiers were introduced, containing measures that progressively increase energy efficiency and reduce the amount of energy needed to operate a building.

However, the National Model Codes do not presently address the type or quality of energy source used by buildings and houses nor do they address embodied GHG emissions.

In November 2022, the CBHCC adopted the direction set by Canadian Commission on Building and Fire Codes, including:

- developing objective(s) to address GHG emissions for inclusion in the 2025 National Model Codes;
- developing proposed technical requirements related to operational GHG emissions for inclusion in the 2025 National Model Codes;
- developing proposed technical requirements related to embodied GHG emissions for inclusion in the 2030 National Model Codes; and
- undertaking policy work, and objective and technical development in parallel.

Draft Policy Positions

Definitions

The CBHCC recommends the following working definitions be used to guide the development of code requirements:

A **net zero emissions building or house** has minimal operational and embodied GHG emissions, with remaining emissions offset through various mechanisms.

A **zero or near zero operational emissions building or house** is designed and constructed to minimize or eliminate operational GHG emissions through energy efficiency and energy source choice.

Emission factors represent the GHG emissions of energy sources (CO_2e produced per unit of energy consumed).

Operational GHG emissions are related to the amount of energy consumed and the carbon intensity of the energy source used to operate a building. Operational GHG emissions are described as scope 1 or scope 2 emissions, per the below:

Scope	Description	Equipment examples
1 (direct)	GHG emissions that are produced from fuels that are combusted on site, primarily from combustion of hydrocarbons, e.g. fossil fuels	Natural gas / propane / oil and solid fuel appliances; CHP system; gas engine heat pump.
2 (indirect)	GHG emissions that are produced from energy sources that are generated off site, e.g. purchased electricity	Electric equipment, equipment that uses purchased energy, district heating or cooling.

Guiding principles and ultimate goals

Goal, harmonization within a flexible framework

Code requirements for new houses and buildings towards zero or near zero operational GHG emissions solutions are needed in order to help support provincial, territorial and federal GHG emissions reduction targets and climate action plans.

Similar to the energy efficiency tiers, there are several advantages to a tiered approach as P/Ts move towards a low-carbon economy, including:

1. providing a flexible approach to address P/T-specific circumstances (e.g. cleanliness of electricity grids, availability of clean fuels), and
2. informing and moving the Canadian industry forward through the learnings and experience of early P/T adopters of the higher performance requirements as jurisdictions harmonize towards toward an ultimate goal of zero or near zero operational emissions.

Recommendation: That a tiered framework be developed in the NECB and NBC, with tiers progressing to zero or near zero operational GHG emissions, enabling P/Ts to follow a flexible pathway towards an ultimate end-goal of net zero emissions buildings or houses.

Recommendation: That GHG emissions requirements be separate from the NBC and NECB energy performance tiers but developed with the view to not preclude pairing the requirements in various ways.

Scope of Operational GHG emissions requirements

The CBHCC considered the benefits and drawbacks of addressing only scope 1 emissions compared to addressing both scope 1 and scope 2 emissions in the National Model Codes and has considered the benefits and drawback of various approaches to establishing emissions factors that capture the variability of grid-level (scope 2) emissions.

Recommendation: That both scope 1 and scope 2 emissions (i.e. all fuel types) be addressed to give a more realistic assessment/more complete picture of the GHG emissions emitted by a building. Furthermore, addressing only scope 1 emissions could lead to design choices that do not reduce GHG emissions overall.

Recommendation: That a standardized and fixed emission factor for grid-level scope 2 emissions be set for each province/territory. This grid-level emissions factor would be based on Environment Canada and Climate Change data and, if available, data from the provinces/territories that is specific to each province or territory, with the potential to evolve the approach to consider the impact of other policies and programs on GHG-emission trends over time. Given the complexity and policy implications of grid-level emissions data, provinces/territories may need to engage several provincial/territorial ministries in determining a standardized, grid-level emission factor that is specific to each province/territory.

Compliance paths

For any chosen target, compliance options could include:

- performance path(s) – using energy modelling software to demonstrate compliance to specific targets and/or;
- prescriptive path(s) – using acceptable solutions that are deemed to reach specific targets.

To continue to allow flexibility in design and construction for housing and small buildings, both a performance path and a prescriptive path could be made available in the NBC. Prescriptive requirements in the NECB would also be useful for buildings that are designed without undertaking energy modelling.

Recommendation: That both performance and prescriptive options be developed in the NBC and in the NECB.

Metrics

A variety of metrics could be used to assess the operational GHG emissions associated with buildings. For example, the tiered framework could use reference-based metrics, intensity-based metrics, absolute metrics, or a combination of two or more metrics.

- A reference building metric sets a threshold for the allowable amount of GHG emissions for a proposed building compared to a reference building (expressed as a percent GHG emissions less than or equal to the reference building).
- An intensity-based metric sets a threshold for the amount of allowable GHG emissions per floor area of the building (expressed in $kgCO_2e/m^2/year$).

- An absolute metric sets a threshold for the amount of allowable GHG emissions per building (expressed in $kgCO_2e$ per building). An absolute metric does not normalize for building size, enabling designers/builders to decide on trade-offs between fuel sources/equipment, energy efficiency measures and building design/size.

Recommendation: That metrics be carefully considered to ensure alignment with P/T goals.

RE: Bullet points of other considerations - EE and GHGs

From: May, Zachary OHCS:EX
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: February 7, 2023 10:31:52 PM PST

Thank you.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: Tuesday, February 7, 2023 2:02 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Bullet points of other considerations - EE and GHGs

Hey Zac,

As we discussed last week, please see below a few items in relation to EE and GHGs that may come up in tomorrows meeting with Minister Kahlon:

Energy Efficiency

- Small homes in cold climates and cost disparities in comparison to larger homes - a methodology was developed through the research project (Focal Engineering and Bernhardt) to reduce cost burden through relaxations in metrics – refinement may be needed. CHBA has been contacted to look into the data base they have of real projects to help verify approach.
- Log Homes – research completed to verify that there are many ECM options to meet Step 3 for the homes studied. Changes to the BCBC 2023 will be looked at in more detail.

GHGs

- GHGs and supplemental heat for homes in cold climates – Some concerns were raised regarding meeting the more stringent GHG metrics for homes in cold climates given that they may be required to use more supplemental heat when employing heat pump technology. This has been somewhat addressed by the fact that back-up heat is excluded, so a secondary system could be used. Also, this is opt-in initially which give some degree of latitude to LGs as to how to enforce the GHG metrics, and have the ability to take a more relaxed approach. As this regulation evolves, we can further identify the issues and work towards solutions prior to mandatory requirements.
- As raised by UDI, more comprehensive costing analysis should be undertaken with revisions to the Metrics Report. Also, less GHG intensive technologies should be looked at as part of the expanded study (ie HP DHW). We will be discussing additional analysis and research with the SCC on Monday.
- Further development of the NBC/NECB regarding GHGs will help to inform the evolution of this standard.

Ongoing work to support EE and GHG changes in code:

- Part 9 and Part 3 calculators along with supporting educational material
- Current discussions with partners such as BCHousing and the Step Code Council to address, collaboratively, any training, training materials, studies etc
- Opportunities through the National Code Acceleration Fund

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

A touch base on the materials and approach for engaging UDI and the non-profit housing sector

---

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15

Energy Step Code Council agenda

From:	Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To:	bea.bains@fortisbc.com, ebaudinaud@communityenergy.bc.ca, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, GCarignan@communityenergy.bc.ca, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, rmathews@cnv.org, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, jowen@surrey.ca, sean.pander@vancouver.ca, roberto@zebx.org, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, trothery@communityenergy.bc.ca, pauline@chbabc.org, lsampliner@portmoody.ca, zsegal@boma.bc.ca, dstathonikos@boma.bc.ca, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Cc:	hudson.giesbrecht@bchydro.com, frank.lin@bchydro.com, angela.cho@bchydro.com, kevin.lim-kong@bchydro.com, altaf.hussain@bchydro.com, iulia.jurgea@bchydro.com, Rick.mann@iompropertygroup.com, Keith.Anderson@bchydro.com, ranjeet.gill@bchydro.com, james@brightfuture.studio, carmina@chbabc.org, robert.chin@bchydro.com, Tom.Berkhout@bchydro.com
Sent:	February 9, 2023 5:14:39 PM PST
Attachments:	2023-02-13 agenda v1.docx

Hi, all:

Agenda attached. Please let me know if you have additional questions. Looking forward to Monday.

Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Energy Step Code Council agenda

From: Wells, Ralph <ralph.wells@ubc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: February 10, 2023 3:53:36 PM PST

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Whoot!! Thanks for sharing the good news Zach! Perfect timing for us, we're tracking toward approval of our carbon pollution target at June Board of Governors, so May 1 lines up perfectly. Will we be the first AHJ to approve..? ☺

Anyway, thanks for kickoff our weekends with this.

Best, Ralph

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, February 10, 2023 3:41 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; Madden, John (C+CP) <j.madden@ubc.ca>; Lisa.Mak@bchydro.com; rmathews@cnv.org; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; Wells, Ralph <ralph.wells@ubc.ca>; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Cc: hudson.giesbrecht@bchydro.com; frank.lin@bchydro.com; angela.cho@bchydro.com; kevin.lim-kong@bchydro.com; altaf.hussain@bchydro.com; iulia.jurgea@bchydro.com; Rick.mann@iompropertygroup.com; Keith.Anderson@bchydro.com; ranjeet.gill@bchydro.com; james@brightfuture.studio; carmina@chbabc.org; robert.chin@bchydro.com; Tom.Berkhout@bchydro.com; iulia.jurgea@bchydro.com
Subject: RE: Energy Step Code Council agenda

[**CAUTION:** Non-UBC Email]
Hello everyone,

I wanted to let you all know that the regulation for the proposed changes to the Energy Step Code and introduction of the carbon pollution standard has been signed by the Minister with an effective date of May 1, 2023. The regulation isn't official until it is published in the Gazette next Thursday, but this means we can focus on implementation. We will highlight some of the key changes we made based on public review feedback at the meeting on Monday, and we are working on having a convenience copy of the updated code language available next week.

Have a great weekend. Looking forward to connecting again on Monday.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Thursday, February 9, 2023 5:15 PM
To: bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; rmathews@cnv.org; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Cc: hudson.giesbrecht@bchydro.com; frank.lin@bchydro.com; angela.cho@bchydro.com; kevin.lim-kong@bchydro.com; altaf.hussain@bchydro.com; iulia.jurgea@bchydro.com; Rick.mann@iompropertygroup.com; Keith.Anderson@bchydro.com; ranjeet.gill@bchydro.com; james@brightfuture.studio; carmina@chbabc.org; robert.chin@bchydro.com; Tom.Berkhout@bchydro.com; iulia.jurgea@bchydro.com
Subject: Energy Step Code Council agenda

Hi, all:

Agenda attached. Please let me know if you have additional questions. Looking forward to Monday.

Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Energy Step Code Council agenda

From: Tami Rothery <trothery@communityenergy.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: February 10, 2023 4:12:32 PM PST

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Congrats Zac! Great news. Appreciate your hard work to help make this happen, and the quick pivot to implementation.

Have a wonderful weekend,
Tami

Tami Rothery, Senior Community Energy Manager
Community Energy Association
Office: (250) 469-6783 ext. 719

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: February 10, 2023 3:41 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; bea.bains@fortisbc.com; Elisabeth Baudinaud <ebaudinaud@communityenergy.bc.ca>; Berkhout, Tom <Tom.Berkhout@bchydro.com>; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; Gaëtane Carignan <GCarignan@communityenergy.bc.ca>; Maya Chorobik <mchorobik@communityenergy.bc.ca>; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; Enright, Patrick <patrick.enright@vancouver.ca>; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; Nicholas Heap <nheap@richmond.ca>; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Megan Lohmann <mlohmann@communityenergy.bc.ca>; Madden, John (C+CP) <j.madden@ubc.ca>; Lisa.Mak@bchydro.com; rmathews@cnv.org; Christopher McCurry <cmccurry@communityenergy.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; Tami Rothery <trothery@communityenergy.bc.ca>; pauline@chbabc.org; Laura Sampliner <lsampliner@portmoody.ca>; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn Wark <robyn.wark@bchydro.com>; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Grass, William OHCS:EX <William.Grass@gov.bc.ca>
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Subject: RE: Energy Step Code Council agenda

Hello everyone,

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Have a great weekend. Looking forward to connecting again on Monday.

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Executive Director

(he/him/his)

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Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Re: Energy Step Code Council agenda

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To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Cc: Grass, William OHCS:EX <William.Grass@gov.bc.ca>, Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>
Sent: February 12, 2023 10:30:36 PM PST

We do have a list of ECIF projects and I can speak to them briefly. Looping in Will and Tracy so they know.

From: May, Zachary OHCS:EX
Sent: Sunday, February 12, 2023 10:09:18 PM
To: Williams, Scott B OHCS:EX; Wong, Hugo OHCS:EX
Subject: RE: Energy Step Code Council agenda

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To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: February 13, 2023 8:15:20 AM PST
Attachments: ESCC Post Public Review Summary 2023-02-13.pptx

I can speak to the changes post public review at 10:15. I have prepared a few slides. See attached.

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ENERGY

STEPCODE

BUILDING BEYOND THE STANDARD

Post Public Review Changes

February 13, 2023

Part 9

- **9.36.1.3. Compliance and Application**
  - Must comply with 9.36.6. - so the performance path is now the default
  - Should an LG wish to pursue the prescriptive path, then they will need to do so via their bylaws.

- **20% Better – Prescriptive**
  - Removed the continuous insulation requirements for below grade walls and non -accessible flat roofs
  - For ceilings below attics - dialed back the RSI requirement
  - HRV efficiencies were dialed back form 75% efficiency to code minimum of 60%

- **20% Better – Performance**
  - Removed peak cooling load requirement
  - ‘Mix and Match’ option is still available

GHGs

- **Emissions Factors**
  - Emissions Factors for both electricity and natural gas have been inserted into the code (CoV EMGs)

- **Part 9**
  - **Performance Path** defined by MEUI – space conditioning, ventilation and DHW
    - Ancillary uses currently excluded
    - Back-up/redundant heat excluded
  - **Prescriptive Path**
    - EL-4 (ie zero carbon), the requirement is for 'energy sources supplying all building systems, including equipment and **appliances**' – so we have opened the door to have gas cook tops and gas dryers included in the prescriptive requirements (wood burning stoves and gas fire places would still not be included as these would still be considered 'back-up').

RE: Energy Step Code Council agenda

From: Wilma Leung <wileung@bchousing.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>
Sent: February 13, 2023 8:35:46 AM PST
Attachments: image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Congrats to Zac and team!

Thank you, Huy chexw & Hay ce:p q̓ə,
Wilma

To honour the truth, I acknowledge that I live and work on the shared, ancestral and unceded homelands of the hən̓q̓amin̓am̓ and Sḵwxwú7mesh-speaking people who have been caring for these lands, along with the waters and all that is above and below, since time immemorial. As a newcomer to the Salish Coast, I am on a journey to reciprocate by working towards reconciling with all our relations here and beyond.

Wilma Leung (she/her/hers) | Senior Manager, Technical Research & Education | BC Housing
wileung@bchousing.org | Mobile: 604-218-1095 | www.bchousing.org/research-centre

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RESEARCH CENTRE

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Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Energy Step Code Council agenda

From: Megan Lohmann <mlohmann@communityenergy.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: February 13, 2023 9:41:06 AM PST

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Zac, thanks for steering the ship over the past years! I am sure it's a relief to see it through to regulation – the long game is always worth it ☺

See ya (virtually) in a few minutes!

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: February 10, 2023 4:41 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; bea.bains@fortisbc.com; Elisabeth Baudinaud <ebaudinaud@communityenergy.bc.ca>; Berkhout, Tom <Tom.Berkhout@bchydro.com>; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; Gaëtane Carignan <GCarignan@communityenergy.bc.ca>; Maya Chorobik <mchorobik@communityenergy.bc.ca>; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; Enright, Patrick <patrick.enright@vancouver.ca>; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; Nicholas Heap <nheap@richmond.ca>; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; Megan Lohmann <mlohmann@communityenergy.bc.ca>; Madden, John (C+CP) <j.madden@ubc.ca>; Lisa.Mak@bchydro.com; rmathews@cnv.org; Christopher McCurry <cmccurry@communityenergy.bc.ca>; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; Tami Rothery <trothery@communityenergy.bc.ca>; pauline@chbabc.org; Laura Sampliner <lsampliner@portmoody.ca>; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn Wark <robyn.wark@bchydro.com>; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Cc: hudson.giesbrecht@bchydro.com; frank.lin@bchydro.com; angela.cho@bchydro.com; kevin.lim-kong@bchydro.com; altaf.hussain@bchydro.com; iulia.jurgea@bchydro.com; Rick.mann@iompropertygroup.com; Keith.Anderson@bchydro.com; ranjeet.gill@bchydro.com; james@brightfuture.studio; carmina@chbabc.org; robert.chin@bchydro.com; Berkhout, Tom <Tom.Berkhout@bchydro.com>; iulia.jurgea@bchydro.com
Subject: RE: Energy Step Code Council agenda

Hello everyone,

I wanted to let you all know that the regulation for the proposed changes to the Energy Step Code and introduction of the carbon pollution standard has been signed by the Minister with an effective date of May 1, 2023. The regulation isn't official until it is published in the Gazette next Thursday, but this means we can focus on implementation. We will highlight some of the key changes we made based on public review feedback at the meeting on Monday, and we are working on having a convenience copy of the updated code language available next week.

Have a great weekend. Looking forward to connecting again on Monday.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Thursday, February 9, 2023 5:15 PM
To: bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; rmathews@cnv.org; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Cc: hudson.giesbrecht@bchydro.com; frank.lin@bchydro.com; angela.cho@bchydro.com; kevin.lim-kong@bchydro.com; altaf.hussain@bchydro.com; iulia.jurgea@bchydro.com; Rick.mann@iompropertygroup.com; Keith.Anderson@bchydro.com; ranjeet.gill@bchydro.com; james@brightfuture.studio; carmina@chbabc.org; robert.chin@bchydro.com; Tom.Berkhout@bchydro.com; iulia.jurgea@bchydro.com
Subject: Energy Step Code Council agenda

Hi, all:

Agenda attached. Please let me know if you have additional questions. Looking forward to Monday.

Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Energy Step Code Council meeting updates, materials

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>

To: bea.bains@fortisbc.com, ebaudinaud@communityenergy.bc.ca, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, GCarignan@communityenergy.bc.ca, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, nheap@richmond.ca, SHorsburgh@rdn.bc.ca, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, rmathews@cnv.org, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, jowen@surrey.ca, sean.pander@vancouver.ca, roberto@zebx.org, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, trothery@communityenergy.bc.ca, pauline@chbabc.org, lsampliner@portmoody.ca, zsegal@boma.bc.ca, dstathonikos@boma.bc.ca, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Grass, William OHCS:EX <William.Grass@gov.bc.ca>

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Sent: February 13, 2023 10:16:29 AM PST

Hi, everyone:

New meeting link below: Apologies!

Microsoft Teams meeting
Join on your computer, mobile app or room device
Click here to join the meeting
s.15

From: Wong, Hugo OHCS:EX
Sent: Tuesday, February 7, 2023 2:10 PM
To: 'bea.bains@fortisbc.com' <bea.bains@fortisbc.com>; 'ebaudinaud@communityenergy.bc.ca' <ebaudinaud@communityenergy.bc.ca>; 'Tom.Berkhout@bchydro.com' <Tom.Berkhout@bchydro.com>; 'alexandre.bigonesse@canada.ca' <alexandre.bigonesse@canada.ca>; 'pcaraher@ahma-bc.org' <pcaraher@ahma-bc.org>; 'GCarignan@communityenergy.bc.ca' <GCarignan@communityenergy.bc.ca>; 'mchorobik@communityenergy.bc.ca' <mchorobik@communityenergy.bc.ca>; 'NConnolly@richmond.ca' <NConnolly@richmond.ca>; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; 'bdeeks@rdcfinehomes.com' <bdeeks@rdcfinehomes.com>; 'diana@havan.ca' <diana@havan.ca>; 'patrick.enright@vancouver.ca' <patrick.enright@vancouver.ca>; 'catherine.ernst@boabc.org' <catherine.ernst@boabc.org>; 'jfisher@udi.org' <jfisher@udi.org>; 'MGatensby@aibc.ca' <MGatensby@aibc.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; 'joe.iconhomes@gmail.com' <joe.iconhomes@gmail.com>; 'nheap@richmond.ca' <nheap@richmond.ca>; 'SHorsburgh@rdn.bc.ca' <SHorsburgh@rdn.bc.ca>; 'jjung@asttbc.org' <jjung@asttbc.org>; 'toby.lau@bchydro.com' <toby.lau@bchydro.com>; 'wileung@bchousing.org' <wileung@bchousing.org>; 'mlohmann@communityenergy.bc.ca' <mlohmann@communityenergy.bc.ca>; 'J.Madden@ubc.ca' <J.Madden@ubc.ca>; 'Lisa.Mak@bchydro.com' <Lisa.Mak@bchydro.com>; 'rmathews@cnv.org' <rmathews@cnv.org>;

May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; 'cmccurry@communityenergy.bc.ca' <cmccurry@communityenergy.bc.ca>; 'christopher.mclellan@canada.ca' <christopher.mclellan@canada.ca>; 'mmcwilliam3@bcit.ca' <mmcwilliam3@bcit.ca>; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; 'Muncaster, Katherine EMLI:EX' <Katherine.Muncaster@gov.bc.ca>; 'jowen@surrey.ca' <jowen@surrey.ca>; 'sean.pander@vancouver.ca' <sean.pander@vancouver.ca>; 'roberto@zebx.org' <roberto@zebx.org>; 'hradhakrishnan@egbc.ca' <hradhakrishnan@egbc.ca>; 'ron@havan.ca' <ron@havan.ca>; 'kelly@hkrbuilders.com' <kelly@hkrbuilders.com>; 'trothery@communityenergy.bc.ca' <trothery@communityenergy.bc.ca>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'lsampliner@portmoody.ca' <lsampliner@portmoody.ca>; 'zsegal@boma.bc.ca' <zsegal@boma.bc.ca>; 'dstathonikos@boma.bc.ca' <dstathonikos@boma.bc.ca>; 'lise.townsend@surrey.ca' <lise.townsend@surrey.ca>; 'Robyn.Wark@BCHydro.com' <Robyn.Wark@BCHydro.com>; 'ralph.wells@ubc.ca' <ralph.wells@ubc.ca>; 'tyler.wightman@boabc.org' <tyler.wightman@boabc.org>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; 'Wong, Hugo OHCS:EX' <Hugo.Wong@gov.bc.ca>; Grass, William OHCS:EX <William.Grass@gov.bc.ca>
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Subject: Energy Step Code Council meeting updates, materials

Hello, members of the Energy Step Code Council:

We look forward to meeting this coming Monday, Feb. 13. I wanted to provide some logistical updates and meeting materials (attached).

In-person registration is now closed as we have reached capacity for the meeting rooms at BC Hydro. However, we can still accept more virtual attendees.

We have booked two meeting rooms to accommodate in-person attendees. **Attendees may go to either Meeting Room 1 on the 13th floor or Meeting Room 1 on the 7th floor.** Zac and I will be on the 13th floor. I encourage any attendees who have travelled far to come here to go to the 13th floor, and anyone who's primarily listening to go to the 7th floor. But, as long as you're seated at a conference table, the mics will pick you up and you may participate fully no matter which room you're in.

A selection of sandwiches, year-round salad and coffee/tea will arrive at about 11:45 a.m. at the 13th floor conference room. It will be provided by the Dirty Apron (read the PDF menu) and should accommodate the food preferences/requirements indicated by guests on the registration form. We can all mingle there during the lunch hour.

A few reminders:

- **For in-person attendees:** bring your laptop, tablet or phone to "raise your hand" during the meeting and read questions from remote participants. Mute your mic and speakers to eliminate audio feedback.
- **For all attendees:** if you have questions about electrical extension issues you wish to ask BC Hydro staff, please email them to me at hugo.wong@gov.bc.ca **before noon on Thurs. Jan. 9** so I can pass them on and they can do any technical research if required.

I'll send a more fulsome agenda and other materials soon. In the meantime, please review the attachments. The BC Hydro package should remain within your organizations and are not to be shared publicly.

Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
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PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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To: **Hon. Ravi Kahlon, Minister of Housing**
From: **Urban Development Institute (UDI)**
Date: **February 13, 2023**
Re: **Right of First Refusal**

Purpose

Premier David Eby has previously stated his intention to provide non-profit housing providers with the first right of refusal to purchase rental properties. This change would build on the recent announcement of a new $500-million Rental Protection Fund. Introducing a right of first refusal could undermine the delivery of new rental and even below-market housing. It is understood that the model currently operating in Montreal/Quebec is being used as a reference for this initiative, which has a different objective. This model is not applicable in many ways to the B.C. context, and should not be considered a successful example, as it has failed to meet its objectives in Quebec.

This change in-part is being driven by public commentary on the "financialization of housing" and seeking to limit the extent to which the private sector can build and operate rental, and below-market housing in Canada. Private builders remain the largest contributor to new housing delivery in B.C. and across Canada. Governments and non-profits do not have the resources to develop the large amounts of new housing needed in British Columbia, and it will take the efforts of both the private and public sector to meet the growing demand for rental housing in B.C.

Background/Context

Quebec Pre-emptive Right
"The pre-emptive right gives the city the priority to purchase certain buildings or lots in order to create community projects." - City of Montreal

The Province of Quebec conferred powers to the City of Montreal in 2017 under the *Charte de la Ville de Montreal, metropole du Quebec* (Montreal municipal charter) to exercise a pre-emptive right to purchase properties for "*community projects.*" Between 2017 and 2020, the power was used primarily to acquire land for regional parks. In March 2020, Montreal's Agglomeration Council (AC) adopted a bylaw that allows the City to pre-emptively acquire specified properties for the purposes of developing new social housing. In July 2022, this broad authority was extended to all municipalities, intermunicipal boards and transit authorities in the Province of Quebec. **This pre-emptive right was designed to facilitate the purchase of development sites by municipalities for the purposes of City-led development, not the acquisition of existing buildings to be maintained in their current form.**

The authority is exercised through a charge on title listed with the Land Registry and this charge remains in place for a period of 10 years. Upon expiry, the City's interpretation of their authority would allow them to re-apply the pre-emptive right for a different purpose (i.e., if the site was previously identified for park expansion, it would later be designated as a potential social housing site). This has not yet been tested as the process is less than 10 years old. Owners of

affected properties are notified that when they list their property for sale, the City will have the opportunity to acquire it.

To acquire property under this provision, a City must take the following steps:

1. After a specified property is listed for sale and an offer is accepted, the owner of an affected property must send the City a notice of intent together with the offer to purchase;
2. The owner must send the City a copy of any leases, agreements, studies or evaluations associated with the site, including those conducted by the prospective purchaser, and any other associated documents;
3. The City then has 60 days from receipt of the notice to decide whether or not to exercise its right of first refusal to purchase the property at the same price and terms as the accepted offer; and
4. If the City decides to purchase the property, it has a further 60 days to close on the property. The City also reimburses the unsuccessful purchaser reasonable expenses associated with the offer.

If the City declines to exercise its pre-emptive right, the initial offer proceeds with closing on the property.

B.C. Context
During his leadership campaign, Premier David Eby listed the following commitment as part of his housing platform:

"We will establish by law a right of first refusal for acquiring these at-risk homes and secure renters' housing."

This was expected to be announced with the new non-profit acquisition strategy, kick-started by a $500 million provincial funding investment.

Discussion

Ineffectiveness of the Montreal Model
UDI's Executive met with representatives of UDI's Quebec Chapter (IDU) on December 5, 2022, and they identified a number of issues with the pre-emptive right authority as it currently operates in Quebec. Although it was recognized that the pre-emptive right may be useful for municipal planners, it would have required conditions, which were not included. Neither the extension, nor the original introduction of the power in Quebec was supported by the development community. This created uncertainty with acquisitions and the willingness of lenders to finance projects acquiring properties where this charge on title exists.

Although cities are required to reimburse unsuccessful purchasers when they choose to exercise their pre-emptive right, these reimbursements have not covered the full costs associated with

offer submissions. This has become a deterrent for builders to make offers on properties with a charge on title, and has the ability to negatively impact land prices.

In the case of Montreal specifically, the City has selectively exercised its authority to restrict land assemblies and create orphan sites. For example, in an assembly involving eight individual sites all with charges on title, the City may waive their pre-emptive right for six sites and exercise it for the remaining two. This has led to negotiations directly with the City to unlock the remaining sites, without certainty that the City will waive its right.

These negotiations have resulted in the City establishing a process to generate additional financial contributions from proponents, outside of the existing development finance framework. In B.C. this would equate to an additional Community Amenity Contribution (CAC) or negotiated extraction, which will add time and cost to housing delivery.

In the approximately three years since Montreal could use its pre-emptive right for social housing, the AC has exercised this power more than 60 times, however there has been very limited action taken to redevelop any of these properties. The City lacks the capacity to act on all of the sites acquired through the pre-emptive right process, stagnating the development of new housing and freezing properties.

Inapplicability to Existing Rental Housing in B.C.
There are some key differences between the model applied in Montreal and Quebec and way in which this type of authority is discussed for B.C. Firstly, application to tenanted rental buildings in B.C. does not align with the rationale for this authority in Quebec.

In Quebec, the authority is focused on the acquisition of development sites by municipalities. Whereas the suggested application in B.C. would be designed to acquire existing rental buildings to be maintained in their current form, and it is not clear who would be able to exercise the right of first refusal.

If applied to existing rental housing in B.C., a right of first refusal or pre-emptive right to purchase power would have significant consequences for the supply of new rental housing. Currently, there are opportunities to redevelop low-density, ageing rental housing in certain locations, such as around transit and services. This would create more homes, and allow current renters to return to new, seismically upgraded, low carbon and energy efficient housing at below-market rents. The model used by the City of Burnaby illustrates the success of this approach, where thousands of new affordable rental homes are being built, with some of the most robust tenant protections in British Columbia.

A pre-emptive right to purchase, if applied broadly, would limit these opportunities to build more rental housing. It would make redevelopment riskier because a builder's ability to acquire properties containing existing rental housing would be uncertain. This would affect site redevelopments and assemblies of multiple sites, where one parcel contains rental housing. Increased risk means lenders may be less willing to provide financing in the assembly phase of a

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project where a property is subject to this type of requirement. This is a strong disincentive to builders and lenders, who contribute to the supply of new rental housing. Creating further restrictions on rental supply will perpetuate low vacancy rates and high rents.

Further, we would be very concerned if this type of authority was provided to a municipality in British Columbia. The use of the pre-emptive right authority by the City of Montreal has added additional time and costs to the delivery of housing through unnecessary negotiations. As British Columbia seeks to streamline both development finance and housing approvals, creating a right of first refusal would be counter-productive.

Recommendations/Conclusion

As illustrated, we have significant concerns with the potential creation of a right of first refusal authority, in B.C., with any reference to the model used in Montreal and Quebec. The authority that has been provided to municipalities in Quebec is intended to meet different objectives and we would not consider it an applicable policy reference. It is also unclear whether there is a need for such a policy to intervene in the B.C. market, given the current interest rate conditions, and strong demand. Instead, we encourage the Province to work with rental providers, and non-profits to develop policies that will support the increased delivery of more new rental housing.

CHBA & Altus Meeting – February 14, 2023

Topic: Discussion on data points and researchers used to help inform the selection of municipal targets.

1. Introductions
    - Carmina Tupe - CHBA
    - Daryl Keleher – Altus – Senior Director (planner)
    - Diana Petramala – Altus – Director (analytics)
    - Candcie,
    - Sandra
    - Cimarron
    - Regrets: Bindi Sawchuk
2. Housing Supply Act Overview
3. Alus Study
    a. 13 municipalities
    b. Forecast and suppressed housing (pent up demand)
    c. Data challenges: happy to share experience
    d. Municipal process and documentation/descriptions
    e. Municipalities perceive the minimum target the maximum
        i. Cimarron: range and adjust accordingly
4. Discussion
    - Sandra: why 2001 considered affordability benchmark
        - Diana: homeownership affordability – didn't explain why…

UDI HSA Meeting August 4, 2022

Staff
amcmullin@udi.org Anne McMullin President & CEO
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Abundant Housing…

Hello Indiana, Cory, Thanks again to you and the housing team for the productive meeting yesterday. ADM Sawchuk asked about contacts for organizing going forward. We would like to propose a few possible topics for more focused meetings/correspondence in the near future and a point-person for each:

General Minimum Zoning ("2 FSR eight-plexes"): Point Person: Daniel Oleksiuk, s.22
Suggested Meeting Dates: Feb. 22-24

Transit- and Jobs-Oriented Minimum Zoning ("6-Storey apartments"): Point Person: Owen Brady, owen@abundanthousingvancouver.com Suggested Meeting Dates: Week of Feb. 27

Housing Needs Assessments and Enforcement: Point Person: Peter Waldkirch,
s.22 Suggested Meeting Dates: Week of Feb. 27

If we are misreading your priorities, please do not hesitate to propose alternative topics/working groups. I will serve as a general contact to delegate questions & topics for AHV. We will follow up with detailed written responses to your questions from yesterday.

We would suggest a follow-up meeting as per the availability above. As you know, for most of us, our expertise is primarily in advocacy and general issues regarding urban growth. We may wish to pull in some industry or academic contacts depending on the topic.

Since we are discussing dates, I should note that we are hosting a talk with author and researcher M. Nolan Gray in conjunction with VPL on March 15th on zoning issues. If any staff are interested in attending, it would be great to meet in person!

Kind regards,
Owen Bradley

Housing Supply Act Regulations & Housing Targets

From:	Corpe, Cimarron OHCS:EX
To:	jfisher@udi.org
Sent:	February 14, 2023 1:53:00 PM PST
Attachments:	image001.png, image003.png

Hi Jeff,

Further to my voicemail just now, we're in the process of drafting the Housing Supply Act regulations and would like to meet with UDI. Additionally, I would like to discuss housing targets methodology with you and/or your staff.

I'm in meetings until 4 PM today and most of Wednesday and Thursday but perhaps you could let me know when you have 15 minutes for a call this week to discuss the above? My mobile number works best for telephone calls: 250-208-0242.

Cheers!

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

RE: Housing Supply Act Regulations & Housing Targets

From:	Corpe, Cimarron OHCS:EX
To:	Cassandra Smith <csmith@udi.org>
Cc:	Jeff Fisher <jfisher@udi.org>
Sent:	February 14, 2023 3:53:49 PM PST
Attachments:	image001.png, image003.png

Hi Cassandra,

4 PM today works for me. I'll send an invite to you right away.

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

From: Cassandra Smith <csmith@udi.org>
Sent: Tuesday, February 14, 2023 2:59 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: Housing Supply Act Regulations & Housing Targets

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Cimarron,

Jeff shared your note with me and we'd be happy to set up an initial call to better understand what your process and timelines look like. That would also help us identify who else should be part of any subsequent discussions.

We could connect at 4pm today or Thursday afternoon looks fairly open, do you have any timeslots that might work.

Thanks,
Cassandra

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: February 14, 2023 1:53 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: Housing Supply Act Regulations & Housing Targets
Importance: High

Hi Jeff,

Further to my voicemail just now, we're in the process of drafting the Housing Supply Act regulations and would like to meet with UDI. Additionally, I would like to discuss housing targets methodology with you and/or your staff.

I'm in meetings until 4 PM today and most of Wednesday and Thursday but perhaps you could let me know when you have 15 minutes for a call this week to discuss the above? My mobile number works best for telephone calls: 250-208-0242.

Cheers!

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15

RE: Energy Step Code Council agenda - ZEBx newsletter

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
To: Roberto Pecora <roberto@zebx.org>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Anna Henderson <anna@zebx.org>
Sent: February 16, 2023 9:42:04 AM PST

Hi all,

I'll be modifying the entry in the ESC newsletter to remove the reference to public review and find something newer. We'd rather not point to the out-of-date material.

We are working on posting the convenience copy of the code language and when that is finished I will upload it ASAP and give you a new URL.

Hugo

From: Roberto Pecora <roberto@zebx.org>
Sent: Thursday, February 16, 2023 9:25 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Anna Henderson <anna@zebx.org>
Subject: Re: Energy Step Code Council agenda - ZEBx newsletter

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi guys! The ESC newsletter goes out tmrw and the ZEBx newsletter goes out Tuesday (hopefully). For the ZEBx newsletter, is there an article, bulletin or something that we can point our newsletter recipients to for more information? The link in the ESC newsletter points to the public review. I'm looking for something more forward-looking for the ZEBx newsletter.

From: Roberto Pecora <roberto@zebx.org>
Date: Friday, February 10, 2023 at 4:28 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Re: Energy Step Code Council agenda

That's great news! I'm glad to see all the hard work BSSB put into this come to fruition. Let the implementation games begin!

Good timing for the codes accelerator fund application. Our aim is to get LGs to set a minimum for the CPS.

I'd like to delay our newsletter until Friday so we can include this announcement in it. Any risk of it not being published next Thursday?

Enjoy your weekend!

Roberto

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Date: Friday, February 10, 2023 at 3:40 PM
To: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>, bea.bains@fortisbc.com <bea.bains@fortisbc.com>, ebaudinaud@communityenergy.bc.ca <ebaudinaud@communityenergy.bc.ca>, Berkhout, Tom <tom.berkhout@bchydro.com>, alexandre.bigonesse@canada.ca <alexandre.bigonesse@canada.ca>, pcaraher@ahma-bc.org <pcaraher@ahma-bc.org>, Gaëtane Carignan <gcarignan@communityenergy.bc.ca>, mchorobik@communityenergy.bc.ca <mchorobik@communityenergy.bc.ca>, NConnolly@richmond.ca <NConnolly@richmond.ca>, Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>,

bdeeks@rdcfinehomes.com <bdeeks@rdcfinehomes.com>, diana@havan.ca <diana@havan.ca>, patrick.enright@vancouver.ca <patrick.enright@vancouver.ca>, catherine.ernst@boabc.org <catherine.ernst@boabc.org>, jfisher@udi.org <jfisher@udi.org>, MGatensby@aibc.ca <MGatensby@aibc.ca>, nathaniel.gosman@gov.bc.ca <nathaniel.gosman@gov.bc.ca>, joe.iconhomes@gmail.com <joe.iconhomes@gmail.com>, nheap@richmond.ca <nheap@richmond.ca>, SHorsburgh@rdn.bc.ca <SHorsburgh@rdn.bc.ca>, jjung@asttbc.org <jjung@asttbc.org>, toby.lau@bchydro.com <toby.lau@bchydro.com>, wileung@bchousing.org <wileung@bchousing.org>, Megan Lohmann <mlohmann@communityenergy.bc.ca>, J.Madden@ubc.ca <J.Madden@ubc.ca>, Lisa.Mak@bchydro.com <Lisa.Mak@bchydro.com>, rmathews@cnv.org <rmathews@cnv.org>, cmccurry@communityenergy.bc.ca <cmccurry@communityenergy.bc.ca>, christopher.mclellan@canada.ca <christopher.mclellan@canada.ca>, mmcwilliam3@bcit.ca <mmcwilliam3@bcit.ca>, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, katherine.muncaster@gov.bc.ca <katherine.muncaster@gov.bc.ca>, jowen@surrey.ca <jowen@surrey.ca>, sean.pander@vancouver.ca <sean.pander@vancouver.ca>, Roberto Pecora <roberto@zebx.org>, Harshan Radhakrishnan <hradhakrishnan@egbc.ca>, ron@havan.ca <ron@havan.ca>, kelly@hkrbuilders.com <kelly@hkrbuilders.com>, trothery@communityenergy.bc.ca <trothery@communityenergy.bc.ca>, pauline@chbabc.org <pauline@chbabc.org>, lsampliner@portmoody.ca <lsampliner@portmoody.ca>, zsegal@boma.bc.ca <zsegal@boma.bc.ca>, dstathonikos@boma.bc.ca <dstathonikos@boma.bc.ca>, lise.townsend@surrey.ca <lise.townsend@surrey.ca>, robyn.wark@bchydro.com <robyn.wark@bchydro.com>, ralph.wells@ubc.ca <ralph.wells@ubc.ca>, tyler.wightman@boabc.org <tyler.wightman@boabc.org>, Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Cc: hudson.giesbrecht@bchydro.com <hudson.giesbrecht@bchydro.com>, frank.lin@bchydro.com <frank.lin@bchydro.com>, angela.cho@bchydro.com <angela.cho@bchydro.com>, kevin.lim-kong@bchydro.com <kevin.lim-kong@bchydro.com>, altaf.hussain@bchydro.com <altaf.hussain@bchydro.com>, iulia.jurgea@bchydro.com <iulia.jurgea@bchydro.com>, Rick.mann@iompropertygroup.com <Rick.mann@iompropertygroup.com>, Keith.Anderson@bchydro.com <Keith.Anderson@bchydro.com>, ranjeet.gill@bchydro.com <ranjeet.gill@bchydro.com>, james@brightfuture.studio <james@brightfuture.studio>, carmina@chbabc.org <carmina@chbabc.org>, robert.chin@bchydro.com <robert.chin@bchydro.com>, Berkhout, Tom <tom.berkhout@bchydro.com>, iulia.jurgea@bchydro.com <iulia.jurgea@bchydro.com>
Subject: RE: Energy Step Code Council agenda

Hello everyone,

I wanted to let you all know that the regulation for the proposed changes to the Energy Step Code and introduction of the carbon pollution standard has been signed by the Minister with an effective date of May 1, 2023. The regulation isn't official until it is published in the Gazette next Thursday, but this means we can focus on implementation. We will highlight some of the key changes we made based on public review feedback at the meeting on Monday, and we are working on having a convenience copy of the updated code language available next week.

Have a great weekend. Looking forward to connecting again on Monday.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Sent: Thursday, February 9, 2023 5:15 PM
To: bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca;

mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; jjung@asttbc.org; toby.lau@bchydro.com; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; Lisa.Mak@bchydro.com; rmathews@cnv.org; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Grass, William OHCS:EX <William.Grass@gov.bc.ca>
Cc: hudson.giesbrecht@bchydro.com; frank.lin@bchydro.com; angela.cho@bchydro.com; kevin.lim-kong@bchydro.com; altaf.hussain@bchydro.com; iulia.jurgea@bchydro.com; Rick.mann@iompropertygroup.com; Keith.Anderson@bchydro.com; ranjeet.gill@bchydro.com; james@brightfuture.studio; carmina@chbabc.org; robert.chin@bchydro.com; Tom.Berkhout@bchydro.com; iulia.jurgea@bchydro.com
Subject: Energy Step Code Council agenda

Hi, all:

Agenda attached. Please let me know if you have additional questions. Looking forward to Monday.

Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

RE: Invite: BC Building Code Accessibility Proposal Review

From:	Jeff Fisher <jfisher@udi.org>
To:	Laboucane, Shannon OHCS:EX <Shannon.Laboucane@gov.bc.ca>
Cc:	Rick Bortolussi (Rick.Bortolussi@tlhousingsolutions.ca) <rick.bortolussi@tlhousingsolutions.ca>, Rick Bortolussi (rick.bortolussi@townline.ca) <rick.bortolussi@townline.ca>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent:	February 17, 2023 3:40:09 PM PST
Attachments:	image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Sorry, I thought we had responded. Rick Bortolussi will be representing UDI.

Here is his contact information:

RICK BORTOLUSSI
DIRECTOR OF TECHNICAL SERVICES

TL HOUSING SOLUTIONS
1212 - 450 SW MARINE DRIVE
VANCOUVER, BC V5X 0C3

T 604-301-3999 X808
C 778-828-4588
E RICK.BORTOLUSSI@TLHOUSINGSOLUTIONS.CA

TLHOUSINGSOLUTIONS.CA

From: Laboucane, Shannon OHCS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: February 17, 2023 3:37 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: FW: Invite: BC Building Code Accessibility Proposal Review

Good afternoon,

I am writing to follow up on the invitation sent earlier this month, as provided below.

We are pleased to schedule some time to discuss the BC Building Code accessibility approach for your input.

Thank you,
Shannon Laboucane

From: Laboucane, Shannon OHCS:EX
Sent: Tuesday, February 7, 2023 8:56 AM
To: Laboucane, Shannon OHCS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: Invite: BC Building Code Accessibility Proposal Review

Sent on behalf of Jun'ich Jensen.

Dear valued partner:

In November 2020, the Minister responsible for Housing received a mandate to include changes in the next iteration of the BC Building Code to make new buildings more accessible for all people.

Since this time, engagement has occurred to seek input on what BC Building Code changes should be actioned first and special considerations. Valuable feedback was received and has been instrumental in developing a meaningful code change proposal that balances accessibility and housing priorities, accessibility engagement feedback, product availability, and affordability.

Before the proposal is finalized for public comment in Spring 2023, I would like to invite your organization to nominate a policy lead to review the proposed approach and discuss any questions they may have.

Please email Shannon.Laboucane@gov.bc.ca or call 778-974-3912 to provide the name and email address of the representative that we can engage with, to facilitate this discussion, on behalf of your organization.

Our office will reach out to the contact to schedule a meeting this month.

Thank you for considering this request.

Sincerely,

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250-858-1325

RE: REQUEST: Housing Supply Act Regulations Meeting with the Urban Development Institute

From: Corpe, Cimarron OHCS:EX
To: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Cc: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>, Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>, Gartner, Candice OHCS:EX <Candice.Gartner@gov.bc.ca>
Sent: February 18, 2023 5:17:02 PM PST
Attachments: image001.png, image003.png

Hi Indy,

Just following up on this request. If we can set a couple of placeholders, I'll coordinate with UDI. Thanks!

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

From: Corpe, Cimarron OHCS:EX
Sent: Wednesday, February 15, 2023 5:12 PM
To: King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Cc: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>; Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
Subject: REQUEST: Housing Supply Act Regulations Meeting with the Urban Development Institute
Importance: High

Hi Indy,

I'm looking to schedule a 90-minute meeting with UDI staff and members on the Housing Supply Act Regulations with Bindi, Jessica, Aman, Alyssa and me sometime in the next two weeks. Can you schedule a couple of placeholders and I'll coordinate with UDI on available dates? Thanks!

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

RE: Invitation to comment on draft report: R2B: Realizing Resilient Buildings

From: May, Zachary OHCS:EX
To: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: February 20, 2023 10:02:29 PM PST
Attachments: image001.png

Are we providing comments to this? No pressure, just curious.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Wilma Leung <wileung@bchousing.org>
Sent: Thursday, February 16, 2023 10:15 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; bea.bains@fortisbc.com; ebaudinaud@communityenergy.bc.ca; Tom.Berkhout@bchydro.com; alexandre.bigonesse@canada.ca; Patrick Caraher <pcaraher@ahma-bc.org>; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline MUNI:EX <Madeline.Dams@gov.bc.ca>; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; Jeff Fisher <jfisher@udi.org>; MGatensby@aibc.ca; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; joe.iconhomes@gmail.com; nheap@richmond.ca; SHorsburgh@rdn.bc.ca; vanessa@chbabc.org; jjung@asttbc.org; toby.lau@bchydro.com; mlohmann@communityenergy.bc.ca; Madden, John (C+CP) <j.madden@ubc.ca>; rmathews@cnv.org; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>; Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; Ron Rapp <ron@havan.ca>; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Robyn.Wark@BCHydro.com; Ralph Wells <ralph.wells@ubc.ca>; Tyler Wightman <tyler.wightman@boabc.org>; XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Warkentin, Tiffany AG:EX <Tiffany.Warkentin@gov.bc.ca>; Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>
Cc: Olsen, Tracy OHCS:EX <Tracy.Olsen@gov.bc.ca>; Carter, Devon ENV:EX <Devon.Carter@gov.bc.ca>
Subject: RE: Invitation to comment on draft report: R2B: Realizing Resilient Buildings

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

I had forgotten that Monday is a public holiday, so perhaps send me your comments by Wednesday, Feb 22nd instead? Also let me know if you need more time.

Have a nice long weekend and a Happy Family Day!
Wilma

From: Wilma Leung
Sent: Wednesday, February 15, 2023 5:30 AM
Subject: RE: Invitation to comment on draft report: R2B: Realizing Resilient Buildings

Hello everyone,

It felt so great to be able to see some of you face-to-face on Monday.

Some of you suggested that we extend the window for comments on the attached R2B report, and so we are moving the deadline to next **Monday, February 20th**, to provide more time for your review.

Thank you, Huy chexw & Hay ce:p q̓ə,
Wilma

To honour the truth, I acknowledge that I live and work on the shared, ancestral and unceded homelands of the hən̓q̓əmin̓əm̓ and Sḵwxwú7mesh-speaking people who have been caring for these lands, along with the waters and all that is above and below, since time immemorial. As a newcomer to the Salish Coast, I am on a journey to reciprocate by working towards reconciling with all our relations here and beyond.

Wilma Leung (she/her/hers) | Senior Manager, Technical Research & Education | BC Housing
wileung@bchousing.org | Mobile: 604-218-1095 | www.bchousing.org/research-centre

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From: Wilma Leung
Sent: Wednesday, February 1, 2023 1:00 PM
Subject: Invitation to comment on draft report: R2B: Realizing Resilient Buildings

Good afternoon everyone!

I'm reaching out to the Energy Step Code Council community to invite you to share your comments and perspectives on the draft recommendations from this exciting research project.

The **R2B** Project "**Realizing Resilient Buildings**: Research on the **Barriers and Enablers for Climate Adaptation and Resilience in the Building Sector in B.C.'s Local Government Context**" is co-funded by the province and BC Housing, and aims at building knowledge and alignment on removing barriers and providing enablers to make it easier and most cost-effective to build low-carbon climate-adapted resilient buildings in B.C.

Your input (received on or before **Friday, February 10th**) will help us refine the recommendations and develop a toolkit. The toolkit will be designed primarily for use by local governments but also for reference by industry and many others who have a role to play. Please feel free to forward this report for input by other relevant parties but keep me posted so I am aware. Note that the consultants are also working on a separate short report that focuses on barriers / enablers specific to Indigenous communities.

We are very grateful for your contribution, and we look forward to your comments.

Thank you, Huy chexw & Hay ce:p q̓ə,
Wilma

To honour the truth, I acknowledge that I live and work on the shared, ancestral and unceded homelands of the hən̓q̓əmin̓əm̓ and Sḵwxwú7mesh-speaking people who have been caring for these lands, along with the waters and all that is above and below, since time immemorial. As a newcomer to the Salish Coast, I am on a journey to reciprocate by working towards reconciling with all our relations here and beyond.

Wilma Leung (she/her/hers) | Senior Manager, Technical Research & Education | BC Housing
wileung@bchousing.org | Mobile: 604-218-1095 | www.bchousing.org/research-centre

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s.15

RE: Deloitte Housing Follow-up

From: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
To: Sawchuk, Bindi OHCS:EX <Bindi.Sawchuk@gov.bc.ca>, Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Sent: February 21, 2023 10:16:32 AM PST

Hi Bindi,
I've had a check in with the team and the issue we have heard the most about has been raised by City of Vancouver (although likely affects others as well) and is concerned with the issue of when electrical system upgrades (e.g. new lines, new transformer, new substation) are needed to cope with development, BC Hydro seeks to impose the full cost for such upgrades at a single point in time (eg on a single development). So essentially, there is a electricity usage / capacity threshold and if it's going to be passed, BC Hydro needs payment to proceed. However, the existing and forecast hydro needs accumulate over time due to many different projects/development and aren't necessarily the direct result of that 'last' project. Our sense is that the alternative that Vancouver may be interested in is for Hydro to take a different, presumably more flexible approach, that somehow allows the same overall cost recovery for hydro but doesn't get triggered by a single development and is instead somehow staggered or spread more widely.
Separately and more generally, during the DAPR consultations we also heard that BC Hydro often engages late in the approvals process (unclear whether by design or capacity) which can be challenging if there are substantive design impacts. The broad feedback here was that there may be a role for the Province to support Hydro in engaging earlier on in the process.
We're happy to follow up with LGs from the workshop to see if there are any further details or issues they can provide – just let me know if more / different would be helpful.
Thanks
Jessica

From: Sawchuk, Bindi OHCS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, February 17, 2023 4:18 PM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Cc: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>
Subject: Deloitte Housing Follow-up
Hi Jessica,
I will need some background information on the BC Hydro issues that were raised by cities in the Deloitte Housing forum. Could you share notes, examples etc pls?
Next week is fine.
Thanks - B
Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346
With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15

Accessibility Mandate:

Continue work with the Minister of Housing on ensuring the next iteration of the BC Building Code includes changes that will make new buildings more accessible for all people.

Accessibility Proposal:

Require greater increases in multi-unit residential buildings (e.g., power-operated entry doors, elevators, visual alarms, and adaptable dwelling units) and modest increases for small residential housing (e.g., grab bar backing and wider entry doors).

UDI

Discussion notes:

Market lacked rancher homes and very expensive for square footage. Found two storey house with master on ground floor to prepare for senior years.

2004 building in North Van, had requirements for adaptability. Building high risers based on wood frame. Made a proposal to put in backing for grab bars in bathrooms rather wood, wanted to use flat stock and was being used in kitchen. Did some **sketches of bathrooms to identify elevations to identify where backing provided**. Was accepted by City.

Prior to that in regard to room size increases for adaptability . 1972 CMHC had Canadian Code Residential Construction. Room sizes, clearances, ventilation, were removed from code. Now finding a need to go back to what was.

Standards and where they are as building for units with financing with BCH and/or CMHC. Looking at BCBC and NBC and compare. Have four sets of guidelines. BCH conflict with BCBC and NBC on adaptability and accessibility. CMHC recent universal requirements – additional step that touches on floor space.

Whatever standard – needs to be consistent and applicable for all types of construction and all types of lending. One size fits all. No matter if building market or low cost, requirements should be the same.

Joint Task group task was to review **grab bars – graspable, size, location, and tested balance. Most challenge were for young people 6 years and younger and 70 and over due to balance challenges**. Did not include people with physical disabilities.

Using accessible shower, and flip down seat – where do grab bars go?

CMHC tried to push CSA which also conflicts.

Rick now building several units – designed for access and adaptability and universality and **CMHC requirements make it very confusing.**

Grab bar example for simple accessible shower stall. Some require vertical bar near seat, some require vertical half way between entrance and controls on end of unit. Requirements are 1, 2, 3, sometimes 4 as L shaped back wall turning 90 degrees. Confusing for builders to talk to owners…

Discussions whether 24” is adequate – settled on 40 “ as it exceeds 1 meter.

Control location – common to put on back wall instead of side wall to avoid reaching far, but also hard to reach back too. Opportunity to put in options both locations as long as adequate controls for units.

Then backing – how do you deal when each requirement is different., Used wide flat stock and gave options and did 3 sides of shower. Addressed horizontal and two side walls and vertical panel and another vertical panel to catch L shape for back wall.

Additional space for 5 ft wheelchair, doesn’t work for adaptable due to different configurations.

BCH requires lockable drawers for medications – and location and medicine cabinet. Could benefit all users. When considering bathroom – important to consider these too. Medicine cabinet be accessible.

BCH requires floor drain for accessible washroom – requires additional plumbing and additional cost. BCH reason is floor is wet someone could slip. Flooring products available to resist slippage.

Additional issues around water closet. Screw down lid and tank.

MURBS have common washrooms and use toilet with flush valve. Option to use control – should check and see if there is a need and it be adequately addressed.

Entrance of building into access to elevator and access to common areas on main floor. Increasing size of front entrance, not usually a problem, putting in a wider or double door unit. OK.

Automatic door is needed and there. Ques: If designing building for adaptability do you have to have additional entrance or exits?

Andy: status quo. If common space, accessibility required. No more entrances or exists required. 3.3.1.7. protection of accessible floor areas remains.

2nd floor and higher in time of a fire incident – where can the accessible/adaptable people go? Can they hit a door? Suite door to hallway, then stairwell – **areas of refuge** – consider adoption of this.

Andy: 2020 NBC does not provide area of refuge. Note made. Thumbs up for areas of refuge in future.

There are some areas in MURBs that are problematic for builders: accessible unit have reqs for thresholds and balconies, adaptable unit do not have height requirements for access or depth of accessibility – cater to accessible not fully to adaptable. Need commonality between the two.

Similarity common areas: laundry rooms and kitchens in amenity rooms should be designed for accessible use. There is a cost to retrofit – appliance replacements is high for stoves, dishwashers, height can be impeded to specific BCH requirements.

Clear as to which units are applicable for adaptable and accessible and potential universal and how will we achieve it. SFD ramps become expensive, need to be cooperative with issues and expenses when not recoverable for home owner.

May 1 code changes for green house gas and energy and adding on adaptable. Homeowner upgrades trigger permit and then update for ee and access. And nothing left. All BO work to get builders to comply – avoiding back underground – make sure that does not happen.

Experience with accessibility units and discussions with BCH and laundry ended up in bedroom closet.

Accessible doors can be problematic too. Bypass doors – and no access to front of unit.

Are there others in UDI we should talk to ahead of public review?

Go back with Jeff Fisher, some members on code committee, some code consultants with mobility and dimensional requirements.

Discussion Notes:

Meeting Request: Housing Supply Act Regulations

From:	Corpe, Cimarron OHCS:EX
To:	Cassandra Smith <csmith@udi.org>
Cc:	jfisher@udi.org, Gartner, Candice OHCS:EX <Candice.Gartner@gov.bc.ca>, Aman X OHCS:EX Gill (Aman.X.Gill@gov.bc.ca) <Aman.X.Gill@gov.bc.ca>, Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>
Sent:	February 21, 2023 5:23:06 PM PST
Attachments:	image001.png, image003.png

Hi Cassandra,

Further to our call last week, the following days/times are available for our ADM to brief UDI on the Housing Supply Act regulations.

- Friday February 24: 1 -2:30 PM
- Tuesday February 28: 9 – 10:30 AM
- Friday March 3: 9 – 10:30 AM

I recall you mentioning a UDI meeting on Wednesday March 9th starting at 8 AM. Ideally, we can meet before then, but if that is the absolute best date for member participation, I'll confirm with the ADM Office to see if we can meet that day. Please let me know your preference.

Once we set a briefing date, we can discuss meeting with UDI staff/members regarding housing target methodologies.

Cheers!

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

RE: Meeting Request: Housing Supply Act Regulations

From: Corpe, Cimarron OHCS:EX
To: Cassandra Smith <csmith@udi.org>
Sent: February 22, 2023 2:31:42 PM PST
Attachments: image004.png, image002.png, image001.png

Hi Cassandra,

Thanks for confirming that Friday March 3rd from 9 – 10:30 AM works best. Below are the names and email address of the UDI participants in the Housing Supply Act legislation briefing. Please let me know if anyone would not be participating or if there are additional people attending. Once confirmed, we'll circulate a confidentiality agreement. Agenda to follow.

Staff
amcmullin@udi.org Anne McMullin President & CEO
jfisher@udi.org Jeff Fisher VP & Senior Policy Advisor
mdrummond@udi.org Mike Drummond VP, Corporate & Public Affairs
csmith@udi.org Cassandra Smith, Director Policy & Public Affairs
tblack@udi.org Tracey Black (coordinator) *replaces Andrea Nicholls anicholls@udi.org

Members
jons@relianceproperties.ca Jon Stovell
rick.ilich@townline.ca Rick Ilich
rblackwell@anthemproperties.com Rob Blackwell
david@hollyburn.com David Sander
cynthia@goodmanreport.com Cynthia Jagger
McCauley.Brian@outlook.com Brian McCauley
lewismv@bennettjones.com Mark Lewis

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

From: Cassandra Smith <csmith@udi.org>
Sent: Wednesday, February 22, 2023 1:54 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: RE: Meeting Request: Housing Supply Act Regulations

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Cimarron,

Apologies we've just confirmed with our group, but Friday March 3rd is the date that was available for us.

Feel free to give me a call if you'd like to discuss.

Thanks,
Cassandra

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: February 22, 2023 1:41 PM
To: Cassandra Smith <csmith@udi.org>
Subject: RE: Meeting Request: Housing Supply Act Regulations

Thank you, Cassandra. Bindi needed to schedule a meeting during the Friday timeslot, so that is no longer available.

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

From: Cassandra Smith <csmith@udi.org>
Sent: Tuesday, February 21, 2023 5:28 PM
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: Re: Meeting Request: Housing Supply Act Regulations

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Cimarron,

Thanks for sending this. Let me connect with our group and I'll get back to you shortly.

As an initial thought, this Friday will most likely be too short notice for this group, so I'm looking at the other two dates.

Thanks,
Cassandra

On Feb 21, 2023 17:23, "Corpe, Cimarron OHCS:EX" <Cimarron.Corpe@gov.bc.ca> wrote:
Hi Cassandra,

Further to our call last week, the following days/times are available for our ADM to brief UDI on the Housing Supply Act regulations.

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- Tuesday February 28: 9 – 10:30 AM
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Once we set a briefing date, we can discuss meeting with UDI staff/members regarding housing target methodologies.
Cheers!

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

UDI Confidentiality Agreements

From: Corpe, Cimarron OHCS:EX
To: Aman X OHCS:EX Gill (Aman.X.Gill@gov.bc.ca) <Aman.X.Gill@gov.bc.ca>, Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>
Cc: Gartner, Candice OHCS:EX <Candice.Gartner@gov.bc.ca>
Sent: February 22, 2023 4:48:53 PM PST
Attachments: image001.png, image003.png

Hi Aman,

Can you coordinate with Yashar circulating and collecting signed CAs via the housinglegislation2022 email for the following UDI participants? Please include a draft email noting that this is for a briefing on the March 3rd. Agenda to follow. Thanks!

Staff
amcmullin@udi.org Anne McMullin President & CEO
jfisher@udi.org Jeff Fisher VP & Senior Policy Advisor
mdrummond@udi.org Mike Drummond VP, Corporate & Public Affairs
csmith@udi.org Cassandra Smith, Director Policy & Public Affairs
tblack@udi.org Tracey Black (coordinator)

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rblackwell@anthemproperties.com Rob Blackwell
david@hollyburn.com David Sander
cynthia@goodmanreport.com Cynthia Jagger
McCauley.Brian@outlook.com Brian McCauley
lewismv@bennettjones.com Mark Lewis

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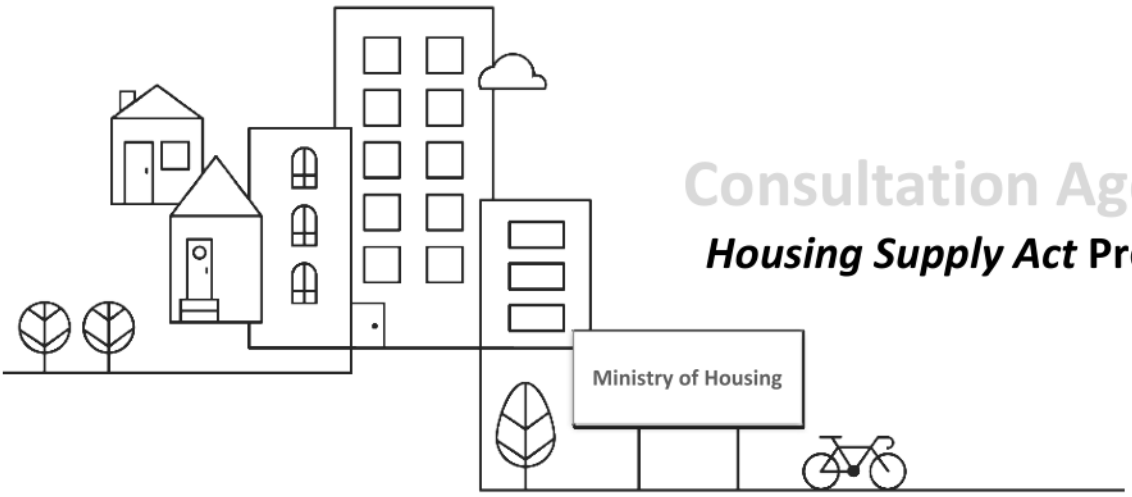
Email: Cimarron.Corpe@gov.bc.ca



Consultation Agenda

Housing Supply Act Proposed Regulation

March 3, 2023

9:00 - 10:30 AM

Ministry of Housing	Urban Development Institute
• Bindi Sawchuk, Assistant Deputy Minister • Jessica Brooks, Executive Director • Cimarron Corpé, Acting Executive Director • Aman Gill, Manager • Alyssa Teekah, Senior Policy Analyst • Gabe and/or Tiffany, Legal Counsel TBC	**Staff** Anne McMullin, President & CEO Jeff Fisher, VP & Senior Policy Advisor Mike Drummond, VP Corporate & Public Affairs Cassandra Smith, Director Policy & Public Affairs **Members** Jon Stovell, President & CEO, Reliance Properties Rick Ilich, CEO, Townline Homes Rob Blackwell, Executive VP Development, Anthem Properties David Sander, Director, Hollyburn Properties Cynthia Jagger, Principal, Goodman Commercial Inc. Brian McCauley, President Terra Pacific Consultants Mark Lewis, Bennett Jones LLP

Agenda

1. **Introductions**
2. **Context and Provincial Housing Measures**
3. **Housing Supply Act and regulation making authorities**
4. **Regulation vs. Program Policy**
5. **Discussion**
6. **Conclusion and Next Steps**

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References

1. Housing Supply Act: https://www.bclaws.gov.bc.ca/civix/document/id/bills/billscurrent/3rd42nd:gov43-1
2. Provincial Permitting Strategy News Release: https://news.gov.bc.ca/releases/2023WLRS0003-000033
3. Housing Supply Act: Regulation Making Authority

Section of the Act	Regulation Making Authority
Section 20 (2) (a)	prescribing municipalities as specified municipalities
Section 20 (4) (c)	establish classes of housing targets
Section 4 (3)	prescribed number of days after the end of the reporting period, by resolution, receive the housing target progress report at a meeting that is open to the public
Section 20 (3) (b) (iii)	the time periods that must be met for the purposes of consultation
Section 3 (3) (b) Section 7 (3) (b)	provide, in accordance with the regulations, an opportunity for the specified municipality to provide comments to the minister [before making a housing target order, appointing an advisor, or issuing a directive]
Section 13	Provision of housing information to minister, any other prescribed information

Email written submissions to: HousingLegislation2022@gov.bc.ca

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Agenda now included below

Hello,

The District of Saanich, in partnership with Introba and the Community Energy Association, would like to invite you to a workshop on Local Government Tools for Decarbonizing Existing Buildings.

The purpose of this workshop is to solicit your ideas and insights on how local governments can best leverage the tools and authorities at their disposal to reduce emissions and increase climate resilience in their existing community-wide building stocks. Participants will hear updates on relevant provincial efforts in the existing building space, as well as what other local governments have achieved. The District of Saanich will use their draft Retrofit Strategy as a basis for collectively discussing the key opportunities available to local governments, both alone and in collaboration with one another.

You have been expressly invited as you represent a source of insight that we want you to share! Please let us know if you are able to attend, or if you plan on sending someone in your place, by responding to this calendar invite.

DETAILS:
* Date: March 1st, 2023
* Time: 1:00 – 3:00 pm PT
* Location: Zoom -
s.15

Thanks and hope to see you there,
Lisa

Time	Agenda
1:00	**Welcome and Introductions** • Participant polls
1:10	**State of Existing Building Policy in BC** • *Speakers*: Nat Gosman (EMLI), Hugo Wong (BSSB), and Tami Rothery (CEA) • Participant polls
1:40	**Overview of the District of Saanich's Retrofit Strategy** • *Speaker*: Maggie Baynham (District of Saanich)
2:10	**Participant Discussions** • Facilitated discussions on opportunities to scale up action across local governments, and increase equity in design and implementation of actions in the existing building sector
2:50	**Next Steps & Close** • Participant polls

Hello, members of the Energy (and Zero Carbon) Step Code Council:

This 30-minute lunchtime webinar is meant to cover a topic we did not have time for on Feb. 13: the proposal to include GHG emissions in the National Model Codes.

Please review the materials attached to this calendar invitation (and below), and we hope that some of you can make it on Tuesday. We understand if not everyone can be there, in which case please feel free to follow up afterwards.

As mentioned during the meeting, we encourage members to submit their own comments through the national process. This meeting is meant to build common understanding of the feedback members intend to provide through the national process, which we as provincial representatives could potentially emphasize through other channels.

Best,
Hugo

(message/meeting link continues below)

Dear Stakeholder,

The CBHCC is seeking input from stakeholders, experts, code users, and the general public on the draft policy recommendations for developing and implementing greenhouse gas emissions provisions in the National Model Codes before finalizing the policy framework. The draft policy recommendations are available on the website here:
s.15

The draft policy recommendations will be provided to the relevant standing committee(s) for discussion.

* Consultation wave 1 begins on February 3, 2023 and ends on March 30, 2023.
* Consultation wave 2 is planned to begin in March 2023 and end in May 2023. Note that this consultation period is subject to change as the CBHCC is still working on the draft policy recommendations for wave 2.
Instructions for providing input
To provide input on the policy recommendations, please follow the steps below:

1. Download the policy recommendations on TeamWork here:
s.15

2. Submit comments to the CBHCC Secretary by email and attach any supportive material: CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca<mailto:CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca>
3. Your comments will be reviewed by the Working Group on Climate Change Mitigation who will report to the CBHCC.

Sefton Hyde-Clarke
Secretary, Canadian Board for Harmonized Construction Codes (CBHCC)
Manager, Code Development System, Codes Canada
National Research Council Canada / Government of Canada

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Microsoft Teams meeting

Join on your computer, mobile app or room device

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Page 050 of 136 to/à Page 051 of 136

Withheld pursuant to/removed as

s.14

-----Original Appointment-----
From: Lisa Westerhoff <lisa.westerhoff@introba.com>
Sent: Tuesday, February 14, 2023 11:03 AM
To: Lisa Westerhoff; Maggie Baynham; Tami Rothery; Peter Robinson; Rebecca Newlove; Matthew Wilson; Stewart Somerville
Cc: Bmackinnon@bchousing.org; UDIVictoria@udi.org; mark@bernhardtcontracting.com; rorykulmala@vicabc.ca; davidh@landlordbc.ca; dstathonikos@boma.bc.ca; ian@bcnpha.ca; jmunro@greatervichousing.org; jfisher@frescoltd.com; brad@sesconsulting.com; darla@zebx.org; Jovan@homeperformance.ca; brendan.mcewen@dunsky.com; eere.division@egbc.ca; manager@cacea.ca; dave; president@visoa.bc.ca; dhogue@vreb.org; karen.jawl@jawlproperties.com; oskar.kwieton@shape.ca; Mer.Ebrahimzadeh@colliers.com; dcraig@devonproperties.com; nelliott@crd.bc.ca; ddecandole@victoria.ca; Ting.Pan@nanaimo.ca; gcheetham@kamloops.ca; Jacksonc@dnv.org; lsampliner@portmoody.ca; erica.lay@burnaby.ca; CRay@kelowna.ca; Michelle_Bonner@vancity.com; rgoldstein@fcm.ca; sgalloway@sofiac.ca; matt@efficiencycap.com; Finkelstein, Ben ENV:EX; Broad, Amanda EMCR:EX; Gosman, Nat EMLI:EX; Brooks, Jessica MUNI:EX; May, Zachary OHCS:EX; jessica.webster@nrcan-rncan.gc.ca; Coral.Buitenhuis@technicalsafetybc.ca; Webb, Robyn; katherine.king@bchydro.com; Lise.Townsend@surrey.ca; Henderson, Elyse; Pierre.lachetti@islandhealth.ca; diana@communitycouncil.ca; tom.hackney@bcsea.org; info@efficiencycanada.org; XT:Lawson, Teresa EMLI:IN; Maya Chorobik; betsya@pembina.org; Wilma Leung; kerriann@chbavi.com; cora@chrmc.ca; cculham@crd.bc.ca; rmoss@greatervichousing.org; roberto@zebx.org; christine@harbourgreene.ca; daniel@opentech.eco; Matt Greeno; jho@victoria.ca; cmcgourdji@fcm.ca; Neale, Tina ENV:EX; Muncaster, Katherine EMLI:EX; Bedford, Brian MUNI:EX; Rabinovitch, Hannah R OHCS:EX; Tom.Berkhout@bchydro.com; Angela.Wheeler@islandhealth.ca; grant.stott@citygreen.ca; jmthompson@communityenergy.bc.ca; jessicam@pembina.org; info@creativelyunited.org; assistant@victoriachamber.ca; Tanya Ratzlaff; Scott Walmsley; Selk, Caresse; Erik Blair; David Kassian; managercacea@gmail.com; Syed, Ali; Carmen Proctor; Stacey Lightbourne; Luisa Burhenne; Melissa Williams; Todd Brunner; luke@capitalhomeenergy.com; Leya Behra; Emily Pearson; kevin.lockhart@efficiencycanada.org; Avi Silberstein; Aharonian, Dave ENV:EX; Wong, Hugo OHCS:EX
Subject: Workshop Invitation: Local Government Tools for Decarbonizing Existing Buildings
When: Wednesday, March 1, 2023 1:00 PM-3:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: https://us06web.zoom.us/j/84218346777

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Agenda now included below

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s.15

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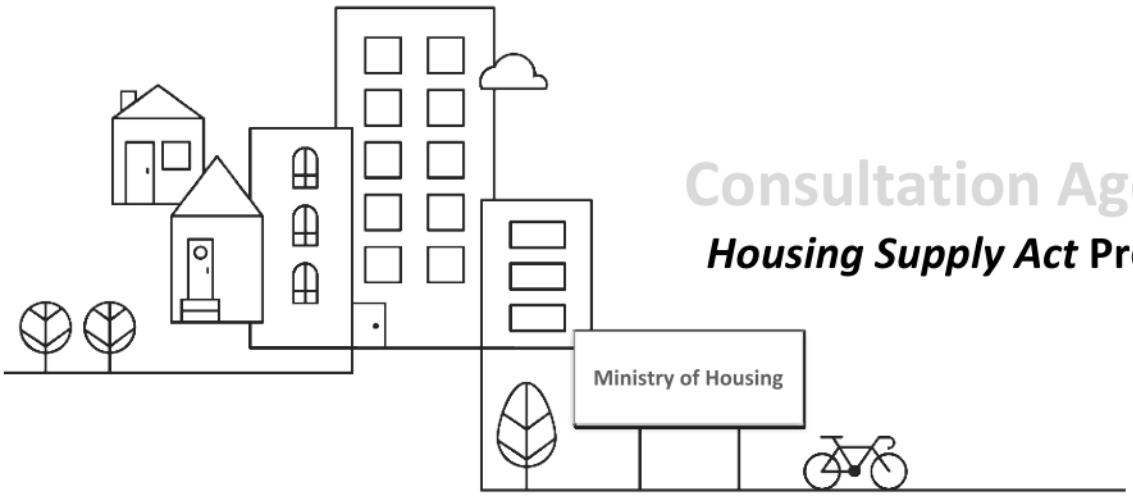
Lisa



Consultation Agenda

Housing Supply Act Proposed Regulation

March 3, 2023

9:00 - 10:30 AM

Ministry of Housing	Urban Development Institute
• Bindi Sawchuk, Assistant Deputy Minister • Jessica Brooks, Executive Director • Cimarron Corpé, Acting Executive Director • Aman Gill, Manager • Alyssa Teekah, Senior Policy Analyst • Gabriel Hill, Tiffany Warkentin, Legal Counsel	**Staff** Anne McMullin, President & CEO Jeff Fisher, VP & Senior Policy Advisor Mike Drummond, VP Corporate & Public Affairs Cassandra Smith, Director Policy & Public Affairs **Members** Jon Stovell, President & CEO, Reliance Properties Rick Ilich, CEO, Townline Homes Rob Blackwell, Executive VP Development, Anthem Properties David Sander, Director, Hollyburn Properties Cynthia Jagger, Principal, Goodman Commercial Inc. Brian McCauley, President Terra Pacific Consultants Mark Lewis, Bennett Jones LLP

Agenda

1. **Context and Alignment with Provincial Housing Measures**
2. **Housing Supply Act and Regulation Making Authorities**
3. **Regulation & Program Policy**
4. **Discussion and Next Steps**

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References

1. Housing Supply Act: https://www.bclaws.gov.bc.ca/civix/document/id/bills/billscurrent/3rd42nd:gov43-1
2. Provincial Permitting Strategy News Release: https://news.gov.bc.ca/releases/2023WLRS0003-000033
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Section 20 (4) (c)	establish classes of housing targets
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Section 20 (3) (b) (iii)	the time periods that must be met for the purposes of consultation
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Section 13	Provision of housing information to minister, any other prescribed information

Email written submissions to: HousingLegislation2022@gov.bc.ca

UDI Profile

- The Urban Development Institute is a non-profit association of the development industry and its related professions.
- It has over 850 corporate members, and represents thousands of individuals involved in all facets of land development and planning from developers to engineers.
- Its key policy priorities (as of 2020) were transit-oriented development, rental housing stock, "missing middle" housing and supply-side measures (faster approvals, higher density zoning, and predictable, fair fees and charges e.g. Community Amenity contributions).
- UDI has been a consistent advocate for housing targets, with the inclusion of financial rewards and penalties for performance.
- UDI released its report Taxing Growth: Analysing the Taxes and Fees on New Housing Development on February 28, 2022.
- The report largely echoes statements made by UDI previously:
    - Cumulative impact of charges from all levels of government are hindering new housing supply
    - Development approvals should be streamlined
    - Barriers to purpose-built rental supply should be removed

Issues previously raised by UDI during Housing Supply Act legislation engagement

UDI comments in italics

Housing Needs Reports as a basis for targets

Several issues with HNR methodology. Local governments have ability to manipulate data to reduce targets or chronically undercount housing need.

Response:

- Government has been actively reviewing the HNR structure and its gaps.
- Part of the housing targets process includes validation of housing needs reports housing estimates.
- This will include identification of data gaps and challenges as well as comparison of Ministry estimates and municipality-supplied estimates
- Ministry estimates will be established using a standardized methodology currently under expert development.

Enforcement mechanisms

Provide more carrots for those who meet targets; apply penalties for those who do not.

Response:

- Increasing infrastructure funding overall through the Growing Communities Fund.
- Government is reviewing local government tools with the goal of providing more tools to achieve growth and create complete communities.
- Financial penalties are not contemplated at this time.

Regional Growth Strategies

Regional Growth Strategies place restrictions on local governments. Province should be able to override RGS during the targets process.

Response:

- The Province will be taking a close look at Regional Growth Strategies during the target setting process. It is a requirement that the minister consider these when setting targets.
- While the Act does not apply to regional governments, we will still be taking a regional perspective when setting targets, to understand differences between nearby and similar municipalities,
- And to also encourage the planning of new growth in areas of infrastructure investment that cross municipal boundaries.
- We agree that mixed employment areas near rapid transit stations should have a mix of housing options, including affordable housing.
- The Province, through the Ministry of Transportation and Infrastructure, is doing work on Transit Oriented Development to ensure we are leveraging all of the benefits of public investments in transportation. You can expect to here more about this.

Advisor

Advisor should be a third-party, independent of local and Provincial government.

Response:

- The Act sets out the role of the advisor and the scope of their report.
- In the event that the Minister appoints an advisor, advisor qualifications will be set out in a publicly available Request for Proposal/Request for Quote, and subsequently detailed in the Advisor's contract.

RE: UDI Webinar Panel Invitation

From: Verna Yu <vyu@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 2, 2023 9:38:12 AM PST
Attachments: image002.jpg, image004.jpg, image005.jpg, image003.jpg, image006.jpg, image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Excellent! Thank you for confirming. Please hold those dates.

Jeff and I will work on filling in the panel.

Cheers,
Verna

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 1, 2023 9:29 PM
To: Verna Yu <vyu@udi.org>
Subject: RE: UDI Webinar Panel Invitation

Hi Verna,

I'm happy to join a panel. Both days work for me right now, so let's block those out and work on filling up the panel!

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Wednesday, March 1, 2023 4:57 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: UDI Webinar Panel Invitation

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

Happy March!

We are hoping to schedule a follow-up webinar with our members on the changes to the Zero Carbon Step Code and the changes that were made to the BC Energy Step Code and what is likely to be happening to both of those on a go-forward bases. Would you be available to join us on the panel for this session?

Proposed dates and times as follows:

- Tuesday, May 2 (9:30-10:30)
- Thursday, May 4 (9:30-10:30)

Please let me know if either of these date options work with your schedule or, please advise of some alternate options.

Thank you!
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



Value Added Housing Hub Program & Registration

From:	Alex Boston <a_boston@sfu.ca>
To:	Nicol, Lee A JEDI:EX <Lee.Nicol@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>, Price, Shannon TRAN:EX <Shannon.Price@gov.bc.ca>
Cc:	Rebekah Parker <rebekah_parker@sfu.ca>, Brad Doff <brad_doff@sfu.ca>
Sent:	March 2, 2023 5:02:40 PM PST
Attachments:	RC Housing Hub Workshop 0.4.docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Lee, Zach, Shannon:

WORKING PROGRAM

Please find attached a detailed working RT program.

We are currently seeding input from some key players across the province and different sectors. You will see them in the details column. Most have been contacted but not all.

If you think anything could/should be strengthened, please email Brad and me by EOD, tomorrow March 2. Others are also providing further input, notably our facilitators.

Liam Butler (Housing comms) and Siân Madoc Jones (MA) and touched base with me on Minister Kahlon's introductory remarks. There is no ppt, simply a number of key points

REGISTRATION

V solid registration. We have 50 mid to c-suite motivated managers and a sprinkler of key experts from really diverse sectors... There will be ~25% no shows.

There are 5 breakout facilitators so small group discussion will be with ~8 people.

Fantastic representation in housing, local gov, manufacturer, ec dev.... some key developer. Need to strengthen transpo authority, labour and a few others. (UBCM exec members are there but not UBCM.)

Amongst those that are very interested are Linda Coady (COFI), Jill Atkey, Thom Armstrong, Ken Kalesinikoff, Oliver Lang - Intelligent City, Jeff Fisher - UDI..

There are some great BC Gov registrations, AND I'm confident you can ID a few others who can really add value:-)

Please email Rebekah and me if there are other key people in your respective ministry who should be attending

Thanks so much,

Alex

Please do not circulate the below. Email addresses are there to help with org identification.

Bob	Simpson	bsim56@live.ca
Thom	Armstrong	tarmstrong@chf.bc.ca
Mike	Buda	mike.buda@translink.ca

Joel	McKay	lori@northerndevelopment.bc.ca
Chris	Knight	Chris@mg-architecture.ca
Natalie	Telewiak	Natalie@mg-architecture.ca
Jennifer	Draper	jdraper@cnv.org
Oliver	Lang	olang@intelligent-city.com
Lara	Beckekttt	lbeckett@rdffg.bc.ca
Kevin	Millsip	kmillsip@columbiainstitute.eco
Aidan	Shirley	aidan@citystate.ca
Jonathan	Cote	jonathan.cote@metrovancouver.org
David	van Hemmen	dvanhemmen@boardoftrade.com
Nizar	Laarif	business@ahma-bc.org
Matthew	Baldwin	mbaldwin@langford.ca
Leonard	Krog	donna.stennes@nanaimo.ca
Michael	Epp	michael.epp@metrovancouver.org
Peter	Sun	psun@vancouvereconomic.com
Brenda	Knights	bknights@vnhs.ca
George	Benson	gbenson@vancouvereconomic.com
Tim	Ryce	tryce@cnv.org
Erin	Robinson	erobinson@quesnel.ca
Lisa	Helps	Lisa.Helps@gov.bc.ca
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Lisa	Pineault	mayor@daajinggiids.ca
Rik	Logtenberg	rlogtenberg@nelson.ca
Jeff	Fisher	jfisher@udi.org
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Ester	de Vos	edevos@bchousing.org
Norm	Couttie	s.22
Helen	Goodland	hgoodland@scius.ca
Gary	Penway	gary@penwayconsulting.ca
Elicia	Maine	avpkmi@sfu.ca
Lee	Nicol	lee.nicol@gov.bc.ca
Marie	Bednash	marie.bednash@zgf.com
Daniel	Wilson	daniel.wilson@zgf.com
Victor	Cumming	Mayor@vernon.ca
Rick	Welch	s.22
Jarrett	Hutchinson	daria.mykhailenko@gov.bc.ca
Michael	White	Michael.white@ubc.ca
Chris	Fay	Chris.Fay@ubc.ca
Jill	Atkey	jill@bcnpha.ca
Ken	Kalesnikoff	kenk@kalesnikoff.com
Andrew	Stiffman	andrews@kalesnikoff.com
Linda	Coady	coady@cofi.org
Zara	Rabinovitch	rabinovitch@cofi.org

Zachary	May	zachary.may@gov.bc.ca
Shawn	Keyes	skeyes@wood-works.com
Rocky	Sethi	s.22
Doug	Rooke	Doug.Rooke@wintonhomes.ca
Sam	Raven	sraven@smithers.ca

Alex Boston
Let's connect on LinkedIn & Twitter @AlexBostopolis
Executive Director, Renewable Cities
Fellow, Morris J. Wosk Centre for Dialogue
Simon Fraser University
a_boston@sfu.ca / 604-928-2347
Website / Updates

#3300-515 West Hastings Street, Vancouver, British Columbia, Canada, V6B 5K3
We would like to acknowledge that at the Simon Fraser University Vancouver Campus we live and work on the unceded traditional territories of the Skwxwú7mesh, Səl̓ilwətaɬ, and xʷməθkwəy̓əm First Nations.

UDI Feedback

1. Ensure Alignment
    a. DAPR/HNR
    b. BC Hydro systems: Rick Illich regulation change *follow up
    c. Funding programs: BCH/CMHC…
2. Targets: range – minimum to upper bound - could overlay with economy other factors, national trends
3. Matters outside muni control
    a. In economic downturn consider tax measures to encourage development
4. Expand outside SVT to province-wide (Brian McCauley)
5. S 13: be as broad as possible (Cassandra)
6. Unintended consequence of foreign investment policy (Rick Illich): follow up w/FIN
7. Market and below market linked
8. Muni progress indicators
9. Dev Fin Committee will reboot
10. Vancouver: development pre-approval process slowing and limiting development (Rick Illich): follow up with Dan

Broadway Subway Meeting

- Jesse Singer (CoV):
    - crisis in development team due to turnover; ~100 re-zonings in Broadway
    - Occupancy permits
        - don't include all details
        - Posse System: manual pull and x-ref data; time consuming…
        - Affordable housing – below market…

UDI March 3, 2023

Attendees:

Ministry

1. Bindi Sawchuk
2. Jessica Brooks
3. Cimarron Corpe
4. Gabriel Hill
5. Tiffany Warkentin
6. Candice Gartner
7. Aman Gill

UDI

8. Brian McCauley
9. Cassandra Smith
10. Cynthia Jagger
11. David Sander
12. Jeff Fisher
13. Mark V Lewis
14. Michael Drummond
15. Rick Ilich
16. Rob Blackwell
17. Anne McMullin

- ADM: Very aggressive timelines for development approvals - single window Provincial Permits
- Pre-zoning, secondary suites and missing middle
- UDI: Lack of labour in the market to achieve objectives … widespread labour market challenges
    - Refresh will include Post Secondary Ed ministry to address construction workforce needs
    - Need innovation in the industry (ADM) - immigration alone isn't the answer to labour shortages
    - Rick: BC Hydro infrastructure
        - They are behind growth and need to get ahead of it … leg change would fix it instead of being reactive
        - High schools need to have shop classes
        - Brian - kudos to all government to be working toward solutions
            - Shouldn’t just focus on SVT - look province wide - all areas have challenges and should be held responsible for delivering on their HNRs and ensuring they are doing them consistently …
            - ADM: Overtime it will be expanded to other areas too
            - Rick - foreign ownership legislation (federal) - very badly impacting developers that build rental housing … access to money … CMHC can't approve the foreign linked ownership or they may have conflicts through some foreign ownership
                - Can't start these projects now
                    - ADM - follow-up call with Min FIN
    - (Anne M) How do you deal with things out of muni's control, if it is a Provincial issue
        - ADM - Target leg doesn’t allow Province to direct the Province to do something
            - Somethings might need to be taken slow for a reason

- Rick - excited about the idea of targets - there are things city's and munis can't control - economics of constructions and feasibility of construction
    - e.g., cost of financing
    - Layers and layers of municipal and provincial objectives
    - Mechanical and envelope - costs of construction going through the roof - good intentions but driving up environmental and energy code compliance costs
    - Don't get the economics out of family oriented (3 bedroom units) housing -
        - If you could get free FSR for the third bedroom
    - CoV - tracking applications. Won't accept applications until completed 2 years of pre-application time
        - Smoke and mirrors … can be manipulated
- David - if project gets delayed and puts them off of housing target, goal shouldn't be to meet target but exceed it, contingency should be built in
    - Target setting along continuum - confusing
        - Units that get built are what matters
    - Zoned units might not even get built
    - ADM - margin around targets - what means a target has been met
- Brian - idea of supply Act … seen as big brother weighing in on municipal jurisdiction
    - What has the reaction been - ADM: Elected officials
- Cynthis Aligning funding with targets - and coordination with BC Housing
    - ADM: we will be bringing BC Housing CMHC and others to the table for setting targets on things like the social and supportive housing
- Cynthia: CoV slowing applications coming in for affordable housing
- Jeff - transitional provisions
    - When Building Permit is issued, building started
    - Can you take action sooner then the building permit target isn't met
    - Ground-oriented housing - many building's have townhouse on ground-level - are those ground-oriented
- Anne - Govt should look at economic levers too that are available to stimulate development
    - ADM - we don't have this authority, but need province-wide approach to
- Michael - pre-zoning, link to targets … applies to all municipalities to support their HNRs
- Cassandra Municipal information related to the supply and demand for housing
    - Be as broad as possible … sometimes info is out of date, not aligned with OCPs
        - Look at what kinds of applications are being approved vs. what isn't
- David - need more housing of all kinds, way more below market, affordable, other
    - Sometimes municipal numbers aren't feasible
    - Municipality could lower their requirements but then they won't meet the target
    - How do you get to the right balance
- Cynthia - inclusionary zoning, condos subsidizing market and below market housing
    - Will you ask them to propose a target? ADM could - could be a negotiation …
- Jeff - may vary depending on what target you are looking at
    - Number of units identified in an HNR are probably underestimated
    - Overall they might be underestimating; on non-profit housing it might exceed what it possible
    - Will province use paramountcy to get housing built more quickly in TOD areas
        - ADM - not sure if MOTI will be doing this, but has come up

RE: FOR REVIEW: BCNPHA HSA Materials

From: Sawchuk, Bindi OHCS:EX <Bindi.Sawchuk@gov.bc.ca>
To: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Cc: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>, Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>, King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>, Gill, Aman X OHCS:EX <Aman.X.Gill@gov.bc.ca>, Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>
Sent: March 6, 2023 7:55:55 AM PST
Attachments: image002.png, image003.png, image004.png, image001.png, HSA UDI consult Mar 3.docx

Good morning Cim,

1. The agenda looks good, and I agree that 1 hour is sufficient.

2. The deck looks good, with one exception - slide 7, classes of housing – I think this is an older view of the approach we have been using. Pls update – happy to discuss if it isn't clear what's needed.

3. I have attached my SN's from the UDI session with a request that these notes / tone and approach be used for the BCNHA session.

4. Finally, can you confirm if this is the last scheduled session we have re: engagement on the regs? (recognizing more may need to be done with FNLC).

B

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: Saturday, March 4, 2023 4:31 PM
To: Sawchuk, Bindi OHCS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>; Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>; King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>; Gill, Aman X OHCS:EX <Aman.X.Gill@gov.bc.ca>; Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>
Subject: FOR REVIEW: BCNPHA HSA Materials
Importance: High

Hi Bindi,

The draft deck for Tuesday's HSA briefing with BCNPHA is ready for your review: HSA Regulations BCNPHA 2023 03 04.pptx The deck is based on Friday's UDI deck. We included the UBCM housing types slide as Jill Atkey (CEO) provided feedback that the HSA should address tenure and should expedite delivery of non-profit housing developments (as a right) and thought it might be worth including.

The draft agenda is also ready for review (same as UDI): Province BCNPHA HSA Regulation Briefing Agenda 2023 03 04.docx So far, I believe only Jill is attending, but will confirm Monday.

Cheers!

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

Energy Step Code Council Meeting
Notes

Date and Time of Meeting: Monday Feb 13, 2022 | Time: 10:00 a.m. to 3:00 p.m. Pacific Time
Location: BC Hydro Head Office: 333 Dunsmuir St., Vancouver, B.C. and online
Chair: Zachary May, Building and Safety Standards Branch, Ministry of Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Attendees:

Bea Bains, FortisBC
Tom Berkhout, BC Hydro
Maya Chorobik, Community Energy Association
Norm Connolly, City of Richmond, PIBC, Part 3 subco co-chair
Madeline Dams, MUNI
Diana Dilworth, HAVAN
Patrick Enright, City of Vancouver
Jeff Fisher, UDI
Elisabeth Baudinaud, CEA
Maura Gatensby, AIBC
James Glave, Bright Future Studios
William Grass, BSSB
Joe Hart, CHBA-BC
Altaf Hussain, BC Hydro
Jason Jung, ASTTBC
Iulia Jurgea, BC Hydro
Toby Lau, BC Hydro, Part 3 subco co-chair
Wilma Leung, BC Housing
John Madden, UBC
Rick Mann, CHBA-BC
Zachary May, BSSB
Jason Owen, City of Surrey
Harshan Radhakrishnan
Jason Rowley, CoV Chief Electrician
Laura Sampliner, CEA and SCPN
Zack Segal, BOMA BC
Bertine Stelzer, BC Hydro
Lise Townsend, City of Surrey
Carmina Tupe, CHBA-BC
Robyn Wark, BC Hydro and ESCC Vice-Chair
Ralph Wells, UBC
Scott Williams, BSSB
Hugo Wong, BSSB

Meeting started 10:27 due to technical issues.

Overview of CleanBC Code changes: Scott Williams, BSSB

- May 1, 2023 effective date
- Congratulations for last six years of hard work. Big milestone.
- Refer to presentation for additional details
- More communications on the way to support

Actions:

- ~~HW to send highlighted building code convenience copy to the Council when available (keep within your organizations)~~ **(Update, Feb. 21: Convenience copy included in Feb. Energy Step Code newsletter)**

Presentation from BC Hydro

- Refer to presentation
    - BC Hydro prefers Option 3 described in the presentation
- BC Hydro preparing for rollout of building carbon pollution standard

- BCHydro has a surplus of energy looking to 2030; however, transmission and distribution needs to be looked at in more detail.
- Anticipating quick uptake due to pace of Energy Step Code adoption
- Local governments should contact their Key Account Managers or Sustainable Communities to liaise with the Hydro grid planning team to discuss how implementing the carbon pollution standard might affect their communities
- Option 3 intended to increase cost certainty and provide a cost estimate quicker. Lowering overall costs was not the primary driver.
- BCUC ruling on this issue would take at least 12 months

Commented [WO1]: uptake?

Commented [WHO2R2]: Yes indeed.

- Attendee questions/comments:
  - BC Hydro and Province should connect to ensure local electrical capacity supports provincial housing targets (CHBA & UDI have met Hydro on this issue, Housing DM is aware)
  - No decision yet on whether new improvement charge is based on usage or fixed cost per dwelling
  - BC Hydro should present on these basics more frequently to the construction industry to improve basic literacy on these issues.
  - Reconsider Option 4, or mix that with Option 3 to bring fees more in line with other utilities to make it more competitive.
  - BC Hydro is prepared for increased electricity use in the summer due to air conditioners. Summer peak use still lower than winter peaks.
  - Do you use future weather files when planning the system? No, they use historic load used over last 30 years, and have cushion (load feeders to 75%, and 66% in high-growth areas) to capture load fluctuations.
- Action items:
  - **Hydro staff will return to ESCC with cost estimates to hear further feedback**
  - **Council members to bring a list of key issues to BC Hydro and track progress**
  - **Include guidance for local governments to foresee local electrical capacity issues**

Roundtable

Commented [WO3]: Some more roundtable notes for your consideration:
s.13

- Northern customers still prefer dual-fuel or backup heating systems.
- One customer expected $14,000 in CleanBC rebates but the rebate program was fully subscribed after 2 weeks.
- UDI: Updated case studies with savings, initial costs needed given changing energy policy landscape and availability
- Step 3 for Part 9 buildings “pretty smooth”. Allowing backup heat allays concerns.
- Mechanical contractors need further training
- CEA Climate Action Dashboard coming soon that tracks Step Code adoption.
- Step Code Peer Network:
  - Subgroup discussed making a process map for RNG. Their key questions: intended outcome of the map, intended audience, and how will it be used? A legal review might be necessarily for some AHJs, with uncertainty around timing. Continued concerns about lack of permanency, lack of clarity on how carbon intensity of RNG can be

guaranteed due to different sourcing, and administrative barriers for AHJs (time of permitting, staffing issues, expertise).
    - FortisBC staff willing to meet with SCPN members on this issue
    - SCPN also creating an implementation cohort to figure out best practices given new CleanBC code changes
- FortisBC: 18 PJ of RNG will be available in the next few years.
- Gas heat pumps not small enough for single-family homes now, but advancements are being made.
- Part 3/Part 9 Non-Residential Subcommittee met late last year, consulted a few times on CleanBC code changes, pleased that they're signed. Toby is on CSA committee for energy efficiency, interested in hybrid heating systems, working with Cam Shook from EMLI on this.
- Capacity Building/Communications Subcommittee: Energy Step Code newsletter revived. Somewhat involved in update for code compliance tools, wanting to include building officials this time, not just EAs so there's buy in from those who receive the reports. Strong desire from EAs to professionalize, as many EAs don't have Step Code-specific training. BC Housing released Market Response Study that tracks industry activity, readiness, and some costing. Key findings:
    - Builders often choose energy conservation measures that cost more. Low-cost interventions like integrated design process aren't used as much as they should.
    - Consider extension to the Matrix study given the new Zero Carbon Step Code.
    - Comment: Make costing info relative (percentage up or down) rather than absolute dollar figures, as those become obsolete quickly.
    - Comment: Use local best practices as a baseline rather than code minimum, as many Northern builders don't build to Code minimum as customers there demand more airtight buildings to save energy.
- Part 9 subcommittee: Consulted several times on CleanBC code changes. Implementation planning is next step.
- Some mechanical engineers or design teams won't sign off on heat pump designs because they want an oversized design for the project despite AHJ wanting a smaller system
    - EGBC practice advisory team can help with this.
- Builders tend not to understand mechanical systems – mechanical contractors are not required to have TECA training, CSA F280 is in the code but only about 10% use it. Most just over size.
- Action items:
    - **Zac to check internally whether Office of the Superintendent of Professional Governance (OSPG) has a role to plan in EA professionalization and whether EA professionalization can be raised as a priority with them.**

Zero Carbon Step Code PowerPoint presentation

- Thanks to James and Sarah for creating these graphics
- Mandatory carbon requirements still TBD for 2024 and 2027.
- Consider a "super-presentation" that combines new energy requirements with new Zero Carbon Step Code content, illustrating how energy efficiency and carbon interact
- Action items:
    - **Council members to find case studies that meet Moderate and Low-Carbon Performance to include in this presentation**

- **Zac to circle back with EMLI regarding market transformation of key technology and PSFS for trades transformation**
- **Acknowledging that many training resources exist from professional organizations and BC Housing, BSSB will work with partners to prepare comprehensive technical training materials for the next Code rather than rush something out this spring/summer for energy and carbon only**
- **BSSB to provide work plan for the next year, to finalize over next 1.5 months.**
- ~~BSSB to organize lunchtime webinar to answer questions regarding CBHCC poll regarding GHG requirements in the National Building Code.~~ **(occurred Tues. Feb. 28, 2023)**
    - Draft policy recommendations are available on the website here: https://cnrc.teamwork.com/app/tasks/37694438
    - **Zac encourages all organizations to individually submit responses to CBHCC poll as they may not know what the ESCC is and the sectors it represents.**
- **Next ESCC meeting in 2-3months**

RE: MRK Meeting with Urban Development Institute

From: Corpe, Cimarron OHCS:EX
To: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>, Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Cc: Thomson, Lia MUNI:EX <Lia.Thomson@gov.bc.ca>, Cabral, Marlinda MUNI:EX <Marlinda.Cabral@gov.bc.ca>, King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Sent: March 7, 2023 10:48:37 AM PST
Attachments: image001.png, image003.png

Hi Cory,

This seems related to tenant right of first refusal as a result of tenant displacement (redevelopment or major renovation). I would think that Richard Rogers (ED, RTB) would be the best person to attend.

I am happy to attend if Jessica would like me there. No other staff from my branch

Cheers!

Cimarron Corpé
a/Executive Director

Housing Targets Program Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

From: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
Sent: Tuesday, March 7, 2023 10:26 AM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>; Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Cc: Thomson, Lia MUNI:EX <Lia.Thomson@gov.bc.ca>; Cabral, Marlinda MUNI:EX <Marlinda.Cabral@gov.bc.ca>; King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Subject: MRK Meeting with Urban Development Institute

Hi Jessica and Cim,

The MO has just confirmed a meeting on Friday from 9am to 10am between MRK and the Urban Development Institute on the 'Right of First Refusal'. The DMO has reached out to ask which staff members need to attend, keeping in mind that Bindi will be away.

Jessica, as you will be acting and Cim, as I believe you have led our meetings with UDI before, can you both confirm for me who needs to attend? Is there other staff you'd like present with you? Please let me know so I can have the DMO forward you and anyone else required.

Thank you,

Cory Scott | Documents Coordinator
Assistant Deputy Minister Bindi Sawchuk
Housing & Land Use Policy Division
Ministry of Housing
Ph: 778-405-3465 Email: Cory.Scott@gov.bc.ca

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15

MRK meeting on EMTC

From: Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Chase, Andy OHCS:EX <Andy.Chase@gov.bc.ca>
Sent: March 10, 2023 1:30:56 PM PST

Andy just FYI, Zac, my notes. We need an analyst on this! Lyle will be the technical but a policy person would be good too.

Concerns on earthquake design- ZM is in the loop and received a letter from RJC
Check in with Rocky at UDI on 6 vs 12 comment
Minister would like to be in next meeting on mass timber with Quebec MOU
BSSB will follow up with OMTI/NRC on recommendations in the report- in particular firestopping recommendation and combustible windows. Other items are in the NRC CCR stage and can be included in the work with Quebec.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

From: Ally Bodnar <Ally@icba.ca>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: March 13, 2023 7:24:01 AM PDT
Attachments: image001.png, image002.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good Morning Zachary,

Ooh, that is great news!

Yes, I can make time this morning to connect with you. Here is my availability for this morning. If there is a time that works for you, please let me know and I will book you in. Or, if you prefer, you can book yourself in using the booking tool below.

Please select the time that works best for you.

Event: 30 Minute Video Call
Time zone: Pacific Time - US & Canada Change

MON

Mar 13

11:00 a.m.

11:30 a.m.

12:00 p.m.

Need another time? See full list of times

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 f. 604-298-2246
Association | Benefits | Training

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ICBA
BC BUILT. BC STRONG™

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Sunday, March 12, 2023 10:05 PM
To: Ally Bodnar <Ally@icba.ca>
Cc: Wong, Hugo OHCS:EX <Hugo.Wong@gov.bc.ca>; Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Jensen, Jun'ichi OHCS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

Hi Ally,

Thank you for your patience! We have our regulations out and are able to commit to presentations related to the changes starting in mid-April, or anytime after that. Do you have time to discuss details tomorrow morning? I'm fairly flexible all morning, so let me know if there's a time that works for you between 9am and noon.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Ally Bodnar <Ally@icba.ca>
Sent: Tuesday, January 3, 2023 8:33 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

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Hi Zachary,

Okay! Thanks for the update. I will wait to hear from you then.

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 f. 604-298-2246
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From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: December-29-22 3:05 PM
To: Ally Bodnar <Ally@icba.ca>
Subject: RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

Hi Ally,

Still working on wrapping up our regulation. That could be as late as the end of January.

I have ICBA on our list for follow up when we have the regulation complete and are planning communications and training.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Ally Bodnar <Ally@icba.ca>
Sent: Wednesday, December 21, 2022 7:32 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary,

I hope you are well! Can you believe it's almost the end of the year already?

I'm just following up on this to see if you were able to give me an update on if we could offer something on this topic in 2023?

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 f. 604-298-2246
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ICBA
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From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: November-22-22 1:43 PM
To: Ally Bodnar <Ally@icba.ca>
Subject: RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

Hi Ally,

We are not able to commit to any additional presentation at this point. I am happy to include ICBA in our commitments for early 2023 when we have a final regulation and prepared materials. I will follow up in December with likely timeline. Thank you for your understanding and patience.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Ally Bodnar <Ally@icba.ca>
Sent: Tuesday, November 22, 2022 1:28 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

Just following up on this?

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 f. 604-298-2246
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From: Ally Bodnar
Sent: November-16-22 1:58 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Re: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

Hi Zach,

It looks like the public review period is over. Would we be able to schedule a session on the changes/updates?

Perhaps something like this? https://www.egbc.ca/Events/Events/2022/22NOVBSS

Would you have any availability in December?
Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 f. 604-298-2246
Association | Benefits | Training

Book a call with me! Click here!

From: Ally Bodnar
Sent: November-01-22 3:13 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

Hi Zach,

Thanks so much for getting back to me. Yes, we would most certainly be interested in that. Shall I reach back out one I hear that the public review has ended?

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 f. 604-298-2246
Association | Benefits | Training

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: October-31-22 10:26 PM
To: Ally Bodnar <Ally@icba.ca>
Subject: RE: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

Hi Ally,

Sorry to take so long to get back to you. Unfortunately we're stretched thin right now and don't have capacity to do additional presentations before the end of our public review for the proposed changes. I would be happy to plan a presentation for your members once we have the regulation finalized and can speak about all the specifics. Would that work?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Ally Bodnar <Ally@icba.ca>
Sent: Tuesday, October 25, 2022 11:01 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

Just following up on this inquiry?

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 f. 604-298-2246
Association | Benefits | Training

Book a call with me! Click here!



From: Ally Bodnar
Sent: October-20-22 4:05 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Possible Webinar for ICBA: BC Building Code Proposals - What You Need To Know

Hi Zachary,

I hope you are well.

I see that you are doing a webinar for UDI on the BC Building Code Proposal on November 2nd. I was wondering if you might be willing to do a session on this for ICBA members? ICBA would be happy to host and look after everything, you'd just need to log in and present.
I'd love to connect with you to talk more about if this would be possible. Would you be open to a video call in the next week or so?

Thanks,
Ally Bodnar
Training Manager
Independent Contractors and Businesses Association
t. 604-901-1039 tf. 1-800-663-2865 f. 604-298-2246
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[External Email]

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FW: Stakeholder Qs

From: May, Zachary OHCS:EX
To: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Sent: March 14, 2023 10:22:58 AM PDT

Please also include this email thread in the eapps request related to seismic.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: May, Zachary OHCS:EX
Sent: Friday, March 10, 2023 9:43 AM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Subject: RE: Stakeholder Qs

We have some details on this, but the short version is that the engineering science has improved and that will require more stringent requirements in Victoria (which has one of the highest seismic risks in Canada).

We might be in a situation where government support (or local government flexibility) should be considered to offset the uniquely high costs and impacts in this region, since the same building footprint will allow less interior floor space than it used to.

Do we need some bullets or a BN on this?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: Friday, March 10, 2023 9:35 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Stakeholder Qs

Hi Zach –

More clarity in a meeting with UDI had with Minister Kahlon this morning.

Mentioned specific to Vancouver Island, that the seismic requirements in the next Building Code will make 4-6 story wood frame buildings economically unfeasible. The reasons provided were:

- Code uses anticipated seismic events that have an increased in magnitude
- Code changes soil classification from depth of footing to surface level

Minister Kahlon requested the specifics on why these projects won't be feasible.

John

From: Thomson, John HOUS:EX
Sent: Wednesday, March 8, 2023 6:13 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Stakeholder Qs

Hi Zach –

It only took two days… I was meeting with UDI yesterday, along with Lisa Helps, and they raised some points about the upcoming changes to the Building Code which will add costs re: climate resiliency and emissions reductions principally it seemed. They also talked about the impacts of the 'reclassification of soil' requiring additional construction costs to address additional shear load requirements.

It would be super-helpful to connect with someone in BSSB to test these comments and contextualize these comments within what's happening with the Building Code. Also, if the soil piece rests with ENV please let me know, as I need to connect with them anyway on permitting and contaminated soil remediation.

As an aside, has there been costing (in BC or Nationally) on the cost implications of the upcoming changes to the Building Code? I assume there has.

Thanks.

John Thomson
Executive Lead, Housing Innovations
Ministry of Housing
250.812.1915

I work on the traditional territories of the lək̓ʷəŋən People.

Draft UDI Letter - Phase 1 Consultation on Draft Policy Framework for Climate Change Mitigation

From:	Jeff Fisher <jfisher@udi.org>
To:	May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Cassandra Smith <csmith@udi.org>
Sent:	March 22, 2023 3:19:54 PM PDT
Attachments:	image001.png, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg, Draft UDI Letter - Phase 1 Consultation on Draft Policy Framework for Climate Change Mitigation - March 2023.docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary,

I hope you are well.

UDI has prepared a Draft Letter in response to the Federal government's first phase of consultation on the *Draft Policy Framework for Climate Change Mitigation* and *Policy Considerations for Developing and Implementing GHG Emissions Provisions in the National Model Codes*. I have attached the letter to this email. Given the discussion we had at the ESCC Webinar on February 28th, I know we need to send as many BC letters in as possible. Do you have any concerns with what we have said regarding aligning with the BC approach?

Do not hesitate to reach out if you have any questions.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct:604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

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3/30/2023

Sefton Hyde-Clarke
Secretary, Canadian Board for Harmonized Construction Codes
Manager, Code Development System, Codes Canada
National Research Council Canada
4250 Westbrook Mall
Vancouver, BC V6T 1W5

Dear Sefton Hyde-Clarke:

Re: Phase 1 Consultation on Draft Policy Framework for Climate Change Mitigation

The Urban Development Institute – Pacific Region (UDI) is pleased to provide comments on the first phase of the consultation on the *Draft Policy Framework for Climate Change Mitigation*. We represent the building and development sector in British Columbia and these proposals will have an impact on their construction practices.

In terms of reducing operational greenhouse gas (GHG) emissions in new construction, we recommend that the Canadian Board for Harmonized Construction Codes (CBHCC) follow the approach that has been taken in British Columbia with the *Zero Carbon Step Code (ZCSC)*. However, UDI has concerns with the regulation of embodied carbon through building codes, as there are better mechanisms that should be utilized first to reduce these emissions.

About UDI and Its Involvement in Green/Sustainable Building Practices

The Urban Development Institute is the association of the development and building industry and its related professions in British Columbia. UDI Pacific Region has offices in the Okanagan, the Capital Region, the Fraser Valley and Metro Vancouver, and we represent thousands of individuals involved in all facets of land development and planning, including builders, property managers, financial lenders, lawyers, engineers, planners, architects, construction companies, appraisers, real estate professionals, local governments and government agencies.

UDI has for decades provided leadership in encouraging sustainable development and green building practices. I sit on the Provincial Mass Timber Advisory Council in British Columbia, and UDI was one of the original organizations that developed the *B.C. Energy Step Code (ESC),* and we continue to actively participate on the Energy Step Code

Council (ESCC), which developed the *ZCSC*. UDI is also a member of BC Housing's Mobilizing Building Adaptation and Resilience (MBAR) initiative, the B.C. Real Estate Association's Floodplain Maps Working Group, the Advisory Committee for Simon Fraser University's Adaptation to Climate Change Team and the Lower Mainland Flood Management Strategy Joint Program Committee.

Through our seminars and webinars, we educate our members about best practices on a wide range of topics including mass timber construction, the *ESC*, and the new *ZCSC*, and improving building envelopes and other passive design practices.

Regulating Embodied Carbon in Building Codes

UDI recommends that the Federal, provincial and territorial governments look at other approaches to reducing embodied carbon emissions before regulating them through building codes.

The CBHCC is proposing to make the reduction of embodied carbon emissions an objective under future building codes. It is unclear whether embodied carbon is best regulated in building codes, and UDI believes that it should not be the primary tool used to reduce it. Our members orchestrate the purchase and installation of materials. They are not suppliers, and have little influence over them, so embodied carbon standards would be difficult for our members to enforce. Builders, even larger ones, cannot be overly selective with building materials, as it will add delays and costs to projects – this is especially true with strained and delayed supply chains.

In the past, UDI has advocated that the Broader Public Sector (BPS) lead with improvements in energy efficiency and reducing carbon in new construction. This approach led to the successful adoption of the Leadership in Energy and Environmental Design (LEED) standard in Metro Vancouver. With embodied carbon, the case is even stronger for the BPS to take the lead. Unlike builders, senior governments can use their purchasing power to dictate to suppliers the need to reduce carbon in their products.

A good example of this is concrete, which represents 50% to 80% of the embodied carbon in some buildings. It is unclear whether there is currently enough low-carbon concrete available to build the housing and job spaces needed in the City of Vancouver, let alone the region or British Columbia. However, governments, through investments in bridges, tunnels, the Site C hydro-electric project, hospitals, new housing, schools, university/college buildings and other capital projects, are key purchasers of concrete and can use this purchasing power to push cement producers to reduce GHG emissions in their products. This would make more low carbon cement materials available to our members and potentially reduce costs. A similar approach could be adopted for other building materials, including expanding the use of mass timber. Before embodied carbon is regulated in building codes, the BPS needs to use its purchasing power to set builders up for success.

In addition to the purchasing power of governments, there are other regulatory mechanisms that should be considered such as directly regulating suppliers. In British Columbia, the Provincial Government mandates the energy efficiency of windows, appliances, furnaces and other products through an *Energy Efficiency Act*. The Federal Government has similar legislation. There is an added benefit to this approach, because the requirements apply to products being used in existing buildings – not just new

construction. A similar approach needs to be considered for mandating the reduction of embodied carbon in products and materials. This needs to be in place before embodied carbon is regulated in building codes because it will help ensure that low embodied carbon products and materials will be available to builders.

UDI also is concerned about the industry's capacity to address these substantial objectives in a brief timeframe. When the *ESC* was first introduced in British Columbia, UDI supported it because it standardized green building requirements across the province and provided a roadmap for future regulations. Our members are still adjusting to building to the ESC's higher steps and the new *ZCSC*, which regulates operating GHGs in new construction. Now we are discussing further significant changes to building codes to regulate embodied carbon emissions, which may run counter to our energy efficiency regulations that rely on heavier building envelopes with higher levels of insulation. There are also discussions of adding resiliency elements to the building codes.

With labour and supply chain constraints, this myriad of regulatory changes is going to be difficult for B.C. builders to achieve. This is the case even though many builders in urban centres have worked with the *ESC* for seven years, have some experience with low carbon energy systems[1], and operate in a province with virtually zero emissions electricity. It is not clear how builders in other jurisdictions without these advantages are going to meet all these objectives in a short period of time and still deliver housing affordably. This is especially the case in communities outside of major metropolitan centres.

If reducing GHG emissions is the primary goal, then we may need to reassess the need to achieve the goal of net-zero ready energy buildings between 2030 and 2032 in building codes. As noted above, these buildings will require heavier envelopes which will likely lead to higher embodied carbon emissions. The heavier envelopes of the highest step of the *ESC* also make it exceedingly difficult to achieve the urban design requirements of local governments and the expectations of the public without substantial increases in construction costs. Net-zero energy ready buildings also make utilizing District Energy Systems, which all levels of government are pursuing to reduce GHGs, less viable.

We would like to note that the fundamental provisions in building codes for Part 3, which specifies this type of building construction should be based on balancing cost, safety and performance, has been in place for almost a century. However, most of the provisions in the *National Building Code* (*NBC*) have been layered on top of each other – with no fundamental assessment of the balance of cost, safety and performance occurring. Before adding embodied carbon mandates to the *NBC*, this needs to be completed.

Aligning with the B.C. Approach for Operating Emissions

UDI recommends that CBHCC's approach to regulate operating GHG emissions in new construction be similar to British Columbia's approach with the ZCSC.

We are pleased to see that the approach that the CBHCC is proposing is aligned with what the Province of British Columbia has introduced with the *ZCSC* and the *ESC* as well as the approach that is being taken nationally with energy efficiency requirements.

The Energy Step Code Council, an award-winning multi-stakeholder committee made up of representatives from all levels of government, professional associations, building industry groups, non-profit housing providers, and utilities, developed the *ZCSC* over the past few years. It is based on the success of the *ESC*, developed by the Council's predecessor committee between 2014 and 2016. The ESCC since 2017 has provided guidance and support for the implementation of the *ESC* – and now the *ZCSC*. The advantages of B.C.'s *ESC* and *ZCSC* approaches, include:

- Having a consistent approach to energy efficiency and operating carbon emissions regulations across municipalities and with the *B.C. Building Code* (*BCBC*) – the timing of when the changes occur may vary across B.C., but all the regulators are going in the same direction;
- Providing clear direction to builders, design professionals and construction companies on where these regulations will be going over time, so our members can prepare for future mandates; and
- Having performance intensity metrics that allow our members (especially Part 3 builders) and their design teams to determine the best and most cost-effective approaches to achieve them for their projects - which will change with different sites and as technology evolves.

With these benefits, the work that has been put into these standards, and the familiarity our members have with the approach and will have with the *ZCSC*, we do not want to see significant changes due to another approach being adopted nationally that must then be adopted in B.C. because of the C*onstruction Codes Reconciliation Agreement* (*CCRA*) that harmonizes building codes across the country.

For these reasons, we support many of the recommendations in the *Policy Considerations for Developing and Implementing Greenhouse Gas Emissions Provisions in the National Model Codes* consultation document, including:

- Having tiered framework;
- Having "*... GHG emissions requirements be separate from the NBC and NECB energy performance tiers but developed with the view to not preclude pairing the requirements in various ways*;"
- Ensuring that there will be both performance and prescriptive options available to builders; and
- Considering several types of metrics including intensity-based, absolute and reference building ones, but ensuring that the metrics that will be used are aligned with provincial and territorial goals.

UDI is potentially concerned about the recommendation to have grid level emissions factors based on Environment and Climate Change Canada data. We believe that the emissions factors should be established by Provincial and Territorial governments as there may be issues best addressed in each region. For example, our members are mandated to connect to District Energy Systems, which may not be carbon neutral by 2025 and there is an electrical utility in northern B.C. that has high emissions factors. It would be best if each provincial and territorial government managed these matters. This approach would not violate the intent of the *CCRA* because how the emissions factors are used by design professionals could still be consistent across the country.

Conclusion

As noted above, UDI is very supportive of performance-based codes. However, improvements are needed. Going forward there is a need to re-assess the alternative solution process to permit design professionals to develop more cost-effective solutions for Part 3 projects – especially for energy efficiency and GHG reductions – but also for other provisions in building codes. We recognize that this will take time. In the meantime, a system is needed for approval of properly developed performance based alternative solutions that provide the required level of performance mandated in the *NBC* (and *BCBC*) – as opposed to the *"… level of performance provided by solutions already in the Code.*" Examples raised by our members include:

- Assessing whether an amenity facility on a small 7th level significantly affects the required level of fire safety for a 6-storey wood frame building; and

- Whether Carbon Monoxide (CO) protected vestibules and related mechanical systems are required given the shift to electric vehicles and CO detection systems.

Thank you for allowing us to comment on Phase 1 of the *Draft Policy Framework for Climate Change Mitigation.* We are concerned about the reduction of embodied carbon becoming an objective under the national building codes and recommend that other approaches be considered first. Regarding operating carbon emissions in new construction, UDI is generally supportive of the direction being taken by the CBHCC because it appears to be compatible with the approach being taken in British Columbia. If you have any questions regarding our comments and recommendations, please do not hesitate to contact us. We would be pleased to arrange a discussion with our Building Codes Committee, which includes members involved in the national code development process.

Yours sincerely,

RE: Draft UDI Letter - Phase 1 Consultation on Draft Policy Framework for Climate Change Mitigation

From: Jeff Fisher <jfisher@udi.org>
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>, Cassandra Smith <csmith@udi.org>
Sent: March 23, 2023 1:03:27 PM PDT
Attachments: image002.jpg, image005.jpg, image006.jpg, image003.jpg, image001.png, image004.jpg

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Thanks for looking at it, and no problems with you sharing it as well. We will also send the final version of letter when it is signed-off. Also, which Ministry is looking at embodied carbon? Is it CAS?

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, March 22, 2023 9:42 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Subject: RE: Draft UDI Letter - Phase 1 Consultation on Draft Policy Framework for Climate Change Mitigation

Hi Jeff,

This is excellent. No concerns from me. I found the input on embodied carbon particularly interesting. Any issues if I share a copy of this letter with colleagues working on policy related to embodied carbon in the Province?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: Wednesday, March 22, 2023 3:20 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Subject: Draft UDI Letter - Phase 1 Consultation on Draft Policy Framework for Climate Change Mitigation

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Hi Zachary,

I hope you are well.

UDI has prepared a Draft Letter in response to the Federal government's first phase of consultation on the *Draft Policy Framework for Climate Change Mitigation* and *Policy Considerations for Developing and Implementing GHG Emissions Provisions in the National Model Codes*. I have attached the letter to this email. Given the discussion we had at the ESCC Webinar on February 28th, I know we need to send as many BC letters in as possible. Do you have any concerns with what we have said regarding aligning with the BC approach?

Do not hesitate to reach out if you have any questions.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct:604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



RE: Bullets for MRK

From: Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>, May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>, King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>, Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Sent: March 27, 2023 2:07:06 PM PDT

I'm on it, give me 5 mins…

From: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Sent: Monday, March 27, 2023 2:00 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>; Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>; King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>; Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Subject: RE: Bullets for MRK

You bet – Indiana, would you be able to create and assign an eApps to Zac?

Thank you!

From: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, March 27, 2023 1:57 PM
To: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Cc: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>; Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>; King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>; Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Subject: RE: Bullets for MRK

We can do that. Can someone add this to eapps and assign to me so I can delegate to the team?

I will also have the team provide a list of stakeholders we have already spoken with, in case they are present at the meeting.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Sent: Monday, March 27, 2023 1:49 PM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Willms, Lori OHCS:EX <Lori.Willms@gov.bc.ca>; Scott, Cory OHCS:EX <Cory.Scott@gov.bc.ca>; King, Indiana OHCS:EX <Indiana.King@gov.bc.ca>
Subject: Bullets for MRK
Importance: High

Hi Zac,

It sounds like MRK is contemplating having a stakeholder meeting this Friday to highlight the digitization work and set the stage for conversations when the Strategy is released. Teri has asked if you and your team could put together some bullets for the Minister to support that – what to focus on, and if there are any areas that are still confidential or not ready to be discussed yet. Who will be there is still being worked on but Teri thought likely to be the stakeholders you would expect to be interested in this space, eg UDI etc

I don’t have much more information than that but please let me know if you’d like us to try and find out anything additional

Thanks!
Jessica

Jessica Brooks (she / her) | Executive Director
Planning and Land Use Management | Ministry of Housing
Office: 778-698-3483

FW: Housing Supply Act Regulation Meeting (UDI) - Follow-up

From: Corpe, Cimarron OHCS:EX
To: Aman X OHCS:EX Gill (Aman.X.Gill@gov.bc.ca) <Aman.X.Gill@gov.bc.ca>
Sent: March 31, 2023 2:07:36 PM PDT
Attachments: UDI Memo - Meeting Follow-up March 3 Housing Supply Act Regulations.pdf, image005.jpg, image007.jpg, image001.png, image009.png, image006.jpg, image003.jpg, image002.png, image004.jpg, image001.png

Hi Aman,

Can you take a look at the attached and flag any important considerations? Happy to discuss later today or Monday. Thanks!

Cimarron Corpé
a/Executive Director

Housing Targets Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, March 30, 2023 2:06 PM
To: Sawchuk, Bindi OHCS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>; Brooks, Jessica MUNI:EX <Jessica.Brooks@gov.bc.ca>
Subject: Housing Supply Act Regulation Meeting (UDI) - Follow-up

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Bindi,

I hope you're keeping well. Recognizing that it's been a few weeks since our discussion on the *Housing Supply Act* regulations, we'd like to offer a brief summary of some of the points raised in the meeting with several of our members, and reiterate some of the key areas of interest for the development sector.

We're looking forward to continuing these discussions with you and your colleagues and please don't hesitate to reach out to us if you have any questions.

Thanks,
Cassandra

Cassandra Smith
Director, Policy and Research
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#1100 – 1050 West Pender Street
Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
www.udi.bc.ca

To: Bindi Sawchuk, Assistant Deputy Minister, Ministry of Housing
From: The Urban Development Institute (UDI)
Date: March 30, 2023
Re: *Housing Supply Act* Regulations Discussion Follow-up

Thank you for the opportunity to engage with you and your staff on the forthcoming *Housing Supply Act* regulations. In addition to the comments provided during the March 3rd discussion, we would like to provide additional suggestions for your consideration.

Target setting

We were pleased that the Ministry is considering setting the municipal housing targets broadly based on the areas in which the *Speculation and Vacancy Tax (SVT)* applies. However, we acknowledge that the housing crisis is affecting areas all across the province, even outside of these areas, and that other steps may be required to address issues in these areas. By communicating that targets could apply to municipalities in this broad area, and assigning targets on a rolling basis, it could provide incentives for municipalities that are not assigned a housing target initially to ensure that their policies and processes do not unnecessarily hinder development. If there is the possibility that they may be assigned a housing target in the future, they may make proactive changes to support housing delivery, and avoid new policies that may undermine this[1]. This is especially critical in regions where there are many municipalities with varying levels of growth sharing an interconnected market (i.e. Metro Vancouver and the Capital Region).

In previous correspondence with the former Minister responsible for Housing, we have recommended that there be a transitionary phase for the initial assignment of a municipal housing target. Although the overall target may be tied to the delivery of housing units measured by building permit issuance, during a transitionary phase, there could be interim objectives for earlier stages in the development review process (i.e. *economically viable* zoned capacity or the number of Rezonings/Development Permits). Many projects, especially large complex developments, take several years to advance from the enquiry stage to receipt of a building permit. By setting interim targets it would provide a more timely measure of municipal progress towards broader objectives of increased housing delivery and, if necessary, enable earlier corrective action from the Province.

We also encourage the Ministry to ensure alignment of key definitions with other levels of government and government agencies, particularly BC Housing, CMHC, Regional Districts and local governments. For example aligning definitions of affordability for below market housing will be important to enabling projects to qualify for supportive funding and incentives.

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Responsiveness to targets

To create more responsiveness to municipal housing targets once assigned, we recommend that the Province offer additional incentives, such as funding for infrastructure and amenities to support growth. For example, municipalities exceeding their assigned target could be offered a per-door subsidy or be given the opportunity to apply to a specialized fund for critical infrastructure projects such as pump stations or local distribution capacity that can open new areas up for redevelopment. Development cannot proceed in some areas of high growth communities because a significant piece of infrastructure needs to be funded, and the local government is waiting for a large enough project or builder to fund it. We believe that by providing both a carrot and stick approach it could enable the greatest increase in housing delivery.

Advisor qualification

As part of the regulatory framework, we encourage the Ministry to require that an advisor, should they be appointed, be a third-party independent from all levels of government. This individual, or team, would require qualifications making them familiar with municipal development processes, and able to conduct both qualitative and quantitative assessments. In addition, we recommend that the practice of hiring a third-party consultant who is routinely hired by multiple municipalities for internal and policy reviews be limited, to avoid any perceived conflicts.

Program Policy

We are also encouraged by the defined timelines for responses between the Province and municipalities. We hope that this level of definition could be incorporated into other aspects of the target setting and review process.

Separately, when evaluating the response of a municipality to an assigned housing target, we would encourage the ministry to communicate the opportunities that exist for municipalities to off-set external market pressures (e.g. interest rate fluctuations, cost escalations and labour shortages), with existing policy levers. While these market factors may be outside of a municipality's control, there are generally policy and process changes that could be made to mitigate their impact, such as authorizing additional density or limiting fee increases.

Thank you again for engaging with UDI and we would be happy to provide more detailed comments with the opportunity to review the draft regulations. If you have any questions regarding comments made in the March 3rd discussion or this letter, please do not hesitate to contact us.

RE: Digital permitting roundtable & announcement

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
To: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Cc: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 3, 2023 10:17:42 AM PDT

Thanks Teri, Zac is working on a foundation document on who is doing what on digital permitting today.

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Sent: Monday, April 3, 2023 10:13 AM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: FW: Digital permitting roundtable & announcement

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 8:56 AM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: RE: Digital permitting roundtable & announcement

Hi Folks

The minister would like to add:

Port Coquitlam
Burnaby

Thanks,

Mark

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Saturday, April 1, 2023 8:40 AM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: Digital permitting roundtable & announcement

Hi Teri & Mark,

I wanted to give you a heads up that Minister would like to hold the digital permitting roundtable next Thursday April 6. I have time held from 3-5pm that day. It should be an hour. As I understand it he'd like Ministry staff to speak about where we are going as well as the Digital Supercluster. And then open it up to thoughts from the attendees. Below is a list of the stakeholders he'd like to join.

Mark you and I can discuss how to track down contact info, etc. and folks on Monday. Teri let us know if you have any flags or items to add.

Digital Supercluster

UDI
Homebuilders
Architects
Engineers
Planners
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GVBOT
North Vancouver – Tim Ryce (Chief Building Official)
Kelowna
Surrey
Vancouver
Victoria

Secondly he'd like to do an announcement about the Digital Permitting project on April 11. I have another announcement on that date but that can be moved though I'll still need to get permission from PO to move ahead 100%. Will keep you posted/should have an update Monday.

Thanks,
Siân

Siân Madoc-Jones *she/her*
Chief of Staff to the Honourable Ravi Kahlon
Minister of Housing
Cell: 778-867-6774

RE: Digital permitting roundtable & announcement

From: May, Zachary HOUS:EX
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Sent: April 3, 2023 11:38:45 AM PDT

FYI – we are also cross referencing the list of organizations that the MO has noted with individuals we have been in touch with as part of the user survey for this work. Happy to provide suggested contracts for each organization if that's helpful.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Monday, April 3, 2023 10:28 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: Re: Digital permitting roundtable & announcement

The MO is organizing it. But we will need to support the announcement. Will confirm more this afternoon.

B

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From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, April 3, 2023 10:24:27 AM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Digital permitting roundtable & announcement

Are we (BSSB) taking the lead on organizing the roundtable this week and pulling together attendees? We can do that, but want to confirm before we starch reaching out to contacts at these organizations.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
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Subject: FW: Digital permitting roundtable & announcement

Info – below.
Zac pls let me know when you have the draft document per our discussion.

Thx - B

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

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Sent: Monday, April 3, 2023 10:13 AM
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Cc: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: FW: Digital permitting roundtable & announcement

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Sent: Monday, April 3, 2023 8:56 AM
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Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: RE: Digital permitting roundtable & announcement

Hi Folks

The minister would like to add:

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Burnaby

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Mark

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Saturday, April 1, 2023 8:40 AM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: Digital permitting roundtable & announcement

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Thanks,
Siân

Siân Madoc-Jones *she/her*
Chief of Staff to the Honourable Ravi Kahlon
Minister of Housing
Cell: 778-867-6774

Minister's Request for Announcement on Digital Permitting

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Cc: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>, Grass, William HOUS:EX <William.Grass@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 3, 2023 12:00:06 PM PDT
Attachments: FW: Digital permitting roundtable & announcement

Hi Tasha,

The Minister's Office has indicated that the Minister would like to make an announcement about our digital permitting/digital transformation in housing construction initiative on **April 11th**. I have attached the email with the information we have received so far. Have you received any additional information on the announcement request? Our team is available to work with your team to provide the content and prepare the announcement. Please let us know how you would like to proceed; we are happy to have a call to discuss the project and next steps.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Manager
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

FW: Digital permitting roundtable & announcement

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: April 3, 2023 10:34:19 AM PDT

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

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To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
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Subject: Re: Digital permitting roundtable & announcement

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Executive Director
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To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
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Info – below.
Zac pls let me know when you have the draft document per our discussion.

Thx - B

Bindi Sawchuk, CPA (she/her)

Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

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To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: FW: Digital permitting roundtable & announcement

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 8:56 AM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: RE: Digital permitting roundtable & announcement

Hi Folks

The minister would like to add:

Port Coquitlam
Burnaby

Thanks,

Mark

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Saturday, April 1, 2023 8:40 AM
To: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: Digital permitting roundtable & announcement

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Victoria

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Thanks,
Siân

Siân Madoc-Jones *she/her*
Chief of Staff to the Honourable Ravi Kahlon
Minister of Housing
Cell: 778-867-6774

RE: Contacts for digital permitting roundtable

From: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: April 3, 2023 1:12:17 PM PDT

Thanks Zac.
Nicole has. I am working on this.

Warm regards,
Aura

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, April 3, 2023 12:09 PM
To: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: FW: Contacts for digital permitting roundtable

Hi Aura,

Not sure if Nicole has had a chance to reach out to you on this yet – we need to pull together some suggested contacts at the organizations listed below. For UDI and homebuilders we should also list any of the contacts we reached out to for our survey.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Monday, April 3, 2023 12:00 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: Re: Contacts for digital permitting roundtable

Hi Mark, I'm including Zac May who can help us with this.

Bindi

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From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 11:58:55 AM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: Contacts for digital permitting roundtable

Hi Nikki and Bindi,

I hope you both are well.

I am reaching out to see if you can help us identify contacts to invite to a digital permitting round table on Thursday, April 6.

We have time held from 3-5 pm that day. It should be an hour. As I understand it, the Minister would like Ministry staff to speak about where we are going as well as the Digital Supercluster. And then open it up to thoughts from the attendees. Below is a list of the stakeholders he'd like to join.

Digital Supercluster
UDI
Homebuilders
Architects
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GVBOT
North Vancouver – Tim Ryce (Chief Building Official)
Kelowna
Surrey
Vancouver
Victoria
Burnaby
Port Coquitlam

We are hoping to have the list of invitees finalized today so if you can please provide contact details at your earliest convenience that would be amazing.

Thanks for your help and all the best,

Mark
Mark Hosak, *he/him*
Ministerial Advisor to
The Honourable Ravi Kahlon
Minister of Housing
Cell: 250-886-1834

Hello,
You are warmly invited to join us for coffee, tea, and light refreshments before the Mass Timber Advisory Council at 999 Canada Place.
Please direct any questions or concerns to OMTI staff member Dawn Smith dawn.m.smith@gov.bc.ca<mailto:dawn.m.smith@gov.bc.ca> or 250-883-4269.

-----Original Appointment-----
From: Smith, Dawn M JEDI:EX On Behalf Of Office of Mass Timber Implementation JEDI:EX
Sent: Thursday, March 30, 2023 1:15 PM
To: Office of Mass Timber Implementation JEDI:EX
Cc: ah@ghl.ca; AMcMullin@udi.org; Betsy Agar; bhawrysh@bcwood.com; C.; Derek Newby; XT:Wimmers, Guido CITZ:IN; s.22 Michael@mg-architecture.ca; pfast@fastepp.com; Shawn Keyes; 'Robert Phillips'; regionalchief@bcafn.ca; tryce@cnv.org; Claire Huxtable | ERA Research
Subject: Refreshments before the Mass Timber Advisory Council meeting
When: April 11, 2023 1:00 PM-1:30 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Suite 740 – 999 Canada Place

Hello,
You are warmly invited to join us for coffee, tea, and light refreshments before the Mass Timber Advisory Council at 999 Canada Place.
Please direct any questions or concerns to OMTI staff member Dawn Smith dawn.m.smith@gov.bc.ca<mailto:dawn.m.smith@gov.bc.ca> or 250-883-4269.

RE: 2023 BC Building Code Changes

From: May, Zachary HOUS:EX
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>, Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Sent: April 3, 2023 10:02:41 PM PDT
Attachments: image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, image001.png

Hi Verna,

I'm free 10:30-11:30 or 12:00-2:00.

Please feel free to book a time in those windows.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Friday, March 31, 2023 9:23 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: 2023 BC Building Code Changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

Do you have some time on Tuesday April 4 between 11 - 2 next week for a brief chat with Jeff and I? We had a couple of questions about the anticipated building code changes coming out later this year.

Kind regards,
Verna

Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca

URBAN DEVELOPMENT INSTITUTE PACIFIC REGION

RE: 2023 BC Building Code Changes

From: Verna Yu <vyu@udi.org>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>, Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Sent: April 4, 2023 9:36:55 AM PDT
Attachments: image002.jpg, image004.jpg, image006.jpg, image005.jpg, image003.jpg, image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

I have sent a meeting invite with zoom link for 11am.

Chat with you soon.

Kind regards,
Verna

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 3, 2023 10:03 PM
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>; Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Subject: RE: 2023 BC Building Code Changes

Hi Verna,

I'm free 10:30-11:30 or 12:00-2:00.

Please feel free to book a time in those windows.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
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From: Verna Yu <vyu@udi.org>
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Subject: 2023 BC Building Code Changes

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Kind regards,
Verna

Verna

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Direct:604.661.3038
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Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



Re: Call dropped and meeting with UK partners next week

From: Mark Anderson <mark.anderson@aecoinnovationlab.com>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Arash Shahi <arash@aecoinnovationlab.com>
Sent: April 4, 2023 10:24:07 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Fantastic. Thanks Zac.

Mark Anderson
Director of Business Development
AECO Innovation Lab
mark.anderson@aecoinnovationlab.com
226.505.7758

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 4, 2023 1:22 PM
To: Mark Anderson <mark.anderson@aecoinnovationlab.com>
Cc: Arash Shahi <arash@aecoinnovationlab.com>
Subject: RE: Call dropped and meeting with UK partners next week

My connection paused and then I had to head to another call.

Meeting with your UK partners would be great.

UDI contact is Jeff Fisher – Vice President of Policy jfisher@udi.org
CHBA-BC is Carmina Tupe, Director of Policy and Government Relations carmina@chbabc.org and Pauline Rupp, Director, Technical & Building Innovation pauline@chbabc.org (CHBA-BC had a digital permits session last week, so they have started discussing and thinking about this topic).

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Mark Anderson <mark.anderson@aecoinnovationlab.com>
Sent: Tuesday, April 4, 2023 9:55 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Arash Shahi <arash@aecoinnovationlab.com>
Subject: Call dropped and meeting with UK partners next week

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac,

Not sure what happened, but I expect the internet gremlins were at work there. Happy to schedule another call, otherwise we will work on scheduling something with our UK partners for this Thursday or next Wednesday. We have a call with them tomorrow and will confirm.

If you can provide contact names at UDI or CHBA BC that would be great. If there is any other questions let us know and happy to address them.

Thanks,

Mark

Mark Anderson
Director of Business Development
AECO Innovation Lab
mark.anderson@aecoinnovationlab.com
226.505.7758

FW: 2023 BC Building Code Changes

From: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 4, 2023 10:37:15 AM PDT
Attachments: image004.jpg, image005.jpg, image002.jpg, image006.jpg, image003.jpg, image001.png

Hey Zac,

Should I be on this meeting today?

Brian

From: Verna Yu <vyu@udi.org>
Sent: Tuesday, April 4, 2023 9:37 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>; Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Subject: RE: 2023 BC Building Code Changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach,

I have sent a meeting invite with zoom link for 11am.

Chat with you soon.

Kind regards,
Verna

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 3, 2023 10:03 PM
To: Verna Yu <vyu@udi.org>
Cc: Jeff Fisher <jfisher@udi.org>; Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Subject: RE: 2023 BC Building Code Changes

Hi Verna,

I'm free 10:30-11:30 or 12:00-2:00.

Please feel free to book a time in those windows.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Friday, March 31, 2023 9:23 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: 2023 BC Building Code Changes

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Zach,

Do you have some time on Tuesday April 4 between 11 - 2 next week for a brief chat with Jeff and I? We had a couple of questions about the anticipated building code changes coming out later this year.

Kind regards,
Verna

Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691

Web: udi.bc.ca



Call for Agenda Items for Upcoming ICAC Council Meeting - April 24 1-2:30pm

From:	Milly Luc <mluc@bchousing.org>
To:	Denisa Ionescu <dionescu@bchousing.org>, Esther de Vos <edevos@bchousing.org>, Michelle Hayes <mhayes@bchousing.org>, Peter Mitchell <MITCHELL@egbc.ca>, Ron Rapp <ron@havan.ca>, patrick.ryan@vancouver.ca, Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, jjung@asttbc.org, Adam Terris <aterris@bchousing.org>, Tony Gioventu (external) <tony@choa.bc.ca>, Scott McIntyre (external) <smcintyre@egi.ca>, Neil Moody <neilmoody@chbabc.org>, XT:Mitchell, Peter FOR:IN <mitchell@apeg.bc.ca>, Mary Gerges <mgerges@bchousing.org>, Mark Vernon <mvernon@aibc.ca>, Mark Sakai <msakai@bcrea.bc.ca>, Howard Friedman (external) <howard.friedman2@travelers.com>, Chris Gardner <chris@icba.ca>, Chris Atchison <chris.atchison@bccassn.com>, Ann McMullin <amcmullin@udi.org>, Vincent Tong <vtong@bchousing.org>
Sent:	April 5, 2023 12:23:32 PM PDT
Attachments:	DRAFT ICAC Minutes October 31 2022(DI).docx, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon all,

Hope this note finds you well. In preparation for our upcoming meeting, please send me any items you would like to add to the agenda.

For your reference, I have attached the draft minutes from our last meeting.

Please send in your items by April 17th.

Warm regards,



Milly Luc (she/her)
EA to CEO | EXECUTIVE OFFICE

e: mluc@bchousing.org | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səlilw̓ətaɁɬ (Tsleil-Waututh) people.

The 21st meeting of the **BC HOUSING INDUSTRY AND CONSUMER ADVISORY COUNCIL** was held on Monday, October 31, 2022 via conference call.

IN ATTENDANCE:

Industry and Consumer Advisory Council:
Neil Moody, Canadian Home Builders' Association of BC
Mark Sakai, BC Real Estate Association
Chris Atchison, BC Construction Association
Peter Mitchell, Engineers, and Geoscientists British Columbia
Jason Jung, ASTTBC
Tony Gioventu, Condominium Home Owners' Association

Ministry Representatives:
Zachary May, Building and Safety Standards Branch
Gord Enemark, Housing Policy Branch (In-part)

BC Housing Representatives
Vince Tong, BC Housing (Chair)
Michelle Hayes
Denisa Ionescu
Adam Terris
Esther de Vos
Sue Bate (recording)

Regrets:
Tyler Wightman, Building Officials Association of BC
Mark Vernon, Architectural Institute of British Columbia
Ron Rapp, HAVAN
Anne McMullin, Urban Development Institute
Chris Gardener, Independent Contractors Association of BC
Howard Friedman, Travelers Guarantee
Andrew Armstrong, Aviva Canada
Chris Watters, RSA Home Warranty

1. Welcome & Introductions

V. Tong welcomed participants to the meeting and acknowledged that BC Housing delivers its mission on the ancestral homelands of Indigenous Peoples across B.C., each with their own unique traditions and history. Respect was offered to their Peoples, past and present.

V. Tong introduced himself as the Acting CEO of BC Housing after the former CEO, Shayne Ramsay retired in September 2022. He noted that BC Housing's Board is currently undertaking a global search for the new CEO. Given the complexity of the process, and the importance and specialized nature of the role, it is expected that this process will extend into 2023.

Despite this change in leadership, our mission remains unchanged: making a positive difference in people's lives through safe, affordable, and quality housing.

2. APPROVAL OF AGENDA AND MINUTES

Today's Agenda and the minutes of April 25, 2022 were approved.

3. ACCESSIBILITY AND HUMAN RIGHTS UPDATE

T. Gioventu updated the Council on the Accessibility Research that the Condominium Home Oowners Association is currently working on. ~~There are currently specific issues that are huge barriers in new construction in this area.~~ It was noted that CHOA was running a seminar in early November where an overview of the Accessibility Act and the upgrades and changes to multi-family buildings to increase accessibility, were being reviewed.

4. LICENSING AND CONSUMER SERVICES UPDATE

M. Hayes provided an update on LCS. To date there are currently 5000 new builders in BC. The new step code training initiatives are now live. Its purpose is to support and prepare builders on updated changes. Builders are required to take all eight modules of the course, unless exempted.

5. OFFICE OF HOUSING AND CONSTRUCTION STANDARDS

Z. May attended the meeting to provide an update on the national building standard codes, planned to be released in March 2023, which will harmonize standards. He noted that public consultations were open until November 4, 2022. Updates to other initiatives was provided with alterations to the existing building code and moving retrofits to meet code. A further update on these initiatives will be noted at the next meeting of the council.

6. RESEARCH & EDUCATION INITIATIVES

D. Ionescu provided an update on ~~the~~ Research & Education ~~Grants program~~, to date.

The Monthly New Home Registry Reports and Research & Education ~~Project~~ project ~~Summaries~~ summaries were presented for information.

All these reports are available to view in the Council Portal New APRIO NEXT Portal *Note that the portal has recently undergone a migration to a new system. If you have not accessed the new system, please reach out to APRIO via your usual log in details and request a training session. Your permissions remain the same.*

7. ROUNDTABLE

V. Tong opened the meeting for a roundtable discussion with the Council to determine what issues have emerged for industry and consumers. Several items were discussed with the following of note:

N. Moody, CHBA referenced the recently released Municipal Benchmarking Report which is currently available on their website. The report shows evidence of housing supply shortfalls in BC and the economic consequence of those shortfalls both past and future. The study also looks at housing demands and supply trends throughout BC and 13 municipalities.

J. Jung, ASTTBC, acknowledged his return to the Council after taking over from T. McCurry. He noted the transition that ASTTBC is currently undergoing to being a fully regulated body.

T. Wightman, BOABC, was unable to attend the meeting, however wished to advise the Council that BOABC is running energy step code training through BCIT for building officials over the next few months. He also advised that the BOABC conference is scheduled from May 28-31, 2023 at the River Rock in Richmond BC.

PROPOSED MEETING DATE

The next meeting will be held Monday, April 24, 2023 from 1 to 2:30 p.m. The date/time is currently confirmed for a virtual meeting, however interest has been raised to hold this as a potential hybrid meeting going forward.

ADJOURNMENT

There being no further business, the meeting was adjourned at 2:30 p.m.

UDI Webinar Update - Zero Carbon Step Code & BC Energy Step Code Changes

From:	Verna Yu <vyu@udi.org>
To:	May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Roberto Pecora <roberto@zebx.org>, Sheryl Peters <speters@bchousing.org>
Cc:	Wilma Leung <wileung@bchousing.org>, Jeff Fisher <jfisher@udi.org>
Sent:	April 5, 2023 2:46:22 PM PDT
Attachments:	image004.jpg, image006.jpg, image007.jpg, image008.png, image005.jpg, image003.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon everyone,

A big thank you to Zach and Roberto for joining us as speakers, and to Sheryl for moderating the upcoming UDI Webinar on the Zero Carbon Step Code & BC Energy Step Code Changes scheduled for Tuesday, May 2! We have also invited Laura Sampliner with the City of Coquitlam to round out our panel with the perspective from a municipality and hoping she will be available. Once we receive confirmation from the final speaker, I will schedule a pre-event briefing call with everyone to review the details.

In advance this pre-meeting, I want to highlight some of the key objectives we hope to cover off :

- Zero Carbon and Energy Step Code changes that have been passed
- National Building Code and the Canadian framework / Harmonization of the codes
- Provincial expectations
- Impact this will have for P9 and P3 buildings
- How local governments are dealing with these changes/ what are the local governments doing
- BC Hydro issues / supply and support
- Implementation - Case studies from P3 and P9 builds

I have also outlined below a draft event write-up for promotions for your review and feedback.

Join us for an informative webinar on the latest updates for the Zero Carbon Step Code and the BC Building Code, and how these changes will impact builders in British Columbia.

Our expert panel will provide an overview of the key updates and highlight the new requirements and standards for energy efficiency, emissions reductions, and sustainable building practices. Through this conversation, we will discuss the potential benefits and challenges for builders in meeting these new regulations.

Thank you everyone once again. Happy for your thoughts and feedback on the above proposed items.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

RE: Contacts for digital permitting roundtable

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 6, 2023 4:58:50 PM PDT

Hi Zach,

Here is the list of attendees.

Tim Ryce tryce@cnv.org
Lisa Chong LChong@cnv.org
Dube, Remi RDube@surrey.ca
andrea.law@vancouver.ca
amy.vilis@vancouver.ca
cgray@victoria.ca
George Hemsley (george.hemsley@introba.com).
mzupan@daustudio.ca
Erica Sangster esangster@daustudio.ca
Cassandra Smith csmith@udi.org
'Carmina Tupe' carmina@chbabc.org
Ron Rapp Ron@havan.ca
Diana Dilworth; diana@havan.ca
Shawn Gervais, VP sGervais@digitalsupercluster.ca
Amanda Yasinski Comox Regional District, no email

Sorry that I did not get Amanda's email.

Let me know if you need anything else!

Have a good weekend.

Mark

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, April 6, 2023 4:47 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Mark,

Do you have a final attendee list from this call so can I follow up with everyone?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Thursday, April 6, 2023 8:04 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Zach,

Thanks for letting me know. I will send the invite now.

Cheers,

Mark

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, April 5, 2023 9:59 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Mark,

I just heard that our contact for the City of North Vancouver is out of the office and would have missed the invite. Any chance we can add Tim Ryce, Chief Building Official from City of North Vancouver? tryce@cnv.org

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 4:29 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Zach,

Thank you so much for the contact details.

All the best,

Mark

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, April 3, 2023 4:02 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Proposed Invite List
Digital Permitting Round Table (Thursday, April 6)

Organization	Name, Role, and Contact Information	Status
Authorities Having Jurisdiction		
Comox Valley (Regional District)	John Crockford, Planning and Development Service Branch jcrockford@comoxvalleyrd.ca	Participated in the user research in April 2023
City of Kelowna	Lindsey Paley, Permitting Supervisor lpaley@kelowna.ca	Participated in the user research in April 2023

	Mo Bayat, Director Development Services Department. mbayat@kelowna.ca	
	Terry Kowal, Building Inspection and Licensing Manager tkowal@kelowna.ca	Initial discussion on digitization
City of Nanaimo	Darcy Fox, Manager, Building Inspections Darcy.fox@nanaimo.ca Abe Lang, Manager Application Services Abe.lang@nanaimo.ca	Participated in the user research in April 2023
City of North Vancouver	Richard Mathews, Assistant Chief Building Official rmathews@cnv.org	Participated in the user research in April 2023
City of Surrey	Ron Gill, Acting General Manager, Planning and Development RGill@surrey.ca	
City of Vancouver	Andrea Law, General Manager of Development, Buildings, and Licensing andrea.law@vancouver.ca	
City of Victoria	Alison Meyer, Assistant Director of Development Services ameyer@victoria.ca	
	Calvin Gray, Chief Building Inspector cgray@victoria.ca	Initial discussion on digitization
City of Port Coquitlam	Bruce Irvine, Director of Development Services irvineb@portcoquitlam.ca	
City of Burnaby	Patrick Shek, Chief Building Inspector building@burnaby.ca	
Registered Professionals		
Introba	Gordon McDonald, Senior Principal gordon.mcdonald@introba.com Keith Davidge, Mechanical Designer Keith.davidge@introba.com	Participated in the user research in April 2023
ZGF Architects	Dennis Goff, Design Technology Manager dennis.goff@zgf.com	Participated in the user research in April 2023
Dau Studio	Mike Barros, Architect mbarros@daustudio.ca Mark Zupan, Architect mzupan@daustudio.ca	Participated in the user research in April 2023
Focal Engineering	Riley Beise, Principal riley@focaleng.com	
Planning Institute of British Columbia	David Crossley, Executive Director Dave.crossley@pibc.bc.ca	
Pacific Land Group	Laura Jones, Senior Development Planner info@pacificlandgroup.ca	
Builders & Developers		

Adera Development	Rocky Sethi, Chief Operating Officer s.22	Participated in the user research in April 2023
Naikoon Contracting	Max Tighe, Head of Digital Transformation and Innovation max@naikoon.ca	Participated in the user research in April 2023
Townline	Rick Bortolussi,Director of Technical Services Rick.bortolussi@townline.ca	Participated in the user research in April 2023
Urban Development Institute	Jeff Fisher, Vice President and Senior Policy Advisor jfisher@udi.org	
Aryze Development	Luke Mari luke@aryze.ca	Participated in the DAPR engagement
Canadian Home Builders Association	Neil Moody, Chief Executive Officer Neilmoody@chbabc.org	
Greater Vancouver Home Builders' Association	Ron Rapp, Chief Executive Officer Ron@havan.ca	
Others		
Greater Vancouver Board of Trade	Bridgitte Anderson, President and CEO ceo@boardoftrade.com	
BC Building Trades	Brynn Bourke, Executive Director info@bcbuildingtrades.org	
Digital Technology Supercluster	Sue Paish, Chief Executive Officer sPaish@digitalsupercluster.ca Shawn Gervais, VP sGervais@digitalsupercluster.ca	

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 12:30 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Zach,

Thanks for following up.

This is a virtual event.

Thanks and all the best,

Mark

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, April 3, 2023 12:07 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

My team is pulling together relevant contacts.

Will this be a virtual or in-person event?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Monday, April 3, 2023 12:00 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: Re: Contacts for digital permitting roundtable

Hi Mark, I'm including Zac May who can help us with this.

Bindi

Get Outlook for iOS

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 11:58:55 AM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: Contacts for digital permitting roundtable

Hi Nikki and Bindi,

I hope you both are well.

I am reaching out to see if you can help us identify contacts to invite to a digital permitting round table on Thursday, April 6.

We have time held from 3-5 pm that day. It should be an hour. As I understand it, the Minister would like Ministry staff to speak about where we are going as well as the Digital Supercluster. And then open it up to thoughts from the attendees. Below is a list of the stakeholders he'd like to join.

Digital Supercluster
UDI
Homebuilders
Architects

Engineers
Planners
BC Building Trades
GVBOT
North Vancouver – Tim Ryce (Chief Building Official)
Kelowna
Surrey
Vancouver
Victoria
Burnaby
Port Coquitlam

We are hoping to have the list of invitees finalized today so if you can please provide contact details at your earliest convenience that would be amazing.

Thanks for your help and all the best,

Mark
Mark Hosak, *he/him*
Ministerial Advisor to
The Honourable Ravi Kahlon
Minister of Housing
Cell: 250-886-1834

Digital Permitting Roundtable - Follow-up

From: May, Zachary HOUS:EX
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 6, 2023 5:08:48 PM PDT

Hello and thank you for joining Minister Kahlon's Digital Permitting Roundtable today.

We will be releasing more information in the coming weeks, including formal engagement processes and ways to get involved. If you have any questions or ideas you think we should consider, please feel free to reach out directly.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: UDI Webinar - Pre-Event Meeting

From: Verna Yu <vyu@udi.org>
To: Roberto Pecora <roberto@zebx.org>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>, Sampliner, Laura <LSampliner@coquitlam.ca>
Cc: Wilma Leung <wileung@bchousing.org>, Shreya Verma <sverma@bchousing.org>
Sent: April 12, 2023 12:56:06 PM PDT
Attachments: image001.png, image003.jpg, image006.jpg, image005.jpg, image004.jpg, image002.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Roberto!

I will send out a calendar invite with zoom link.

Hope you are all enjoying the spot of sunshine today!

Kind regards,
Verna

From: Roberto Pecora <roberto@zebx.org>
Sent: April 12, 2023 9:30 AM
To: Verna Yu <vyu@udi.org>; 'May, Zachary HOUS:EX' <Zachary.May@gov.bc.ca>; Sheryl Peters <speters@bchousing.org>; Sampliner, Laura <LSampliner@coquitlam.ca>
Cc: Wilma Leung <wileung@bchousing.org>; Shreya Verma <sverma@bchousing.org>
Subject: Re: UDI Webinar - Pre-Event Meeting

Hi everyone!

Preferably Ap 25, but if need be I can make Apr 27 work too.

Roberto

From: Verna Yu <vyu@udi.org>
Date: Tuesday, April 11, 2023 at 4:59 PM
To: 'May, Zachary HOUS:EX' <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>, Sampliner, Laura <LSampliner@coquitlam.ca>, Roberto Pecora <roberto@zebx.org>
Cc: Wilma Leung <wileung@bchousing.org>, Shreya Verma <sverma@bchousing.org>
Subject: RE: UDI Webinar - Pre-Event Meeting

Thank you all! Looks like the top picks are

- Tuesday, April 25 4-5pm
- Thursday, April 27 1-2pm

Roberto – please let us know if these dates work.

Kind regards,
Verna

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 11, 2023 4:44 PM
To: Sheryl Peters <speters@bchousing.org>; Verna Yu <vyu@udi.org>; Sampliner, Laura <LSampliner@coquitlam.ca>; 'Roberto Pecora' <roberto@zebx.org>
Cc: Wilma Leung <wileung@bchousing.org>; Shreya Verma <sverma@bchousing.org>

Subject: RE: UDI Webinar - Pre-Event Meeting

Updated in green below.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sheryl Peters <speters@bchousing.org>
Sent: Tuesday, April 11, 2023 4:27 PM
To: Verna Yu <vyu@udi.org>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sampliner, Laura <LSampliner@coquitlam.ca>; 'Roberto Pecora' <roberto@zebx.org>
Cc: Wilma Leung <wileung@bchousing.org>; Shreya Verma <sverma@bchousing.org>
Subject: RE: UDI Webinar - Pre-Event Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Me (SP) in red below:

Sheryl (Lim) Peters | Provincial Director, Redevelopment | Development & Asset Strategies
Office: (604) 439-4142 | speters@bchousing.org | www.bchousing.org

My work day may differ from yours. Please do not feel obliged to reply to this email outside of your working hours.

From: Verna Yu <vyu@udi.org>
Sent: April 11, 2023 4:22 PM
To: May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; Sampliner, Laura <LSampliner@coquitlam.ca>; Sheryl Peters <speters@bchousing.org>; 'Roberto Pecora' <roberto@zebx.org>
Cc: Wilma Leung <wileung@bchousing.org>; Shreya Verma <sverma@bchousing.org>
Subject: RE: UDI Webinar - Pre-Event Meeting

Hi everyone,

Thank you for updating your availability.

As I see some conflicts, I have listed additional date/time options below:

- Monday, April 24 12noon-1pm SP AVAILABLE. ZM not available
- Tuesday, April 25 4-5pm – SP AVAILABLE ZM available
- Thursday, April 27 1-2pm - SP AVAILABLE 1:30-2:30 ZM can be but prefer other times.

Kind regards,
Verna Yu

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 11, 2023 4:13 PM
To: Sampliner, Laura <LSampliner@coquitlam.ca>; Sheryl Peters <speters@bchousing.org>; Verna Yu <vyu@udi.org>; 'Roberto Pecora' <roberto@zebx.org>
Cc: Wilma Leung <wileung@bchousing.org>; Shreya Verma <sverma@bchousing.org>
Subject: RE: UDI Webinar - Pre-Event Meeting

My availability in green.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sampliner, Laura <LSampliner@coquitlam.ca>
Sent: Tuesday, April 11, 2023 4:12 PM
To: Sheryl Peters <speters@bchousing.org>; Verna Yu <vyu@udi.org>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; 'Roberto Pecora' <roberto@zebx.org>
Cc: Wilma Leung <wileung@bchousing.org>; Shreya Verma <sverma@bchousing.org>
Subject: RE: UDI Webinar - Pre-Event Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Verna,

Please find my availability below in purple. Thank you for the opportunity to be a part of this event!

Thank you,
Laura Sampliner *She/her* **| Environmental Sustainability Manager**
City of Coquitlam | 3000 Guildford Way | Coquitlam, BC | V3B 7N2
E: lsampliner@coquitlam.ca | **C:** 604-306-8307

From: Sheryl Peters <speters@bchousing.org>
Sent: Tuesday, April 11, 2023 4:05 PM
To: Verna Yu <vyu@udi.org>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; 'Roberto Pecora' <roberto@zebx.org>; Sampliner, Laura <LSampliner@coquitlam.ca>
Cc: Wilma Leung <wileung@bchousing.org>; Shreya Verma <sverma@bchousing.org>
Subject: RE: UDI Webinar - Pre-Event Meeting

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. If you have any questions or concerns please contact ICT Support.

SP in red below.

Sheryl (Lim) Peters | Provincial Director, Redevelopment | Development & Asset Strategies
Office: (604) 439-4142 | speters@bchousing.org | www.bchousing.org

My work day may differ from yours. Please do not feel obliged to reply to this email outside of your working hours.

From: Verna Yu <vyu@udi.org>
Sent: April 11, 2023 3:59 PM
To: May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; 'Roberto Pecora' <roberto@zebx.org>; 'Sampliner, Laura' <LSampliner@coquitlam.ca>; Sheryl Peters <speters@bchousing.org>
Cc: Wilma Leung <wileung@bchousing.org>; Shreya Verma <sverma@bchousing.org>
Subject: UDI Webinar - Pre-Event Meeting

Good afternoon panel,

I hope you have all had a wonderful long weekend!

With the event coming up in just a few weeks, I would like to schedule a pre-event meeting with our speakers and moderator to review the event content, logistics, and answer any questions you might have.

Would you be available for the below dates/times for a virtual meeting?

-
- Wednesday, April 19 9:30 - 10:30am – SP not available LS not available ZM available
- Monday, April 24 11:00am - 12:00pm - SP – AVAILABLE **LS available** ZM not available
- Monday, April 24 4:00pm - 5:00pm – SP AVAILABLE 4:30-5:30 LS not available ZM not available (may change)

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Agenda to follow.

UDI Webinar Moderator is inviting you to a scheduled Zoom meeting.

Topic: Pre-Meeting: UDI Webinar Zero Carbon Step Code & BC Energy Step Code
Time: Apr 25, 2023 04:00 PM Vancouver

Join Zoom Meeting
s.15

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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#1100 – 1050 West Pender Street
Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
www.udi.bc.ca

April 13, 2023

Codes Acceleration Fund Selection Committee
Codes Acceleration Fund
Natural Resources Canada
Office of Energy Efficiency
19th Floor – 580 Booth Street
Ottawa, ON K1A 0E4

Dear Committee Members:

Re: Government of B.C.'s Funding Application to Stream 1 of the Codes Acceleration Fund (CAF)

Please accept this as the Urban Development Institute – Pacific Region's (UDI's) letter of support for the Government of British Columbia's funding application to Stream 1 of the Federal Government's *Codes Acceleration Fund (CAF)*.

UDI is the association of the development and building industry and its related professions in British Columbia (B.C.). UDI-Pacific Region has Chapters in the Okanagan, Capital Region, Fraser Valley and Metro Vancouver. We represent thousands of individuals involved in all facets of land development and planning including builders, property managers, financial lenders, lawyers, engineers, planners, architects, appraisers, real estate professionals, local governments, and government agencies.

For decades, we have provided leadership in encouraging sustainable development and green building practices. I sit on the Provincial Mass Timber Advisory Council in B.C., and UDI was one of the original organizations that developed the *B.C. Energy Step Code* (*ESC*). We continue to actively participate on the Energy Step Code Council – including its recent work in developing a *Zero Carbon Step Code* (*ZCSC*). Through our seminars and webinars, we educate our members about best practices on a wide range of topics including brownfield remediation, mass timber construction, electrical vehicle charging, the *ESC* and the *ZCSC*.

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#1100 – 1050 West Pender Street
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www.udi.bc.ca

As such, we are pleased to support the B.C. Government's application for *CAF* funding. When implemented, the activities included in their application will help to strengthen our members' ability to prepare and comply with current and future higher levels of energy and low-carbon performance under the *ESC* and *ZCSC,* as well as *B.C. Building Code* (*BCBC*) requirements and national standards.

We are especially looking forward to collaborating with the Province and other key partners to help support *CAF* funded activities to:

- Digitize the *BCBC* through the Digital Innovation in Housing Construction initiative;
- Improve compliance through capacity-building with industry, local governments, and Indigenous Communities;
- Create standardized design and installation guidelines for mechanical systems; and
- Build the capacity and preparedness of key stakeholder groups such as ours to meet upcoming code changes through tailored education, education resources, training, facilitating peer-to-peer learning, and a smooth transition to digital building information and compliance systems.

We would be pleased to work with the Province to include these critical activities in our educational and professional development programming.

UDI strongly supports the Province of British Columbia's application to the *Codes Acceleration Fund* and ask that you approve it.

Sincerely,

Anne McMullin
President & CEO, Urban Development Institute

ICAC Meeting Materials - April 24, 2023

From: Milly Luc <mluc@bchousing.org>

To: Denisa Ionescu <dionescu@bchousing.org>, Esther de Vos <edevos@bchousing.org>, Michelle Hayes <mhayes@bchousing.org>, Peter Mitchell <MITCHELL@egbc.ca>, Ron Rapp <ron@havan.ca>, patrick.ryan@vancouver.ca, Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, jjung@asttbc.org, Adam Terris <aterris@bchousing.org>, Tony Gioventu (external) <tony@choa.bc.ca>, Scott McIntyre (external) <smcintyre@egi.ca>, Neil Moody <neilmoody@chbabc.org>, XT:Mitchell, Peter FOR:IN <mitchell@apeg.bc.ca>, Mary Gerges <mgerges@bchousing.org>, Mark Vernon <mvernon@aibc.ca>, Mark Sakai <msakai@bcrea.bc.ca>, Howard Friedman (external) <howard.friedman2@travelers.com>, Chris Gardner <chris@icba.ca>, Chris Atchison <chris.atchison@bccassn.com>, Ann McMullin <amcmullin@udi.org>, XT:Garcia, Carlos M AG:IN <cmgarcia@bchousing.org>

Sent: April 18, 2023 1:36:40 PM PDT

Attachments: image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello everyone,

The meeting materials for the ICAC Meeting for April 24th have been uploaded on Aprio.

Warm regards,

BC HOUSING

Milly Luc (she/her)
EA to CEO | EXECUTIVE OFFICE

e: mluc@bchousing.org | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səlilw̓ətaʔɬ (Tsleil-Waututh) people.

notes, Feb. ESCC meeting

From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>

To: bea.bains@fortisbc.com, ebaudinaud@communityenergy.bc.ca, Tom.Berkhout@bchydro.com, alexandre.bigonesse@canada.ca, pcaraher@ahma-bc.org, GCarignan@communityenergy.bc.ca, mchorobik@communityenergy.bc.ca, NConnolly@richmond.ca, Dams, Madeline HOUS:EX <Madeline.Dams@gov.bc.ca>, bdeeks@rdcfinehomes.com, diana@havan.ca, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, joe.iconhomes@gmail.com, SHorsburgh@rdn.bc.ca, vanessa@chbabc.org, jjung@asttbc.org, toby.lau@bchydro.com, wileung@bchousing.org, mlohmann@communityenergy.bc.ca, J.Madden@ubc.ca, Lisa.Mak@bchydro.com, rmathews@cnv.org, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, mmcwilliam3@bcit.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, Muncaster, Katherine EMLI:EX <Katherine.Muncaster@gov.bc.ca>, jowen@surrey.ca, sean.pander@vancouver.ca, roberto@zebx.org, hradhakrishnan@egbc.ca, ron@havan.ca, kelly@hkrbuilders.com, trothery@communityenergy.bc.ca, pauline@chbabc.org, lsampliner@portmoody.ca, zsegal@boma.bc.ca, dstathonikos@boma.bc.ca, lise.townsend@surrey.ca, Robyn.Wark@BCHydro.com, ralph.wells@ubc.ca, tyler.wightman@boabc.org, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>

Sent: April 21, 2023 4:17:16 PM PDT

Attachments: ESCC notes vFIN Feb 13 2023.docx

Hello, everyone:

I hope you've all been having a nice, relaxing Friday. I am attaching the notes from the Feb. ESCC meeting here. Please let me know of any errors or omissions.

We are planning something for late May/early June. We'll want to gather the subcommittees in advance of that. More soon

Best,
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Energy Step Code Council Meeting
Notes

Date and Time of Meeting: Monday Feb 13, 2022 | Time: 10:00 a.m. to 3:00 p.m. Pacific Time
Location: BC Hydro Head Office: 333 Dunsmuir St., Vancouver, B.C. and online
Chair: Zachary May, Building and Safety Standards Branch, Ministry of Housing
Co-Vice Chairs: Bob Deeks, CHBA BC and Robyn Wark, BC Hydro

Attendees:

Bea Bains, FortisBC
Tom Berkhout, BC Hydro
Maya Chorobik, Community Energy Association
Norm Connolly, City of Richmond, PIBC, Part 3 subco co-chair
Madeline Dams, MUNI
Diana Dilworth, HAVAN
Patrick Enright, City of Vancouver
Jeff Fisher, UDI
Elisabeth Baudinaud, CEA
Maura Gatensby, AIBC
James Glave, Bright Future Studios
William Grass, BSSB
Joe Hart, CHBA-BC
Altaf Hussain, BC Hydro
Jason Jung, ASTTBC
Iulia Jurgea, BC Hydro
Toby Lau, BC Hydro, Part 3 subco co-chair
Wilma Leung, BC Housing
John Madden, UBC
Rick Mann, CHBA-BC
Zachary May, BSSB
Jason Owen, City of Surrey
Harshan Radhakrishnan
Jason Rowley, CoV Chief Electrician
Laura Sampliner, CEA and SCPN
Zack Segal, BOMA BC
Bertine Stelzer, BC Hydro
Lise Townsend, City of Surrey
Carmina Tupe, CHBA-BC
Robyn Wark, BC Hydro and ESCC Vice-Chair
Ralph Wells, UBC
Scott Williams, BSSB
Hugo Wong, BSSB

Meeting started 10:27 due to technical issues.

Overview of CleanBC Code changes: Scott Williams, BSSB

- May 1, 2023 effective date
- Congratulations for last six years of hard work. Big milestone.
- Refer to presentation for additional details
- More communications on the way to support

Actions:

- ~~HW to send highlighted building code convenience copy to the Council when available (keep within your organizations)~~ **(Update, Feb. 21: Convenience copy included in Feb. Energy Step Code newsletter)**

Presentation from BC Hydro

- Refer to presentation
    - BC Hydro prefers Extension Policy Option 3 described in the presentation
- BC Hydro preparing for rollout of building carbon pollution standard

    - BCHydro has a surplus of energy projected until 2030; however, transmission and distribution needs updates in certain areas to be looked at in more detail.
    - Anticipating quick uptake of building electrification due to pace of Energy Step Code adoption
    - Local governments should contact their Key Account Managers or Sustainable Communities to liaise with the Hydro grid planning team to discuss how implementing the carbon pollution standard might affect their communities
    - Extension Policy Option 3 intended to increase cost certainty and share costs more equitably across new developments . Lowering overall costs was not the primary driver.
    - BCUC ruling on this issue would likely take at least 12 months
- Attendee questions/comments:
    - BC Hydro and Province should connect to ensure local electrical capacity supports provincial housing targets (CHBA & UDI have met Hydro on this issue, Housing DM is aware)
    - Is BC Hydro thinking about a single extension tariff pool and corresponding charge per unit for the entire province or will it account for potential regional differences?
        - Hydro was assuming a single charge per unit for the entire province but will assess regional implications
    - Has Hydro considered having a lower charge per unit for higher efficiency homes/buildings?
        - Hydro has not considered this but will assess.
    - How is Hydro taking electrification retrofits into account when assessing grid capacity? Will these be factored into local government grid capacity assessment work with Hydro?
    - In the past, Hydro's system could handle new loads easier. What has changed?
        - Response: BC Hydro is busier than ever and loads are increasing as well with more MURBs and densification.
    - Clarification was sough on what is considered an extension versus a system improvement (for example, what is it called when a new transformer is needed but a new line is not?)
    - Comment made about the amount of time it takes to get a simple connection.
    - Would like to see Hydro do more of these kinds of presentations to other audiences. Important for people to understand what Hydro is planning.
    - No decision yet on whether new improvement charge is based on usage or fixed cost per dwelling
    - BC Hydro should present on these basics more frequently to the construction industry to improve basic literacy on these issues.
    - Reconsider Extension Policy Option 4, or mix that with Option 3 to bring fees more in line with other utilities to make it more competitive.
    - BC Hydro is prepared for increased electricity use in the summer due to air conditioners. Summer peak use still lower than winter peaks.
    - Do you use future weather files when planning the system? No, they use historic temperature over last 30 years, and have cushion (load feeders to 75%, and 66% in high-growth areas) to capture load fluctuations.
- Action items:

- **Hydro staff will return to ESCC with proposed fees to hear further feedback**
- **Council members to bring a list of key issues to BC Hydro and track progress**
- **Include guidance in Best Practices Guide for local governments to foresee local electrical capacity issues**

Roundtable

- Northern customers still prefer dual-fuel or backup heating systems.
- One customer expected $14,000 in CleanBC rebates but the rebate program was fully subscribed after 2 weeks.
- UDI: Updated case studies with savings, initial costs needed given changing energy policy landscape and availability
- Step 3 for Part 9 buildings "pretty smooth". Allowing backup heat allays concerns.
- Mechanical contractors need further training
- CEA Climate Action Dashboard coming soon that tracks Step Code adoption.
- Step Code Peer Network:
    - Subgroup discussed making a process map for RNG. Their key questions: intended outcome of the map, intended audience, and how will it be used? A legal review might be necessarily for some AHJs, with uncertainty around timing. Continued concerns about lack of permanency, lack of clarity on how carbon intensity of RNG can be guaranteed due to different sourcing, and administrative barriers for AHJs (time of permitting, staffing issues, expertise).
    - FortisBC staff willing to meet with SCPN members on this issue
    - SCPN also creating an implementation cohort to figure out best practices given new CleanBC code changes
- FortisBC: 18 PJ of RNG will be available in the next few years.
- Gas heat pumps not small enough for single-family homes now, but advancements are being made.
- Part 3/Part 9 Non-Residential Subcommittee met late last year, consulted a few times on CleanBC code changes, pleased that they're signed. Toby is on CSA committee for energy efficiency, interested in hybrid heating systems, working with Cam Shook from EMLI on this.
- Capacity Building/Communications Subcommittee: Energy Step Code newsletter revived. Somewhat involved in update for code compliance tools, wanting to include building officials this time, not just EAs so there's buy in from those who receive the reports. Strong desire from EAs to professionalize, as many EAs don't have Step Code-specific training. BC Housing released Market Response Study that tracks industry activity, readiness, and some costing. Key findings:
    - Builders often choose energy conservation measures that cost more. Low-cost interventions like integrated design process aren't used as much as they should.
    - Consider extension to the Matrix study given the new Zero Carbon Step Code.
    - Comment: Make costing info relative (percentage up or down) rather than absolute dollar figures, as those become obsolete quickly.
    - Comment: Use local best practices as a baseline rather than code minimum, as many Northern builders don't build to Code minimum as customers there demand more airtight buildings to save energy.

- Part 9 subcommittee: Consulted several times on CleanBC code changes. Implementation planning is next step.
- Some mechanical engineers or design teams won't sign off on heat pump designs because they want an oversized design for the project despite AHJ wanting a smaller system
    - EGBC practice advisory team can help with this.
- Builders tend not to understand mechanical systems – mechanical contractors are not required to have TECA training, CSA F280 is in the code but only about 10% use it. Most just over size.
- Action items:
    - **Zac to check internally whether Office of the Superintendent of Professional Governance (OSPG) has a role to plan in EA professionalization and whether EA professionalization can be raised as a priority with them.**

Zero Carbon Step Code PowerPoint presentation

- Thanks to James and Sarah for creating these graphics
- Mandatory carbon requirements still TBD for 2024 and 2027.
- Consider a "super-presentation" that combines new energy requirements with new Zero Carbon Step Code content, illustrating how energy efficiency and carbon interact
- Action items:
    - **Council members to find case studies that meet Moderate and Low-Carbon Performance to include in this presentation**
    - **Zac to circle back with EMLI regarding market transformation of key technology and PSFS for trades transformation**
    - **Acknowledging that many training resources exist from professional organizations and BC Housing, BSSB will work with partners to prepare comprehensive technical training materials for the next Code rather than rush something out this spring/summer for energy and carbon only**
    - **BSSB to provide work plan for the next year, to finalize over next 1.5 months.**
    - ~~BSSB to organize lunchtime webinar to answer questions regarding CBHCC poll regarding GHG requirements in the National Building Code.~~ **(occurred Tues. Feb. 28, 2023)**
        - Draft policy recommendations are available on the website here: https://cnrc.teamwork.com/app/tasks/37694438
        - **Zac encourages all organizations to individually submit responses to CBHCC poll as they may not know what the ESCC is and the sectors it represents.**
    - **Next ESCC meeting in 2-3months**

RE: Building Code Briefing Question

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 24, 2023 10:30:40 AM PDT

Ok- I'll add a note as well.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, April 24, 2023 9:32 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: Building Code Briefing Question

Juni,

I think the issue might have to do with some soil remediation requirements as well. CHBA and/or UDI brought this up at some point.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Monday, April 24, 2023 9:22 AM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>; Newman, Debbie HOUS:EX <Debbie.Newman@gov.bc.ca>
Subject: RE: Building Code Briefing Question

Ok, no problem- I will just amend my notes and not the slides or BN. This is really tied in to the seismic issue as the soil classification can impact seismic design.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Sent: Monday, April 24, 2023 9:15 AM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>; Newman, Debbie HOUS:EX <Debbie.Newman@gov.bc.ca>

Subject: FW: Building Code Briefing Question

HI Bindi and team,

Flagging that Minister Kahlon is asking for specifics below to be included in the building code briefing tomorrow.

- specifics on Environment's changes to enforcement and classifications of soils, and how that's impacting the building industry. He would like this information included as part of his briefing on the Building Code tomorrow.

Thank you

Regards,
Nikki

From: Gervais, Jesse HOUS:EX <Jesse.Gervais@gov.bc.ca>
Sent: Monday, April 24, 2023 9:11 AM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: Building Code Briefing Question

Hi Nikki,

Can you please send this question through to the BSSB team?

Minister Kahlon is asking for some specifics on Environment's changes to enforcement and classifications of soils, and how that's impacting the building industry. He would like this information included as part of his briefing on the Building Code tomorrow.

Thanks,

Jesse Gervais (he/him)
Ministerial Advisor
Ministry of Housing
Parliamentary Secretary for Rural Development
778-584-6486

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

April 24th

Hi all,

Here is the meeting link:

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15

s.15

Hello all,

May I ask that you cancel the invite that was sent from Sue Bate's calendar and accept this one. More details will be sent in the coming weeks.

Please stay tuned.

Warm regards,

Milly Luc (she/her)
EA to CEO | EXECUTIVE OFFICE

e: mluc@bchousing.org<mailto:mluc@bchousing.org> | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xmkym (Musqueam), Skwxwú7mesh (Squamish), and slililwta (Tsleil-Waututh) people.

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15

Page 013 of 304

Withheld pursuant to/removed as

s.15

ICAC Meeting Materials - April 24

From:	Milly Luc <mluc@bchousing.org>
To:	Denisa Ionescu <dionescu@bchousing.org>, Esther de Vos <edevos@bchousing.org>, Michelle Hayes <mhayes@bchousing.org>, Peter Mitchell <MITCHELL@egbc.ca>, Ron Rapp <ron@havan.ca>, patrick.ryan@vancouver.ca, Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, jjung@asttbc.org, Adam Terris <aterris@bchousing.org>, Tony Gioventu (external) <tony@choa.bc.ca>, Scott McIntyre (external) <smcintyre@egi.ca>, Neil Moody <neilmoody@chbabc.org>, XT:Mitchell, Peter FOR:IN <mitchell@apeg.bc.ca>, Mary Gerges <mgerges@bchousing.org>, Mark Sakai <msakai@bcrea.bc.ca>, Howard Friedman (external) <howard.friedman2@travelers.com>, Mark Vernon <mvernon@aibc.ca>, Chris Gardner <chris@icba.ca>, Chris Atchison <chris.atchison@bccassn.com>, Ann McMullin <amcmullin@udi.org>
Sent:	April 24, 2023 1:01:01 PM PDT
Attachments:	ICAC April 24 2023 Information Package.pdf, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi all,

Sending the meeting information package to those that were unable to access their Aprio account.

Best,

BC HOUSING

Milly Luc (she/her)
EA to CEO | EXECUTIVE OFFICE

e: mluc@bchousing.org | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səlilw̓ətaɁɬ (Tsleil-Waututh) people.

Industry and Consumer Advisory Council
AGENDA
April 24, 2023
1:00pm-2:30pm

Please join meeting using this MS TEAMs Link:

Click here to join the meeting
Meeting ID: 213 035 042 158
Passcode: BZ6YUw
Download Teams | Join on the web

We acknowledge that BC Housing delivers its mission on the ancestral homelands of Indigenous Peoples across BC, each with their own unique traditions and history. We offer our respect to their Peoples, past and present.

Item Name	Attachment	Presented By
1. Welcome and Introductions	No	Vincent Tong
2. Approval of Agenda and Minutes	Yes	Vincent Tong
3. Housing Strategy Announcement	No	Vincent Tong
4. Licensing and Consumer Services Updates 4.1 Consumer and Builder survey results	 Yes	Michelle Hayes
5. Research Updates 5.1 Building Excellence Grant 5.2 March 2023 New Home Registry Report	 Yes Yes	Denisa Ionescu
6. Office of Housing and Construction Standards 6.1 Update on Building Code Consultation 6.2 Digital Building Codes and Permits Initiative	 No Yes	Zachary May
7. BCH Reconciliation Strategy	No	Mary Gerges
8. BCH Accessibility Strategy Development	No	Mary Gerges
9. Discussion Items: 9.1 Heat pumps 9.2 Glass Balconies	 No No	 Tony Gioventu Tony Gioventu
10. Member Updates	No	Roundtable (all)

The 21st meeting of the **BC HOUSING INDUSTRY AND CONSUMER ADVISORY COUNCIL** was held on Monday, October 31, 2022 via conference call.

IN ATTENDANCE:

Industry and Consumer Advisory Council:
Neil Moody, Canadian Home Builders' Association of BC
Mark Sakai, BC Real Estate Association
Chris Atchison, BC Construction Association
Peter Mitchell, Engineers, and Geoscientists British Columbia
Jason Jung, ASTTBC
Tony Gioventu, Condominium Home Owners Association

Ministry Representatives:
Zachary May, Building and Safety Standards Branch
Gord Enemark, Housing Policy Branch (In-part)

BC Housing Representatives
Vince Tong, BC Housing (Chair)
Michelle Hayes
Denisa Ionescu
Adam Terris
Esther de Vos
Sue Bate (recording)

Regrets:
Tyler Wightman, Building Officials Association of BC
Mark Vernon, Architectural Institute of British Columbia
Ron Rapp, HAVAN
Anne McMullin, Urban Development Institute
Chris Gardener, Independent Contractors Association of BC
Howard Friedman, Travelers Guarantee
Andrew Armstrong, Aviva Canada
Chris Watters, RSA Home Warranty

1. Welcome & Introductions

V. Tong welcomed participants to the meeting and acknowledged that BC Housing delivers its mission on the ancestral homelands of Indigenous Peoples across B.C., each with their own unique traditions and history. Respect was offered to their Peoples, past and present.

V. Tong introduced himself as the Acting CEO of BC Housing after the former CEO, Shayne Ramsay retired in September 2022. He noted that BC Housing's Board is currently undertaking a global search for the new CEO. Given the complexity of the process, and the importance and specialized nature of the role, it is expected that this process will extend into 2023.

Despite this change in leadership, our mission remains unchanged: making a positive difference in people's lives through safe, affordable, and quality housing.

2. APPROVAL OF AGENDA AND MINUTES

Today's Agenda and the minutes of April 25, 2022 were approved.

3. ACCESSIBILITY AND HUMAN RIGHTS UPDATE

T. Gioventu updated the Council on the Accessibility Research that the Condominium Home Owners Association is currently working on. It was noted that CHOA was running a seminar in early November where an overview of the Accessibility Act and the upgrades and changes to multi-family buildings to increase accessibility, were being reviewed.

4. LICENSING AND CONSUMER SERVICES UPDATE

M. Hayes provided an update on LCS. To date there are currently 5000 new builders in BC. The new step code training initiatives are now live. Its purpose is to support and prepare builders on updated changes. Builders are required to take all eight modules of the course, unless exempted.

5. OFFICE OF HOUSING AND CONSTRUCTION STANDARDS

Z. May attended the meeting to provide an update on the national building standard codes, planned to be released in March 2023, which will harmonize standards. He noted that public consultations were open until November 4, 2022. Updates to other initiatives was provided with alterations to the existing building code and moving retrofits to meet code. A further update on these initiatives will be noted at the next meeting of the council.

6. RESEARCH & EDUCATION INITIATIVES

D. Ionescu provided an update on Research & Education , to date.

The Monthly New Home Registry Reports and Research & Education project summaries were presented for information.

All these reports are available to view in the Council Portal New APRIO NEXT Portal *Note that the portal has recently undergone a migration to a new system. If you have not accessed the new system, please reach out to APRIO via your usual log in details and request a training session. Your permissions remain the same.*

7. ROUNDTABLE

V. Tong opened the meeting for a roundtable discussion with the Council to determine what issues have emerged for industry and consumers. Several items were discussed with the following of note:

N. Moody, CHBA referenced the recently released Municipal Benchmarking Report which is currently available on their website. The report shows evidence of housing supply shortfalls in BC and the economic consequence of those shortfalls both past and future. The study also looks at housing demands and supply trends throughout BC and 13 municipalities.

J. Jung, ASTTBC, He noted the transition that ASTTBC has undergone as a result of coming under the Professional Governance Act indicating that ASTTBC is now fully a regulatory body only.

T. Wightman, BOABC, was unable to attend the meeting, however wished to advise the Council that BOABC is running energy step code training through BCIT for building officials over the next few months. He also advised that the BOABC conference is scheduled from May 28-31, 2023 at the River Rock in Richmond BC.

PROPOSED MEETING DATE

The next meeting will be held Monday, April 24, 2023 from 1 to 2:30 p.m. The date/time is currently confirmed for a virtual meeting, however interest has been raised to hold this as a potential hybrid meeting going forward.

ADJOURNMENT

There being no further business, the meeting was adjourned at 2:30 p.m.

SUMMARY REPORT

Licensed Residential Builder Survey

BC HOUSING
RESEARCH CENTRE

2022 SURVEY DETAILS

Invites Sent:
6,897

Surveys Completed:
1,295

Response Rate:
18.8%

*Builders participating in the survey are in good standing without expired, suspended, or cancelled licences.

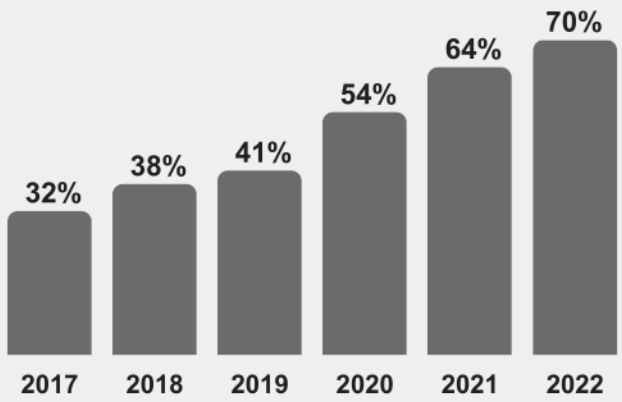
Introduction

Under the Homeowner Protection Act, BC Housing works to improve consumer protection for buyers of new homes and ensure quality residential construction in B.C. BC Housing is responsible for licensing residential builders in the province as part of this work. BC Housing also performs research and provides educational opportunities to promote better building and renovation practices.

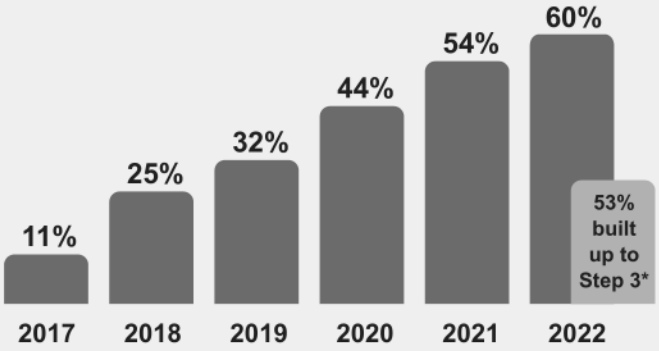
The Licensed Residential Builder Survey is an annual, province-wide survey. The survey includes builder profile information, construction activities, and satisfaction related to educational opportunities.

ENERGY ADVISORS AND ENERGY STEPCODE BUILDING BEYOND THE STANDARD

Builders Working with Energy Advisor in Past Year



Builders Meeting BC Energy Step Code in Past Year



*Fifty-three per cent of builders who were meeting the BC Energy Step Code in 2022, were building to Step 3 of the code.

CONTACT
Research Centre

Phone: 604-439-4135 **Toll-free:** 1-800-407-7757 **Fax:** 604-646-7051
Email: research@bchousing.org **Web:** www.bchousing.org **Twitter:** @RegistrarBCH

Licensed Residential Builder Survey 2

NEW RESIDENTIAL BUILDING ACTIVITY PREDICTIONS

Builders' Company Activity Forecast

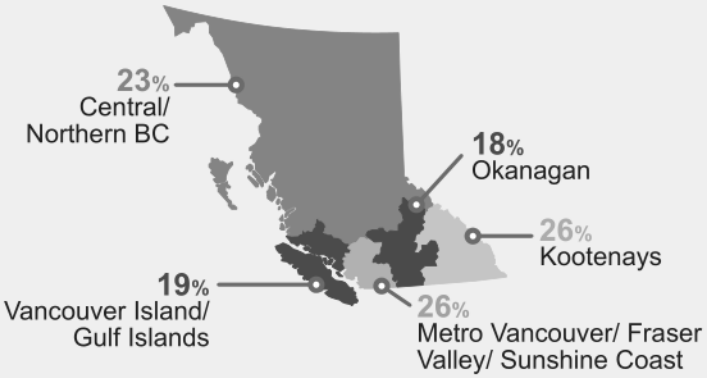


24% expect an **increase**

48% expect **no change**

28% expect a **decrease**

Builders Expecting an Increase by Region



IMPACT OF CLIMATE CHANGE ON THE RESIDENTIAL CONSTRUCTION INDUSTRY

Biggest Perceived Climate Change Challenges for B.C.'s Residential Construction Industry

41% **Extreme heat**

30% **Wildfire**

29% **Air quality**

29% **Severe storms**

27% **Pandemics**

25% **Floods**

Current Impact of Climate Change on How Housing Projects are Located, Designed or Built

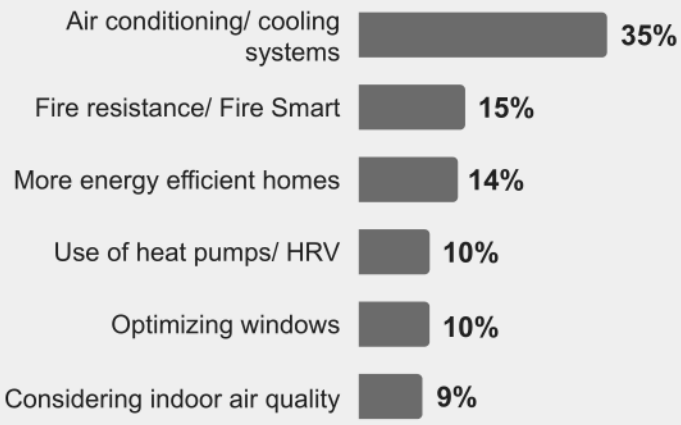


26% climate change **has an impact**

18% **don't know** if climate change has an impact

57% climate change does **not have an impact**

Climate Change Adaptations Currently Being Incorporated by Affected Builders



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Email: research@bchousing.org **Web:** www.bchousing.org **Twitter:** @RegistrarBCH

SUMMARY REPORT

Current Homeowner Survey

BC HOUSING
RESEARCH CENTRE

2022 Survey Details

Mail Sent: **6,400**

Surveys Completed: **710**

Response Rate: **11%**

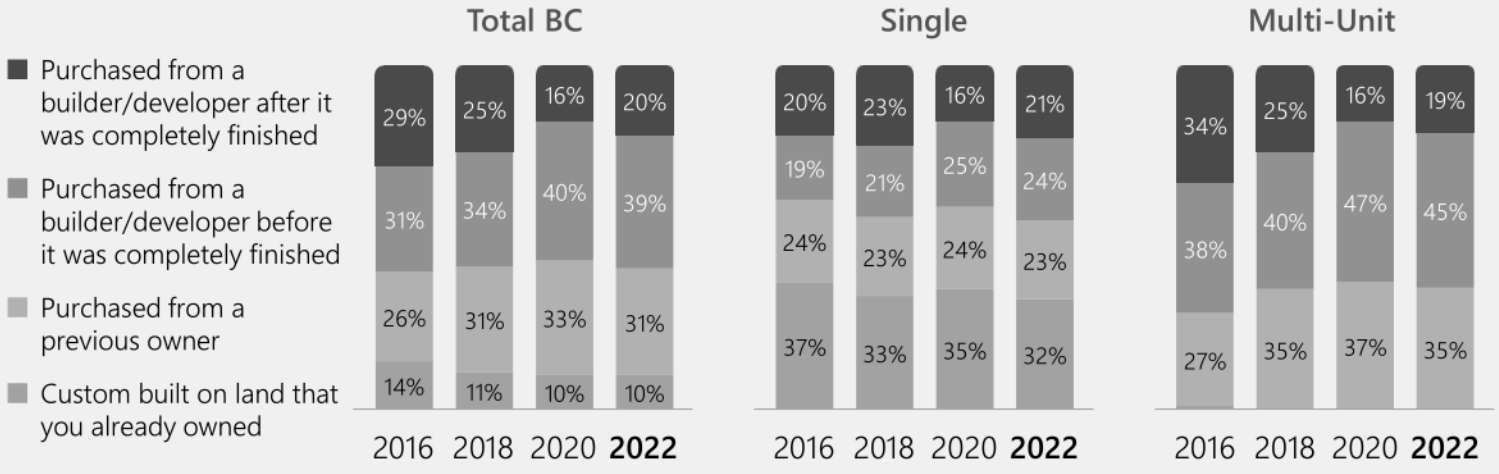
Invites were sent to a randomly selected group of owners with homes covered by warranty insurance under the Homeowner Protection Act.

Introduction

The Homeowner Protection Act provides mandatory home warranty insurance on new homes built in B.C. Since 2002, BC Housing has surveyed new homeowners whose homes are covered by the Act.

The survey covers the current homeowners' profile (age, type of home buyer, length of residency), their confidence level about their home purchase. It also measures their satisfaction with the quality of construction and building process, and their outlook on housing market conditions.

Type of Home Purchase



Satisfaction with **Overall Quality** of Construction

79% Are **very/somewhat satisfied** with the overall quality of construction

Individuals Whose Homes Impact Their **Accessibility**

13% Have homes with design elements that aren't accessible.

CONTACT
Research Centre

Phone: 604-439-4135 **Toll-free:** 1-800-407-7757 **Fax:** 604-646-7051
Email: research@bchousing.org **Web:** www.bchousing.org **Twitter:** @RegistrarBCH

Current Homeowner Survey 2

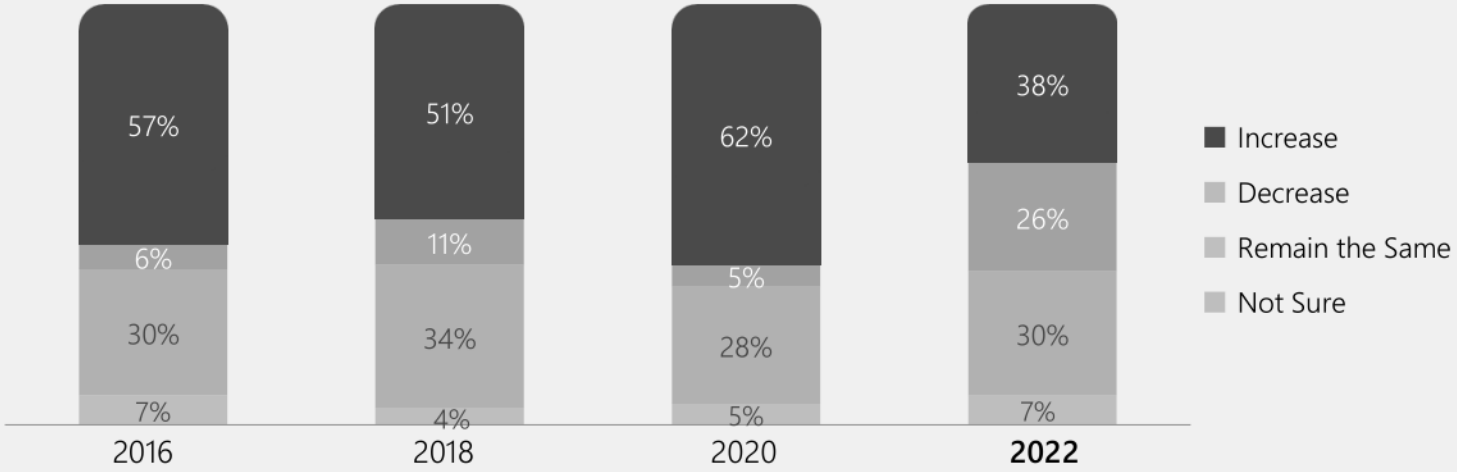
Factors Contributing to **Home Purchase Confidence**

- **93%** Workmanship and materials used
- **90%** Built by a licensed residential builder
- **85%** Gov't regulations, building codes and inspections
- **84%** Having warranty insurance
- **82%** Reputation of home's builder
- **77%** Knowing your home has been privately inspected

8 Biggest **Housing Market Concerns** Over the Next 12 Months



Housing **Price Expectations**



CONTACT
Research Centre

Phone: 604-439-4135 **Toll-free:** 1-800-407-7757 **Fax:** 604-646-7051
Email: research@bchousing.org **Web:** www.bchousing.org **Twitter:** @RegistrarBCH



The Building Excellence Research & Education Grants program continues to foster innovation and best practices to strengthen the housing sector. Since its inception, the program has awarded more than $3.81 million in grants to industry and consumer organizations, education providers, and researchers. Each year, BC Housing receives a wide range of submissions and supports initiatives to expand knowledge and advance best practices. To date, the program has funded more than 119 new research and education projects. This includes innovative projects that improve the quality of residential construction and strengthen consumer protection for new home buyers. This year, BC Housing is distributing $223,600 in grant funding. This report outlines the results of the 2023 application intake and the successful grant recipients.

Funded Projects 2023

Canadian Home Builders' Association of BC (CHBA BC)

$30,000

Create an E-Learning course on managing liquid water risks from rainwater during construction and water intrusion in the building enclosure during building use.

University of Alberta

$30,000

Conduct a study using computational fluid dynamics (CFD) to examine the effectiveness of existing ventilation systems in B.C. and propose optimal ventilation models for new homes, with a goal to ensure health and promote indoor air quality.

Public: Architecture + Communication

$30,000

An examination of the proposed building code change to allow single-stair residential buildings up to 6 stories in Part 3 of the National Building Code.

HSR Zero Waste

$30,000

Creation of an online Zero Waste

certification course for the construction industry.

Small Planet Supply Canada ULC

$13,600

A study monitoring heat pumps located in parkades over a 12 month period to observe conditions and provide guidance on the suitability and safety of placing DHW system heat pumps in a parkade.

Southern Alberta Institute of Technology

$30,000

A project to develop a building planning framework to evaluate multiple construction methods and materials based on sustainable parameters.

Fast + Epp

$30,000

A project to create an Embodied Carbon (EC) Tool for calculating the EC of structural elements of a building, allowing designers to compare structural options more easily during design stages.

Morrison Hershfield

$30,000

Develop high-performance window-to-wall transition details intended for use in larger low energy/low carbon buildings in all climate zones within BC to be added to the Building Envelope Thermal Bridging Guide.

March 2023

British Columbia's Monthly

NEW HOMES REGISTRY REPORT

BC HOUSING RESEARCH CENTRE

Leading Housing Market Indicator for B.C.

Registered new homes data are a leading indicator of housing and economic[1] activity in British Columbia. The *Monthly New Homes Registry Report* provides information on registered new homes by building type, building size and location, and is intended for use by the residential construction industry, real estate community and researchers.

General Highlights

- In the first three months of 2023, 9,843 new homes were registered[2] in B.C., including 1,674 single detached[3] and 8,169 multi-unit homes[4].
- So far in 2023, total home registrations[2] are down 36.6% from 2022. Registrations for multi-unit homes[4] decreased 36.1%, while registrations for single detached homes decreased 38.7%[3].
- In March, 3,057 new homes were registered[2] in B.C., a 53.8% decrease compared with March 2022.
- Using a 12-month moving average[5], there were 3,793 new registered homes[2] in March, a 7.2% decrease from February for all registered new homes.
- Metro Vancouver accounted for 40.0% of all new homes registered[2] in March. Kelowna (537), Coquitlam (501) and Langley* (290) were the top three cities in registered new homes this month.
- In March, there were more multi-unit homes than single detached homes in Colwood, Golden, Hazelton, Kitimat, Coquitlam, Courtenay, Kelowna, Langley*, Saanich, Nelson, Langford, Squamish, Victoria, Oliver, Vernon, Campbell River, Surrey, West Kelowna, Powell River, Revelstoke, Ladysmith, Fernie, North Vancouver*, Osoyoos and Chilliwack.
- So far in 2023, 3,746 purpose-built rental units[6] were registered in B.C. Compared with the same period in 2022, the number of registered rental units decreased 27.2%.

* Langley includes the City of Langley and the Township of Langley. North Vancouver includes the City of North Vancouver and the District of North Vancouver.

Figure 1: Registered New Homes[2] by Building Type, 2002–2023 Year-to-Date

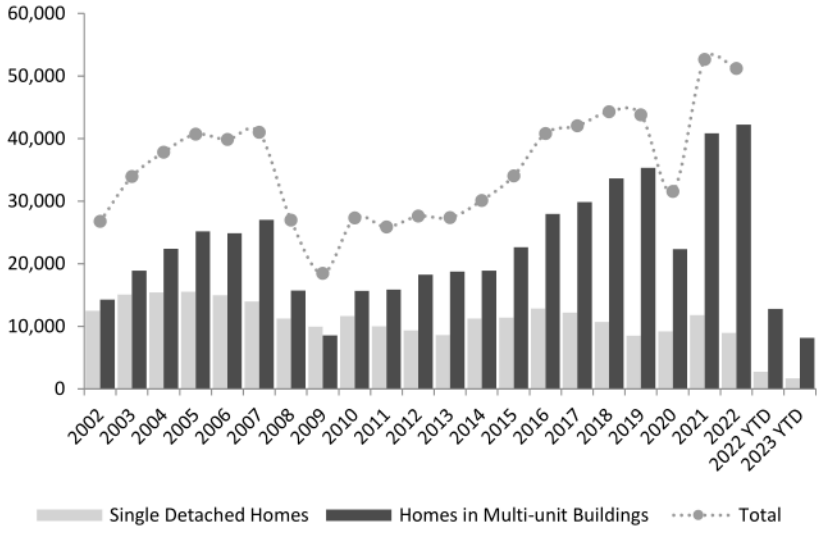


Figure 2: Registered New Homes[2] by Building Type and Selected City[7], March 2023

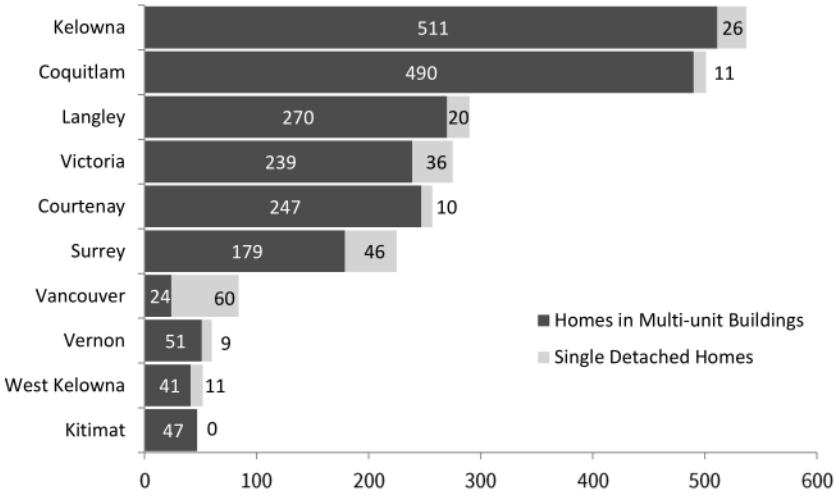
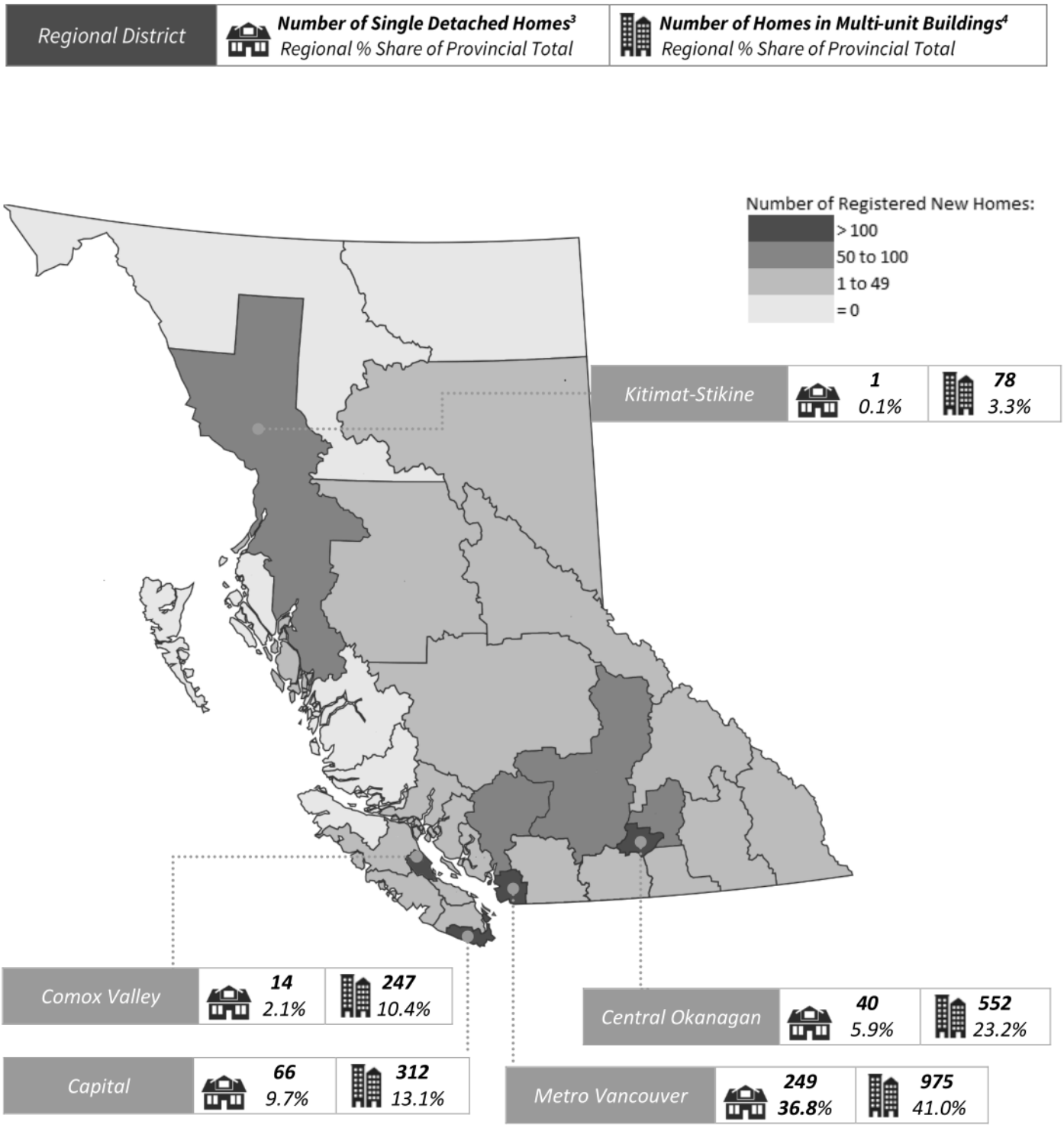


Figure 3: Registered New Homes[2] by Regional District[8], March 2023



Single Detached Highlights

- In the first three months of 2023, 1,674 new single detached homes were registered[3] in B.C. Compared with the same period in 2022, single detached registrations decreased 38.7%.
- In March, 677 single detached homes were registered[3]. Compared with March 2022, the number of single detached registrations decreased 37.9%.
- Using a 12-month moving average[5], there were 657 new single detached registered homes[3] in March, trending at a 5.0% decrease from February.
- Using a 36-month moving average[5], there were 814 new single detached registered homes[3] in March, which is a 0.6% decrease from February.
- Vancouver (60), Surrey (46) and Maple Ridge (39) had the largest number of single detached homes registered[3] in March.

Figure 4: Registered Single Detached Homes[3], March 2023

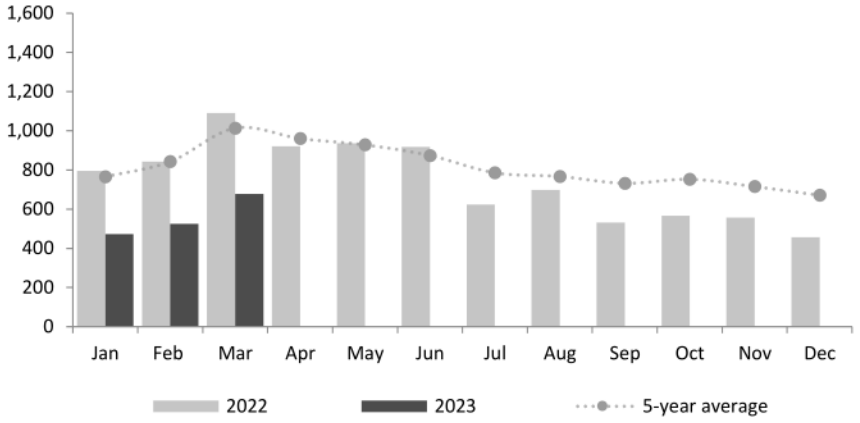


Figure 5: Registered Owner-built Homes[9], 2002 –2023 Year-to-Date

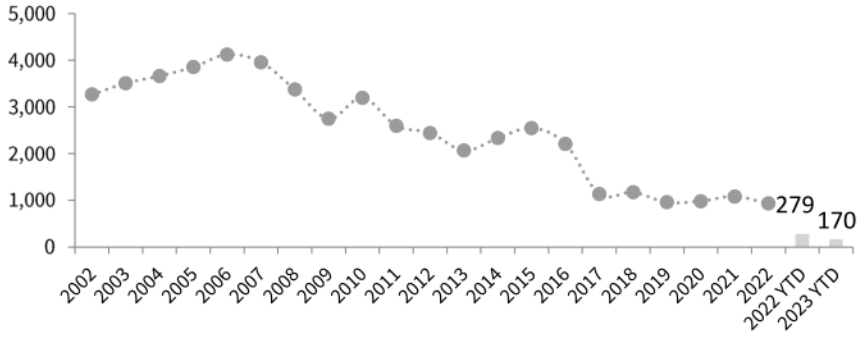


Figure 6: Registered Single Detached Homes[3] by Selected City[10] in Metro Vancouver, 2022-2023 Year-to-Date

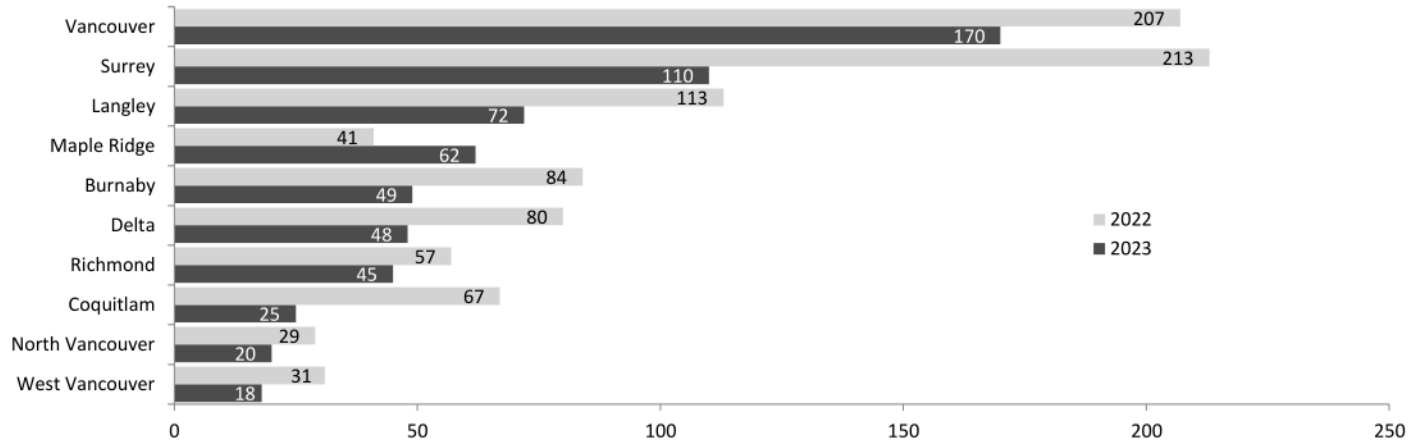
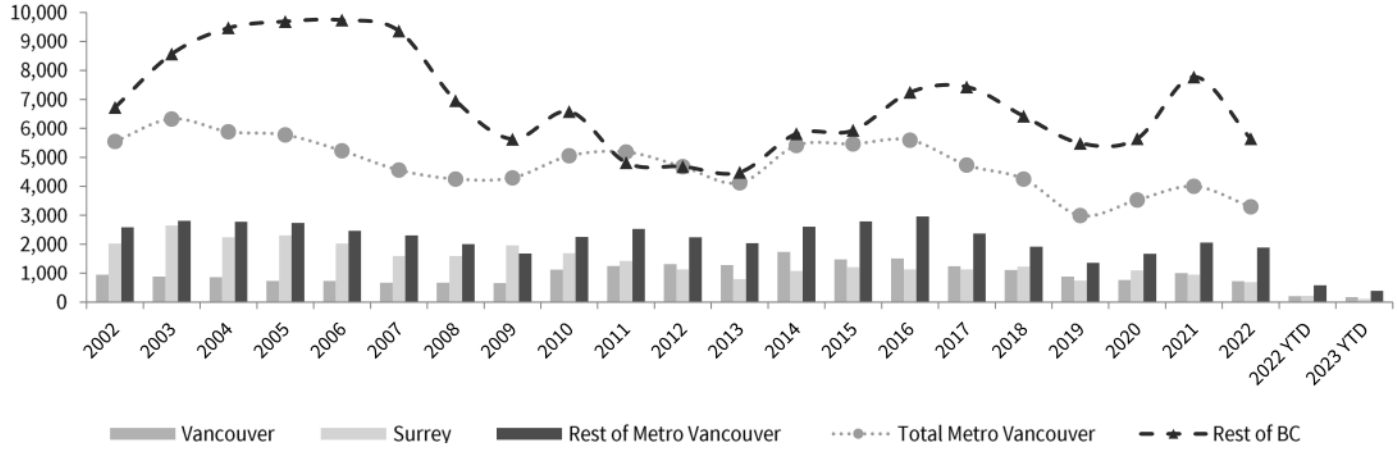


Figure 7: Registered Single Detached Homes[3] in Metro Vancouver, 2002–2023 Year-to-Date



Enrolled Multi-unit Highlights

- In the first three months of 2023, 4,423 new multi-unit homes were enrolled[11] in B.C. Compared with the same period in 2022, multi-unit enrollments decreased 42.1%.
- In March, 1,538 multi-unit homes were enrolled[10]. Compared with March 2022, the number of multi-unit enrollments decreased 54.0%.
- Using a 12-month moving average[5], there were 2,041 new multi-unit enrolled homes[11] in March, trending at a 6.9% decrease from February.
- Using a 36-month moving average[5], there were 1,944 new multi-unit enrolled homes[11] in March, which is a 0.8% increase from February.
- There were 196 new multi-unit buildings enrolled[11] in March. Most of these buildings were duplexes (36.2%) and buildings of 5 to 50 units (29.1%). The largest building of 228 units was proposed to be built in Coquitlam.
- In March, Kelowna (355), Coquitlam (313), and Langley* (270) had the largest number of multi-unit enrolled homes[11] in B.C.

Figure 8: Enrolled Homes in Multi-unit Buildings[11], March 2023

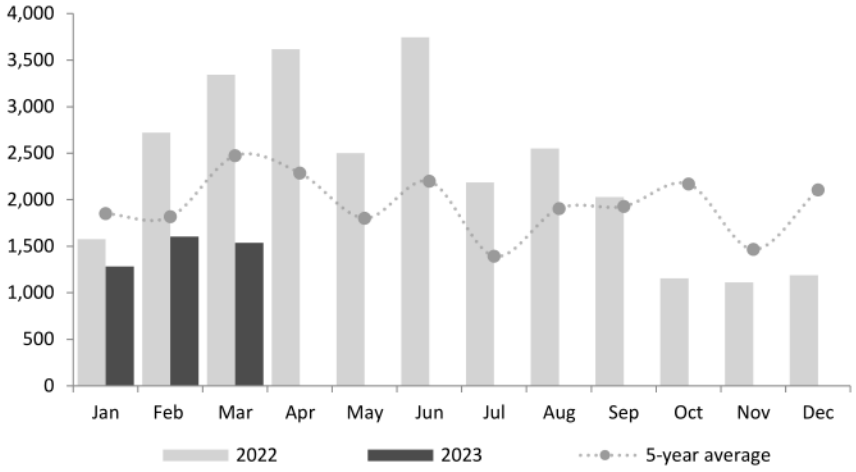


Figure 9: Enrolled Multi-unit Buildings[11] by Building Size[12], March 2023

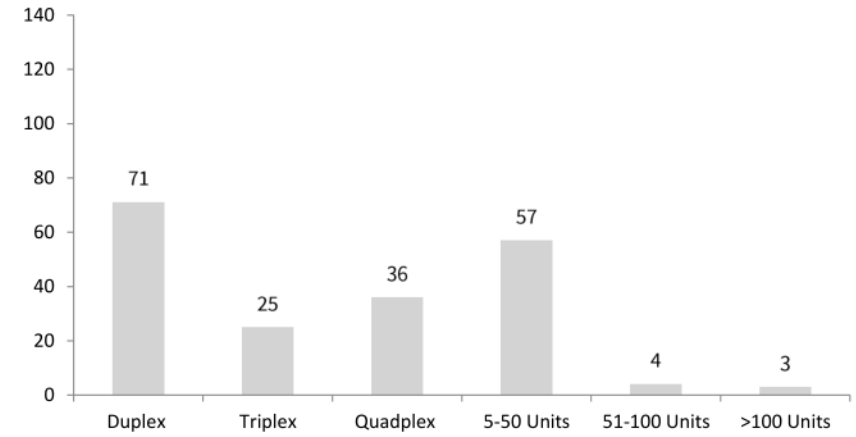
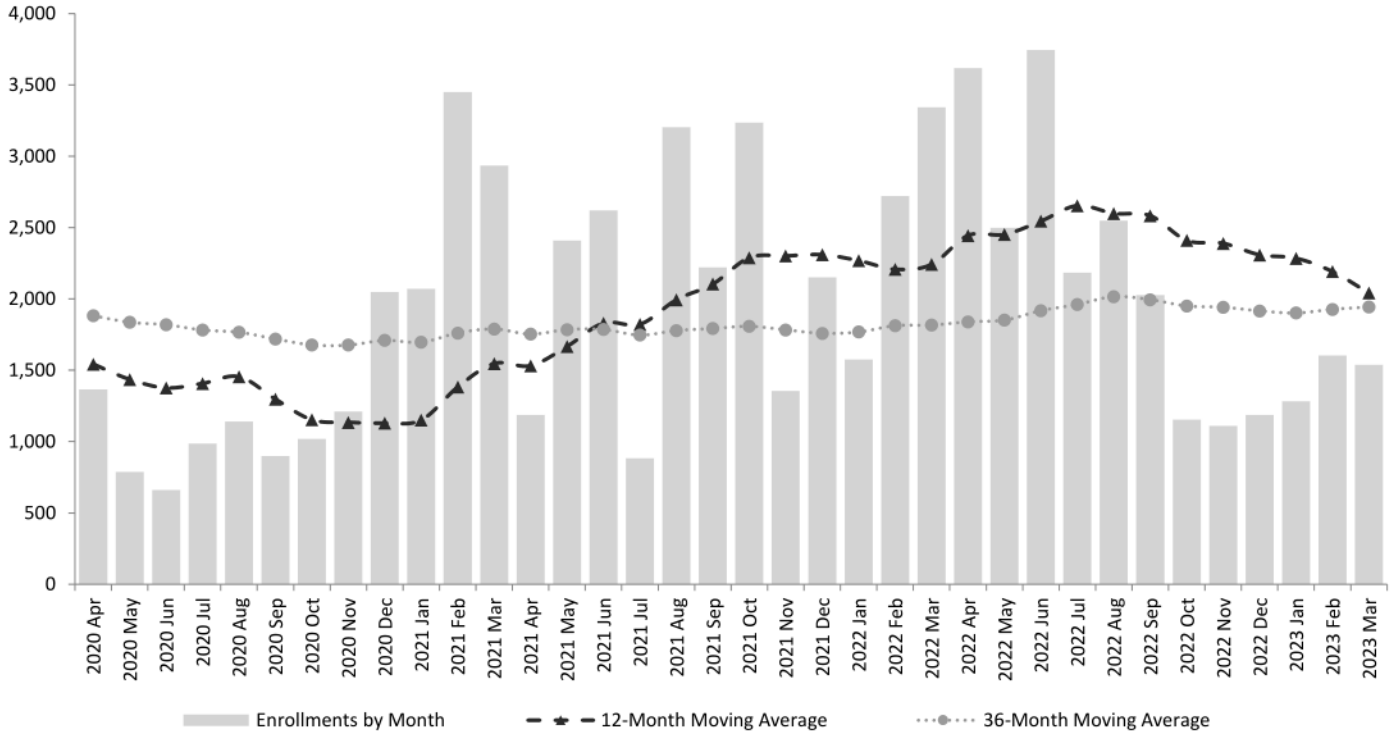


Figure 10: Enrolled Homes in Multi-unit Buildings[11] by 12-Month and 36-Month Moving Averages[5], March 2023



Purpose-built Rental Highlights

- In the first three months of 2023, 3,746 purpose-built rental units[6] were registered in B.C. Compared with the same period in 2022, the number of registered rental units decreased 27.2%.
- So far in 2023, rental units[6] represented 45.9% of all multi-unit registrations.
- This month, 842 rental units were registered[12]. Compared with March 2022, the number of rental units registered decreased 61.3%.
- Using a 12-month moving average[5], there were 1,095 rental units registered[6] in March, trending at a 9.2% decrease from February.
- Using a 36-month moving average[5], there were 1,053 rental units registered[6] in March, which is a 1.0% increase from February.
- There were 14 rental buildings registered[6] in March. Most of these were buildings of 5 to 50 units (28.6%) and quadplexes (28.6%). The largest building of 177 units was proposed to be built in Coquitlam.
- In March, Courtenay (247), Victoria (204), and Coquitlam (177) had the largest number of rental units registered[6] in B.C.

Figure 11: Purpose-built Rental Units[6], March 2023

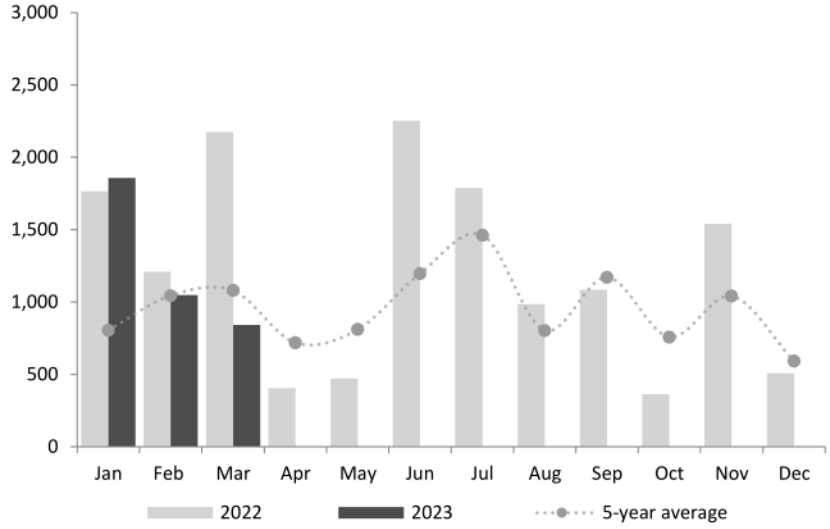


Figure 12: Purpose-built Rental Buildings[6] by Building Size[12], March 2023

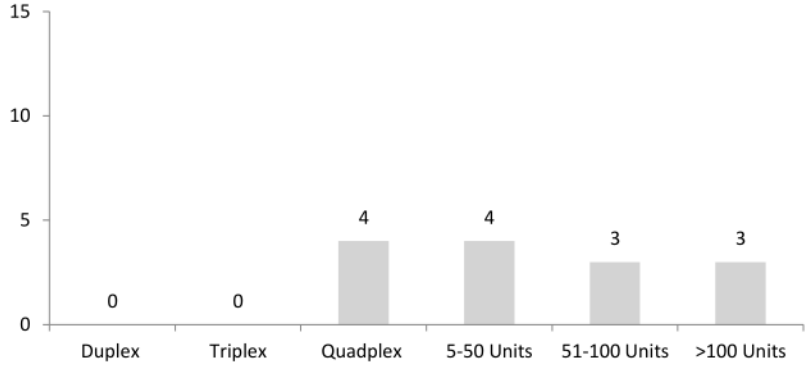
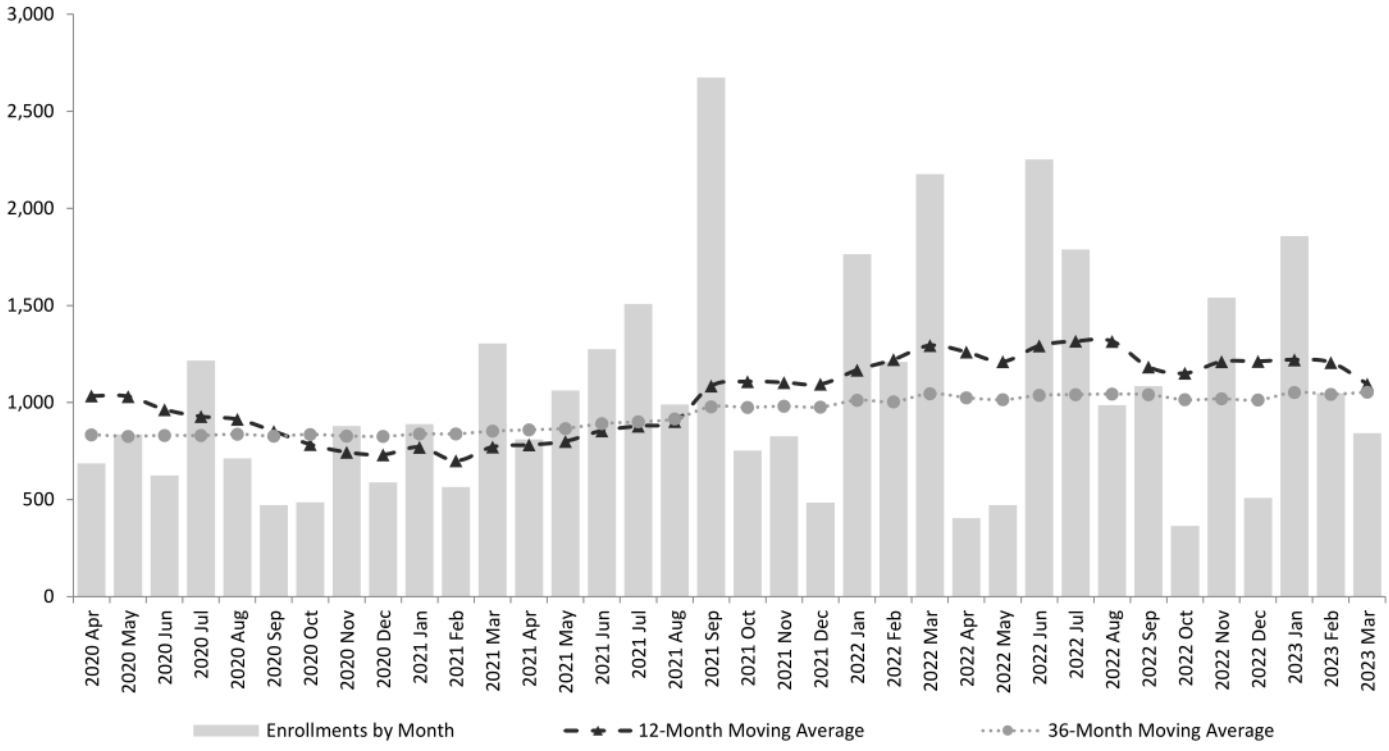


Figure 13: Purpose-built Rental Units[6] by 12-Month and 36-Month Moving Averages[5], March 2023



Data Tables

Table 1: Registered New Homes[2], 2002 to 2023				
Calendar Year	**Registered New Single Detached Homes[3]**		**Registered New Homes in Multi-unit Buildings[4]**	
	Single Detached Homes Enrolled with Home Warranty Insurance	**Owner Builder Authorizations[9]**	**Homes in Multi-unit Buildings with Home Warranty Insurance[11]**	**Purpose-built Rental[6]**
2002	9,179	3,268	12,075	2,178
2003	11,498	3,508	16,338	2,539
2004	11,747	3,666	19,732	2,654
2005	11,619	3,854	23,211	1,945
2006	10,838	4,124	23,393	1,484
2007	9,996	3,959	25,334	1,688
2008	7,853	3,373	14,924	801
2009	7,176	2,749	6,787	1,783
2010	8,432	3,199	13,949	1,712
2011	7,408	2,596	14,498	1,371
2012	6,912	2,445	16,279	1,948
2013	6,536	2,067	15,803	2,951
2014	8,889	2,335	15,929	2,959
2015	8,848	2,549	17,899	4,736
2016	10,631	2,211	22,749	5,217
2017	11,028	1,136	20,586	9,272
2018	9,501	1,173	25,934	7,688
2019	7,520	960	22,055	13,252
2020	8,189	984	13,559	8,778
2021	10,689	1,085	27,718	13,134
2022	8,001	932	27,712	14,546
2022 YTD	2,450	279	7,640	5,149
2023 YTD	1,504	170	4,423	3,746

Table 2: Registered New Homes[2], 2022 to 2023 and 5-year Average, Monthly						
Month	**Registered New Single Detached Homes[3]**			**Registered New Homes in Multi-unit Buildings[4]**		
	2023	**2022**	**5-year Average[13]**	**2023**	**2022**	**5-year Average[13]**
Jan	472	795	765	3,139	3,339	2,657
Feb	525	843	843	2,650	3,931	2,861
Mar	677	1,091	1,014	2,380	5,519	3,552
Apr		921	960		4,021	3,006
May		936	928		2,971	2,613
Jun		917	874		5,996	3,395
Jul		623	786		3,972	2,855
Aug		698	767		3,535	2,709
Sep		531	732		3,111	3,099
Oct		566	753		1,517	2,927
Nov		556	715		2,651	2,507
Dec		456	671		1,695	2,696

Table 3: Registered New Homes in Multi-unit Buildings[4], 2022 to 2023, Monthly						
Month	**Enrolled New Homes in Multi-unit Buildings[11]**		**Purpose-built Rental[6]**		**Registered New Homes in Multi-Unit Buildings[4]**	
	2023	**2022**	**2023**	**2022**	**2023**	**2022**
Jan	1,282	1,575	1,857	1,764	3,139	3,339
Feb	1,603	2,722	1,047	1,209	2,650	3,931
Mar	1,538	3,343	842	2,176	2,380	5,519
Apr		3,617		404		4,021
May		2,499		472		2,971
Jun		3,744		2,252		5,996
Jul		2,184		1,788		3,972
Aug		2,549		986		3,535
Sep		2,027		1,084		3,111
Oct		1,154		363		1,517
Nov		1,111		1,540		2,651
Dec		1,187		508		1,695

Table 4: Registered New Homes[2] by Regional District, March 2023						
Regional District	**Registered New Single Detached Homes[3]**		**Registered New Homes in Multi-unit Buildings[4]**		**Total**	
	Number of Homes	**Regional % Share of Provincial Total**	**Number of Homes**	**Regional % Share of Provincial Total**	**Number of Homes**	**Regional % Share of Provincial Total**
Alberni-Clayoquot	9	1.3%	0	0.0%	9	0.3%
Bulkley-Nechako	5	0.7%	0	0.0%	5	0.2%
Capital	66	9.7%	312	13.1%	378	12.4%
Cariboo	6	0.9%	0	0.0%	6	0.2%
Central Coast	0	0.0%	0	0.0%	0	0.0%
Central Kootenay	16	2.4%	21	0.9%	37	1.2%
Central Okanagan	40	5.9%	552	23.2%	592	19.4%
Columbia-Shuswap	21	3.1%	13	0.5%	34	1.1%
Comox Valley	14	2.1%	247	10.4%	261	8.5%
Cowichan Valley	17	2.5%	7	0.3%	24	0.8%
East Kootenay	26	3.8%	8	0.3%	34	1.1%
Fraser Valley	33	4.9%	16	0.7%	49	1.6%
Fraser-Fort George	8	1.2%	0	0.0%	8	0.3%
Kitimat-Stikine	1	0.1%	78	3.3%	79	2.6%
Kootenay-Boundary	12	1.8%	0	0.0%	12	0.4%
Metro Vancouver	249	36.8%	975	41.0%	1,224	40.0%
Mount Waddington	0	0.0%	0	0.0%	0	0.0%
Nanaimo	37	5.5%	11	0.5%	48	1.6%
North Okanagan	17	2.5%	55	2.3%	72	2.4%
Northern Rockies	0	0.0%	0	0.0%	0	0.0%
Okanagan-Similkameen	11	1.6%	13	0.5%	24	0.8%
Peace River	1	0.1%	0	0.0%	1	0.0%
Powell River	3	0.4%	11	0.5%	14	0.5%
Skeena-Queen Charlotte	0	0.0%	0	0.0%	0	0.0%
Squamish-Lillooet	13	1.9%	41	1.7%	54	1.8%
Stikine	0	0.0%	0	0.0%	0	0.0%
Strathcona	6	0.9%	18	0.8%	24	0.8%
Sunshine Coast	16	2.4%	0	0.0%	16	0.5%
Thompson-Nicola	50	7.4%	2	0.1%	52	1.7%
Total	**677**	**100.0%**	**2,380**	**100.0%**	**3,057**	**100.0%**

Background and Methodology

BC Housing is responsible for the administration of the *Homeowner Protection Act*, with a mandate to help bring about improvements in the quality of residential construction and increase consumer protection for buyers of new homes in British Columbia (B.C.). Under the Act, all new homes in the province must be registered with BC Housing. The registration of new homes in the public registry must occur prior to the issuance of building permits and housing starts. The new homes registry data measures residential construction activities at the beginning of a project before construction commences. Therefore, information in the Monthly New Homes Registry Report is a leading indicator of housing activity in B.C.

New home registration data is collected from Licensed Residential Builders and owner builders through the New Home Registration forms and Owner Builder Authorization applications. Over time, some minor adjustments may be made to the new home registration data as registrations are withdrawn or cancelled from home warranty insurance.

This report provides information on registered new homes by building type, building size, and building location. Figures for registered new homes include both multi-unit and single detached new homes enrolled with home warranty insurance, Owner Builder Authorizations, and, since the August 2016 report, purpose-built rental buildings that are exempt from home warranty insurance.

CSA-approved manufactured homes (modular homes, mobile homes and factory-built homes), floating homes, non-stratified hotels, motels, dormitories and care facilities are excluded from the definition of new home and are not reflected in the report.

Geographical terms in this publication are based on Statistics Canada's 2006 Census area. In March 2009, the regional district of Comox-Strathcona was replaced by two successor regional districts, Comox Valley and Strathcona.

Research

In collaboration with BC Housing, the Bank of Canada conducted a study to assess whether or not new home registration data can be used as a leading indicator for economic activity in B.C. Study findings reveal that quarterly increases in new registrations for single detached homes have statistically significant predictive content for growth in real Gross Domestic Product (GDP) over the next one to three quarters, providing stronger signals compared to housing starts and building permits over this forecast horizon. To view the report, go to the Staff Discussion Papers section on the Bank of Canada's website.

End Notes

[1] Bank of Canada, 2016. New Housing Registrations as a Leading Indicator of the B.C. Economy. Details are available here.

[2] Registered new homes includes: single detached and multi-unit homes enrolled in home warranty insurance, single detached homes constructed by an owner builder not covered by home warranty insurance, and purpose-built rental units that are exempt from home warranty insurance. Before August 2016, calculations of registered new homes in this report excluded purpose-built rental units.

[3] Registered new single detached homes includes new single detached homes enrolled with home warranty insurance or with Owner Builder Authorizations issued by the Registrar.

[4] Registered new homes in multi-unit buildings (two or more dwelling units) include new homes enrolled with home warranty insurance and new homes in purpose-built rental buildings with a home warranty insurance exemption. Before August 2016, calculations of registered new homes in multi-unit buildings in this report excluded purpose-built rental units.

[5] The trend analysis with moving average is based on a twelve-month and 36-month simple moving average of the monthly new home registration data. Data are not seasonally adjusted.

[6] Purpose-built rental refers to new rental homes in multi-unit buildings that qualify for exemption from home warranty insurance. These exempted homes must be constructed for rental purposes, including social housing, and have a restrictive covenant registered on title restricting the sale of any dwelling unit for a 10-year period. Rental homes with a covenant may however be captured under "enrolled new multi-unit homes" if the unit is voluntarily enrolled with home warranty insurance.

[7] Selected cities are the 10 cities that had the highest numbers of registered new homes in the reference month.

[8] The five regional districts with the highest numbers of registered new homes in the reference month.

[9] Owner-built homes refers to Owner Builder Authorizations issued by the Registrar. New homes built under an Owner Builder Authorization are exempt from licensing and home warranty insurance.

[10] Selected cities are the 10 cities that had the highest numbers of registered single detached homes in Metro Vancouver in 2022.

[11] Enrolled new multi-unit homes refers to new homes in multi-unit buildings (two or more dwelling units) enrolled with home warranty insurance.

[12] Building size is measured by number of dwelling units, which is equivalent to new homes.

[13] In this report, the five year average is the average of the most recently completed five years.

Click here to view
Monthly New Home Registry Report

BC HOUSING

British Columbia News

B.C. invests in digital permitting to get homes built faster

https://news.gov.bc.ca/28546

People will be able to move into new homes faster as the Province invests in digital permitting and the construction industry to make the process quicker and more collaborative.

“Technology helps us do just about everything these days, but the housing sector remains reliant on the paper system,” said Ravi Kahlon, Minister of Housing. “To help speed up the homebuilding process, we’re investing in technology that will make us a North American leader in digital permitting and construction. Faster approvals and builds will unlock more homes for British Columbians sooner, easing some of the pressure on our strained housing market.”

The Ministry of Housing, with support from the Ministry of Citizens’ Services, is working on digitizing the BC Building Code and the building permitting process with pilots in select local governments in 2024.

“We don’t have time to waste when it comes to getting new housing on the market, so we need to look for efficiencies throughout the sector,” said Lisa Beare, Minister of Citizens’ Services. “That’s why we’re investing in new tools and technologies that will make it easier for homebuilders to focus on what they do best – build homes – and not worry about red tape. Most importantly, these innovations will get people into homes faster.”

The BC Building Code is currently only available in print or PDF format. The digitally enhanced code will include features that will make it faster and easier for builders and building inspectors to understand and interpret the information. It will also allow for more automation during building permit reviews.

The building permitting process currently varies widely across local governments: some use digital tools and some rely on paper. The provincial government’s work to digitize the process will include working with local governments.

The Province is also investing in innovation in the housing construction sector. Government is investing in Digital**,** previously known as the Digital Technology Supercluster, which is part of the federal Global Innovation Cluster network, with a $9-million, three-year grant to accelerate the development and adoption of innovative technologies in the construction sector. This work will involve collaborating with several partners in industry, academia and at all levels of government to create digital solutions for the construction sector and designing pilot projects to test those solutions. Digital is a B.C-based independent, not-for-profit organization that focuses on the development, adoption and deployment of Canadian-made digital technologies through a unique collaborative model that brings together Canadian small and medium-sized enterprises (SMEs), multinationals and academia.

“One of the core principles of the Stronger BC Economic Plan is embracing innovation to propel us forward,” said Brenda Bailey, Minister of Jobs, Economic Development and Innovation. “Utilizing the Digital Technology Cluster to develop a digital permitting pilot marries progressive thinking with much-needed efficiency in expediting decisions for the housing sector.”

The Province did preliminary consultation with local governments, builders, developers, architects and engineers on this work and will continue to engage with partners throughout the process.

This project builds on the government’s work to establish a single application portal for provincial housing permits and authorizations, which will go live in 2023. It also builds on the Province’s development approvals process

review, which launched in 2018 and helps local governments improve their processes. As part of this work, government created the Local Government Development Approvals Program, which is providing $15 million to help local governments create more efficient approvals processes.

Advancing digital permitting and construction is part of the Province's new housing plan, Homes for People, which was announced on April 3, 2023. The plan will speed up delivery of new homes, increase the supply of middle-income housing, fight speculation and help those who need it the most.

Quotes:

Ken Sim, mayor of Vancouver –

"Utilizing technology is vital to cutting wait times and making government more effective. We are pleased to see these further efforts being made across the province. Vancouver recently moved over to a fully digital permit system, where builders can apply, pay and receive their permit electronically through our ePlan system. Vancouver is proud to be a leading government in embracing technology, and we are excited to see other jurisdictions doing so as well.

Sue Paish, CEO, Digital –

"Digital is proud to have the confidence of the Province of B.C. to deliver one of its key priorities in improving the productivity of the housing and construction sector and unlocking more housing for British Columbians. The Province's investments in digitizing the housing sector will make B.C. a North American leader in digital construction and permitting through the digitization of the building code and advancing the adoption of technologies that help the sector work more effectively with regulators. We look forward to continuing our track record of results and making a difference in the lives of British Columbians."

Neil Moody, CEO, Canadian Home Builders' Association British Columbia –

"The housing crisis in B.C. calls for modern, innovative solutions. There is tremendous opportunity in using technology to automate code compliance and process permits so homes can be constructed faster, and this is a step we can take quickly."

Learn More:

To read the Homes for People action plan, visit: https://news.gov.bc.ca/files/Homes_For_People.pdf (https://news.gov.bc.ca/files/Homes_For_People.pdf)

Ministry of Housing

Media Relations
236 478-0251

Translations

- DigitalPermitting_Chinese(simplified).pdf (https://bcgovnews.azureedge.net/translations/releases/2023HOUS0019-000496/DigitalPermitting_Chinese(simplified).pdf)
- DigitalPermitting_Chinese(traditional).pdf (https://bcgovnews.azureedge.net/translations/releases/2023HOUS0019-000496/DigitalPermitting_Chinese(traditional).pdf)
- DigitalPermitting_Punjabi.pdf (https://bcgovnews.azureedge.net/translations/releases/2023HOUS0019-000496/DigitalPermitting_Punjabi.pdf)

Acknowledgment

The B.C. Public Service acknowledges the territories of First Nations around B.C. and is grateful to carry out our work on these lands. We acknowledge the rights, interests, priorities, and concerns of all Indigenous Peoples - First Nations, Métis, and Inuit - respecting and acknowledging their distinct cultures, histories, rights, laws, and governments.

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Update: Agenda for discussion attached

UDI Webinar Moderator is inviting you to a scheduled Zoom meeting.

Topic: Pre-Meeting: UDI Webinar Zero Carbon Step Code & BC Energy Step Code
Time: Apr 25, 2023 04:00 PM Vancouver

Join Zoom Meeting
s.15

UDI Webinar: Zero Carbon Step Code & BC Energy Step Code - Changes You Need to Know

Agenda:

- **Introductions**
- **Discuss speaker topics and presentation content**
    1. Zachary May, Executive Director, BSSB, Ministry of Housing
    2. Laura Sampliner, Environmental Sustainability Manager, City of Coquitlam
    3. Roberto Percora, Director, ZebX
    4. Sheryl Peters, Provincial Director, Redevelopment - Development & Asset Strategies, BC Housing (Moderator)
- **Key areas of focus**
    1. Overall
        - Zero Carbon and Energy Step Code changes that have been passed
        - National Building Code and the Canadian framework / Harmonization of the codes
        - BC Hydro issues / supply and support
    2. Provincial Level
        - BC Building Code – Current and future
        - Harmonization of codes / National Building Code
        - Provincial expectations
        - What else can we expect
    3. Municipal Level
        - How local governments are managing the Zero Carbon and Energy Step Code changes
        - How to tackle BC Hydro Issues
        - Where they see the future of municipalities
    4. Implementation
        - The impact these changes have
        - Case studies

- **Discuss Potential format**

- **Discuss draft questions**
    1. Will the Best Practices Guide for local governments on the ZCSC address the role of Councils in policy adoption? Or should there be a dedicated guide for Councils?
        - For example, the City of Victoria Council recently adopted accelerated timelines for new buildings to meet the highest steps of the ZCSC, which are shorter than the timelines recommended by staff after extensive engagement.
    2. How will you be advising municipalities to engage with BC Hydro regarding delivery capacity both on policy and local area planning
    3. Are there plans to regularly update the metrics study on costing analysis regarding the ZCSC?
    4. How does the ZCSC account for requirements to connect to District Energy Utilities that are not (yet) low-carbon?
        - As the Province institutes its own ZCSC, will this approach continue?
    5. Assuming the current concerns regarding RNG use in new construction are addr4essed by the BCUC, will the regulations and guidance be amended to provide an option for builders to meet the ZCSC using RNG, or would this remain at the discretion of local governments?
    6. Will the Best Practices Guide reference the overarching objectives for local governments to deliver increased amounts of housing and balance these objectives with achieving higher steps in the ESC and ZCSC.
    7. There is a concern in the industry regarding the incorporation of embodied carbon targets into municipal approval requirements. Given the current capacity constraints in the industry with the adoption of higher energy efficiency standards and new operational carbon requirements, is now the right time to create additional standards for new development? Does the Province have any concerns with municipalities going ahead now with embodied carbon standards?

FW: Pre-approved designs for

From: May, Zachary HOUS:EX
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: April 24, 2023 6:09:49 PM PDT

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Helps, Lisa PREM:EX <Lisa.Helps@gov.bc.ca>
Sent: Monday, April 24, 2023 5:59 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Subject: RE: Pre-approved designs for

Excellent. I think replicability of designs and getting local governments to preapprove standard designs will be key to deal both with affordability and development time concerns. If we can get to standardized prefab designs all the better as this will help reduce construction time/cost AND prevent waste.

See you next week. Thanks for setting this up.

Lisa Helps
Office of the Premier
Housing Solutions Advisor for BC Builds
250-661-2708 (cell)

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, April 24, 2023 5:54 PM
To: Helps, Lisa PREM:EX <Lisa.Helps@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Subject: RE: Pre-approved designs for

This is helpful context. Our office is just starting discussions with UDI and the Engineers' and Architects' associations to develop some design guides for the upcoming seismic requirements in the building code. It would be good to get some input from yourself, John and others at the meeting about what key issues should be addressed and if there's other actions we could be taking make it easier and faster to build.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Appointment-----
From: Helps, Lisa PREM:EX <Lisa.Helps@gov.bc.ca>
Sent: Monday, April 24, 2023 5:22 PM
To: May, Zachary HOUS:EX
Cc: Thomson, John HOUS:EX

Subject: Accepted: Pre-approved designs for
When: Thursday, May 4, 2023 3:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Thanks Zach. I'm happy to have an in-person meeting if this works for everyone else.

As for background documents, I'm attaching a lateral/tangential piece that outlines a parallel process we're working on for small scale multi-unit housing. It's not directly related, but we'd like to propose a similar approach for four to six storey buildings to make it easier, faster and cheaper with preapproved designs - both woodframe and prefab - that take into consideration the building code changes. I'm sending this just to you for now, and if it makes sense to circulate it to the others just as a parallel document to help give wider context, feel free to do so.

UDI Pre-Event Meeting Minutes & Attendee List

From:	Verna Yu <vyu@udi.org>
To:	Roberto Pecora <roberto@zebx.org>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Sheryl Peters <speters@bchousing.org>, Sampliner, Laura <LSampliner@coquitlam.ca>
Cc:	Jeff Fisher <jfisher@udi.org>
Sent:	April 25, 2023 5:45:43 PM PDT
Attachments:	image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, Event Attendance 04.25.23.pdf, image001.png, Webinar Event Run Down.docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Everyone,

It was great seeing you all this afternoon. Further to our conversation, I have attached a our current attendee list for your reference on the participant demographics and a copy of the event run down for Tuesday.

You will be able to share your screen for your presentations, but we would appreciate a copy by the end of the week as back-up.

Post-event, we will be sending an email out to all participants registered with a copy of your slides, presentation, and resource links. If there are key resource and information you would like to share with the participants, please forward them to me and I will incorporate that into our email after the event.

Thank you all once again! Please let me know if you have any questions.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



Event Attendance

UDI Webinar: Zero Carbon Step Code & BC Energy Step Code - Changes You Need to Know

Company Name	Attendee First Name	Attendee Last Name	Primary Contact Company	Attendee Comments
Arcadis IBI Group	Honor	Roan	Arcadis IBI Group	
Arcadis IBI Group	Kareem	Negm	Arcadis IBI Group	
Arcadis IBI Group	Martin	Bruckner	Arcadis IBI Group	
Arcadis IBI Group	Smitha	Vidyasagar	Arcadis IBI Group	
Bancorp Financial Services	danny	wong	Bancorp Financial Services	
Beedie	Jay	Boyce	Beedie	
Beedie	Travis	Henschel	Beedie	
Belford Properties Ltd.	Jay	Lin	Belford Properties Ltd.	
Bingham + Hill Architects	Douglas	Nelson	Bingham + Hill Architects	
Boffo Properties	Daniel	Boffo	Boffo Properties	
Bosa Properties Inc.	Bruce	Currie	Bosa Properties Inc.	
British Pacific Properties Limited	Bryce	Tupper	British Pacific Properties Limited	
British Pacific Properties Limited	Jason	Wexler	British Pacific Properties Limited	
BTY Group	Neill	McGowan	BTY Group	
Canderel Management Inc.	Ryan	Jenkins	Canderel Management Inc.	
Century Group	Bob	Ransford	Century Group	
Century Group	Michelle	Wilson	Century Group	
Citimark Development Corp	Rebecca	Nguyen	Citimark Development Corp	
City of Coquitlam	Doug	Vance	City of Coquitlam	
CMHC	Elisabeth	Lefrancois	CMHC	
Colliers Strategy and Consulting	Lilian	Kan	Colliers International	
Concert Properties Ltd.	Michael	Guenter	Concert Properties Ltd.	
Conwest Developments Ltd.	Bianca	Bellini	Conwest Developments Ltd.	
Coromandel Properties Ltd	Rob	Elliott	Coromandel Properties Ltd	
Darwin Properties (Canada) Ltd.	Dario	Rahbar	Darwin Properties (Canada) Ltd.	
Darwin Properties (Canada) Ltd.	Jessica	O'Sullivan	Darwin Properties (Canada) Ltd.	
dys architecture	Kim	Barnsley	dys architecture	
Fabric Living Developments	Kiegan	Scharnberg	Fabric Living Developments	
Fort Properties	Jayne	Bradbury	Fort Properties	
FortisBC Alternative Energy Services	Sandeep	Sharma	FortisBC Alternative Energy Services	
FortisBC Energy Inc.	Rob	Zelisko	FortisBC Energy Inc.	
Grosvenor	Tanja	Milosevic	Grosvenor	
Hungerford Properties	Kerry	Minailo	Hungerford Properties	
Infinity Properties Ltd.	Caroline	Bourque	Infinity Properties Ltd.	
McKinley Hillside LP	Andrew	Gaucher	McKinley Hillside LP	

☐	McKinley Hillside LP	Keyvan	Khadem	McKinley Hillside LP	
☐	McKinley Hillside LP	Ward	Frost	McKinley Hillside LP	
☐	Morguard Investments Ltd.	Geoffrey	Nagle	Morguard Investments Ltd.	
☐	MOSAIC Avenue Developments Ltd.	Maija	Phelan	MOSAIC Avenue Developments Ltd.	
☐	Orion Construction	Aiden	Virani	Orion Construction	
☐	Orion Construction	Cam	Archer	Orion Construction	
☐	Orion Construction	Jack	Priestley	Orion Construction	
☐	Orion Construction	Jeremy	Paquin	Orion Construction	
☐	PCI Developments LP	Andrew	Adams	PCI Developments LP	
☐	QuadReal Property Group	David	Roppel	QuadReal Property Group	
☐	Qualex-Landmark Living Inc.	Kevin	Jung	Qualex-Landmark Living Inc.	
☐	Qualico Developments Inc.	Jonathan	Meads	Qualico Developments Inc.	
☐	Regal Century Management Inc.	Eric	Cheung	Regal Century Management Inc.	
☐	Scotiabank	Laura	McGowan	Scotiabank	
☐	Scott Construction Ltd.	Jamie	Watts	Scott Construction Ltd.	
☐	Shape Properties Corp.	Jeanne	Miller	Shape Properties Corp.	
☐	Stantec Architecture Ltd.	Jay	Burtwistle	Stantec Architecture Ltd.	
☐	Stantec Architecture Ltd.	Shahrzad	Pedram	Stantec Architecture Ltd.	
☐	Stantec Architecture Ltd.	Terrance	Wong	Stantec Architecture Ltd.	
☐	Stober Group	Colson	Makus	Stober Group	
☐	The AME Consulting Group Ltd.	Marie-France	Venneri	The AME Consulting Group Ltd.	
☐	Third Space Properties Inc.	Leo	Glaser	Third Space Properties Inc.	
☐	UDI Pacific Region	Anne	McMullin	UDI Pacific Region	
☐	UDI Pacific Region	Cassandra	Smith	UDI Pacific Region	
☐	UDI Pacific Region	Channpreet	Kaur	UDI Pacific Region	
☐	UDI Pacific Region	Ginny	Normandeau	UDI Pacific Region	
☐	UDI Pacific Region	Heather	Park	UDI Pacific Region	
☐	UDI Pacific Region	Jenny	Scott	UDI Pacific Region	
☐	UDI Pacific Region	Kathy	Whitcher	UDI Pacific Region	
☐	UDI Pacific Region	Leah	Bell	UDI Pacific Region	
☐	UDI Pacific Region	Lily	Shields-Anderson	UDI Pacific Region	
☐	UDI Pacific Region	Markella	Moschonissios	UDI Pacific Region	
☐	UDI Pacific Region	Michael	Drummond	UDI Pacific Region	
☐	UDI Pacific Region	Michael	Galope	UDI Pacific Region	
☐	UDI Pacific Region	Rachel	Klassen	UDI Pacific Region	
☐	UDI Pacific Region	Tracey	Black	UDI Pacific Region	
☐	UDI Pacific Region	Verna	Yu	UDI Pacific Region	
☐	VICTAULIC	Ahmed	Soliman	VICTAULIC	
☐	Wales McLelland Construction	Darren	Sauer	Wales McLelland Construction	
☐	Wall Financial Corporation	Grant	Myles	Wall Financial Corporation	
☐	Wall Financial Corporation	Jörk	Grävenstein	Wall Financial Corporation	
☐	Wanson Development Ltd.	Jack	Lin	Wanson Development Ltd.	

☐	Wesbild Holdings Ltd.	Fauzia	Suleman	Wesbild Holdings Ltd.	
☐	Wesgroup Properties	Alex	Schmaling	Wesgroup Properties	
☐	Wesgroup Properties	Ian	Patillo	Wesgroup Properties	
☐	Wesgroup Properties	Leah	Kozak	Wesgroup Properties	
☐	Wesgroup Properties	Sebastian	Jasiorkowski	Wesgroup Properties	
☐	Woodbridge Homes Ltd.	Donna	Ichikawa	Woodbridge Homes Ltd.	

UDI Webinar: Zero Carbon Step Code & BC Energy Step Code - Changes You Need to Know

Join us for an informative webinar on the latest updates for the Zero Carbon Step Code and the BC Building Code, and how these changes will impact builders in British Columbia.

Our expert panel will provide an overview of the key updates and highlight the new requirements and standards for energy efficiency, emissions reductions, and sustainable building practices. Through this conversation, we will discuss the potential benefits and challenges for builders in meeting these new regulations.

Date: Tuesday, May 2, 2023 | Time: 9:30-10:30

TIME	ACTIVITY	DURATION	LEAD
9:15	Dry Run / Zoom testing	15	All
9:30	Webinar goes live UDI Opening Remarks Moderator Intro	2-3	Jeff
9:33	Sponsor Remarks Setting the stage Panel Intro	3-5	Sheryl
9:40	Provincial Perspective • BC Building Code – Current and future • Harmonization of codes / National Building Code • Where are we on energy efficiency • Low Carbon • What else can we expect	8-10	Zach
9:50	Municipal Perspective • How local governments are managing the Zero Carbon and Energy Step Code changes • Electrical capacities • Low carbon pathways • Where they see the future of municipalities	8-10	Laura
10:00	Implementation • The impact these changes have • Best practices • Case studies	8-10	Roberto
10:10	Moderated Q&A & Discussion	20-25	All

10:30	Webinar Concludes Thank Speakers	1	Sheryl

About Our Panelists:

Zachary May, Executive Director, BSSB, Ministry of Housing
Zachary May is the Executive Director of the Building and Safety Standards Branch, where he leads the team responsible for British Columbia's building and technical safety regulatory systems. He has led several national and provincial building code initiatives, including the development of the BC Energy Step Code. He is the Chair of the BC Energy Step Code Council and a former member of the National Research Council's Standing Committee on Housing and Small Buildings, and the Standing Committee on Energy Efficiency.

Laura Sampliner, Environmental Sustainability Manager, City of Coquitlam
With over 7 years working in local government climate related policy, Laura has worked for 5 municipalities across BC and Ontario to help advance climate action priorities. Most notably, Laura led the City of Port Moody?s strategy for early adoption of the BC Energy Step Code and development of the Climate Ready Homes and Buildings Plan. Laura previously served as co-chair of the BC Energy Step Code Peer Network for over two years, was a member of the Energy Step Code Council for two years, and has been active in advocating for and supporting enhanced policy for emissions reduction of buildings in BC. Laura holds a Bachelors of Environment, specializing in Environment and Business from the University of Waterloo, BCIT Sustainable Energy Management Advanced Certificate, and Whole Building Lifecycle Assessment Micro Credential from BCIT.

Roberto Percora, Director, ZebX
Roberto's journey through the building industry extends back over two decades and includes stops in Ottawa and Montreal before settling in Vancouver. In addition to his mechanical engineering degree, he has extensive experience in both new developments and existing buildings. Roberto has successfully taken on project management roles for subcontractors, a general contractor and a national property management firm. In the eight years before joining ZEBx, he worked in the building science group of a national consulting engineering firm, specializing in building assessments, capital planning, asset management, energy studies and building performance. Roberto is a member of the Energy Step Code Council, some of its subcommittees and a number of other advisory groups in BC. Through his various roles, he has become very well acquainted with the real estate, property management, consulting and construction industries. Most importantly, Roberto has a deep-rooted belief that the building industry has both a responsibility and a major contribution to make to address the climate crisis.

Sheryl Peters, Provincial Director, Redevelopment - Development & Asset Strategies, BC Housing (Moderator)
After starting her career in private sector construction & development, Sheryl joined BC Housing in 2009. Her portfolio that includes partnerships with other government agencies, municipalities and non-profit housing providers in the delivery of community housing solutions in the province. Sheryl is a certified Project Management Professional with academics in urban geography (UBC) and architectural and building technologies (BCIT). She has over 23 years of experience in design, marketing, development and construction management, in both the private and public real estate sectors. Her career portfolio is a diverse range of projects that includes multi-residential developments; master planned / mixed use communities; hotels; neighbourhood shopping centres; and regional retail centres.

As Provincial Director - Redevelopment, Sheryl manages the revitalization of aging BC Housing assets with the intention of modernizing sites to meet current housing needs and bringing forward best practices in sustainable urban design, engineering & construction.

In her spare time, Sheryl has volunteered with the Women of Urban Development Institute (UDI Pacific) Committee; the Urban Land Institute (ULI-BC) Innovation Product Council & Technical Advisory Panel; and co-leads the ULI-BC Partnerships for Health Equity Team. Sheryl is passionate about facilitating affordable housing options and creating vibrant, complete & inclusive communities in BC.

Draft Questions:

1. Will the Best Practices Guide for local governments on the ZCSC address the role of Councils in policy adoption? Or should there be a dedicated guide for Councils?
    - For example, the City of Victoria Council recently adopted accelerated timelines for new buildings to meet the highest steps of the ZCSC, which are shorter than the timelines recommended by staff after extensive engagement.
2. How will you be advising municipalities to engage with BC Hydro regarding delivery capacity both on policy and local area planning
3. Are there plans to regularly update the metrics study on costing analysis regarding the ZCSC?
4. How does the ZCSC account for requirements to connect to District Energy Utilities that are not (yet) low-carbon?
    - As the Province institutes its own ZCSC, will this approach continue?
5. Assuming the current concerns regarding RNG use in new construction are addr4essed by the BCUC, will the regulations and guidance be amended to provide an option for builders to meet the ZCSC using RNG, or would this remain at the discretion of local governments?
6. Will the Best Practices Guide reference the overarching objectives for local governments to deliver increased amounts of housing and balance these objectives with achieving higher steps in the ESC and ZCSC.
7. There is a concern in the industry regarding the incorporation of embodied carbon targets into municipal approval requirements. Given the current capacity constraints in the industry with the adoption of higher energy efficiency standards and new operational carbon requirements, is now the right time to create additional standards for new development? Does the Province have any concerns with municipalities going ahead now with embodied carbon standards?
8. If we are going to step 4, are municipalities going to be looking at design issues.
9. Best practices guide – what kind of interactions are occurring at the municipal level with BC Hydro.

Bullets on seismic for tomorrow

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 26, 2023 8:32:43 AM PDT

Hi Zac,

Small buildings (many refer to as Part 9- which is the applicable part of the building code):

- British Columbia is proposing to adopt updated seismic hazard values from the National Building Code 2020 so that seismic risks and loads on buildings can be appropriately designed for.
- A consequence of these changes is that buildings in many locations throughout British Columbia will be required to be designed by a professional engineer.
- Design solution have been developed for the National Building Code 2025 that allow small buildings in high seismic areas to continue to be designed and built safely without a professional engineer. British Columbia is proposing to adopt those solutions for the BC Building Code 2023.

Large Buildings (referred to as Part 3):

- British Columbia is proposing to adopt updated seismic hazard values from the National Building Code 2020 so that seismic risks and loads on buildings can be appropriately designed for.
- The Province's Building and Safety Standards Branch is working with industry to understand the impacts of these changes on the design and construction of mid-rise (4-6 storeys) wood frame buildings in high seismic areas of BC, and to provide guidance to industry on best practices to comply with new code requirements so that they can continue to be safe and cost effective.

I am available tomorrow to call in to UDI if it's helpful.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Grass, William HOUS:EX <William.Grass@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Baker, Jim B HOUS:EX <Jim.B.Baker@gov.bc.ca>
Cc: Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, Kuhnert, Lyle HOUS:EX <Lyle.Kuhnert@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>
Sent: April 26, 2023 9:38:11 AM PDT

Oh thanks- we've been focusing on the EGBC guide- this is also a good option for updates. We have a conversation with EGBC first to explore the problem before we get to solutions, but this can go on the potential solutions list for sure.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: Wednesday, April 26, 2023 9:36 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Baker, Jim B HOUS:EX <Jim.B.Baker@gov.bc.ca>
Cc: Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>; Kuhnert, Lyle HOUS:EX <Lyle.Kuhnert@gov.bc.ca>; Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>
Subject: RE: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th

Thanks Juni. I'm reminded of BC Housing's Mid-Rise Best Practice Guide that may benefit from updates in response to the new values but also aids understanding and roll out of mid-rise wood construction.

…Not for MRK bullets but perhaps to raise when we next meet with BCH…

Andy

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, April 26, 2023 9:30 AM
To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Baker, Jim B HOUS:EX <Jim.B.Baker@gov.bc.ca>
Cc: Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>; Kuhnert, Lyle HOUS:EX <Lyle.Kuhnert@gov.bc.ca>; Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>
Subject: FW: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th

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Subject: RE: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th

Added the third bullet.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Wednesday, April 26, 2023 8:05 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: Re: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th

This looks great Zac -

can you add a bullet about how this Cdn standard will have a disproportionately large impact on B.C.....?

Get Outlook for iOS

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, April 25, 2023 10:26:52 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th
Topic:
2023 BC Building Code seismic changes for large buildings
Key Messages :

- The National Research Council of Canada has updated the seismic hazard values in the National Building Code for locations in BC, including Vancouver Island, the Lower Mainland, and Haida Gwaii.
- These updates have been through rigorous technical and public review as part of the national codes process.

- The Ministry is aware that these changes impact BC disproportionately, because we live in Canada's most active seismic regions.
- The updated seismic hazard values are expected to be included in the next edition of the BC Building Code later this year, and will require buildings to be designed with more robust seismic resistance.
- We have already received some feedback that these changes present some design challenges for 4-6 storey wood frame buildings, and we know how important that building type is for housing in BC.
- As part of BC's review of these changes, Ministry staff will be reaching out directly to industry to
    - make sure we have a shared understanding of what these changes will mean for building design in BC, and
    - work together to identify design solutions that will allow industry to deliver the homes we need while addressing the seismic risk in BC.
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FW: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th

From: Chase, Andy HOUS:EX
To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Sent: April 26, 2023 9:50:25 AM PDT
Do these bullets help? (bottom)

Andy

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, April 26, 2023 9:38 AM
To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Baker, Jim B HOUS:EX <Jim.B.Baker@gov.bc.ca>
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(he/him/his)

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Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

FW: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th

From: May, Zachary HOUS:EX
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: April 26, 2023 10:00:24 AM PDT

FYI – with the DM for approval right now.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Wednesday, April 26, 2023 10:00 AM
To: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: FW: RUSH MRK Key Messages - UDI Capital Region Event 12:00pm April 26th

Hi Teri – **bullets below for MRK with UDI today.**

Bindi

Get Outlook for iOS

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Executive Director
(he/him/his)

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Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

BC Building Code 2023 Changes

Building and Safety Standards Branch

Notification – BC Codes

- Farm Buildings & Facilities
- Encapsulated Mass Timber Construction (EMTC)
- Non-Potable Water
- Self-Storage
- Unsprinklered Home-type Care Occupancy (B4)
- Miscellaneous Updates
- BC Fire Code (consequential amendments)

Notification – Farm Buildings & Facilities

- NBC & NFC 2020 introduced provisions relating to large farm buildings (Part 2 of Division B of the NBC) and fire prevention provisions (Parts 2 and 4 of Division B of the NFC)
- Not adopted in B.C.

Notification – Encapsulated Mass Timber Construction (EMTC)

- NBC 2020 introduced EMTC provisions and NFC 2020 included fire prevention measures for EMTC construction sites
- B.C. early adopted these EMTC provisions, effective December 12, 2019
- B.C. will remove the restrictions that limited the jurisdictions that were permitted to build EMTC (rescind Sentence 1.1.1.1.(7) of Division A)
- Relocation of BCBC Subsections 3.1.18. and 3.1.19. to Subsection 3.1.6.

Notification – Non-potable Water

- Over 50 technical changes incorporated in the NPC 2020
- One significant change includes the provision for the harvesting and use of non-potable rainwater (Section 2.7. of Division B)

Notification – Self-Storage

- B.C. will adopt the NBC requirements for self-service storage buildings for Part 3
- Part 9 Requirements have not been changed
- Subsection 4.2.12. of Division B of the NFC 2020 restricting the storage and handling of flammable liquids will also be adopted

Notification – Unsprinklered Home-type Care (B4)

- NBC & NFC 2020 introduced provisions relating to home-type care occupancies (Part 9, Division B of the NBC) and fire prevention provisions (Part 2, Division B of the NFC)
- Not adopted in B.C.

Notification – Miscellaneous Updates

- Noteworthy miscellaneous Code changes and updates, consist primarily of provisions that for the purposes of B.C.’s harmonization commitment, will be harmonized with the National Building Code 2020 (NBC) (i.e. climatic data in Table C-2 of Division B of Appendix C)

Notification – BC Fire Code Updates & Revisions

- Relocation of historic unique to B.C. provisions
  - Fire Door Signs
  - Combustible Materials Within Classrooms
  - Posting of Fire Emergency Procedures (elevator signs)
  - Community Care Facilities
  - Construction Camps
  - Marinas and Boat Yards
- B.C. Standard Fire House Thread requirements rescinded

Notification – BC Fire Code Updates & Revisions Cont'd

- Application – Part 1 of Division A
  - Proposed code language in B.C. to clarify the retroactive application of the BC Building and Fire Code will result in harmonization of several code provisions.
  - Harmonized code provisions include (Part 2 of Division B):
  - 2.1.3.1. Fire Alarm, Standpipe and Sprinkler Systems
  - 2.1.3.3. Smoke Alarms
  - 2.7.3.1. Exit Lighting, Exit Signs and Emergency Lighting
- Consolidation of Fire Safety Plan Requirements
- Isolated Construction Projects - Exemption (TBD)

Public Review– BC Codes

- Accessibility
- Penetrations of fire separations
- Overheating
- Radon
- Seismic
- Ventilation
- Windows, Doors, and Skylights
- Steel Storage Racking

Public Review– Accessibility

- BCBC to adopt most of NBC 2020 Section 3.8. along with some amendments for clarity
- Further enhancements were implemented for existing unique to B.C. variations on adaptable dwelling unit provisions, these include
  - Requiring 100 per cent adaptable features for commercial and public buildings and in large new buildings like apartments and condos, such as
    - Accessible clearances through doorways and along paths of travel to living spaces
    - Space in a bedroom, bathroom and kitchen to support changing and unique needs
    - Switches and other controls at a usable height
    - Reinforcement of bathroom walls to allow grab bars

Public Review– Accessibility Cont'd

- Modest increases in accessibility of smaller residential housing: single-detached homes, townhomes, and row homes:
  - An accessible clearance at the entry door
  - Reinforcement of bathroom walls to allow grab bars

Public Review– Combustible Penetrations

- Proposed change eliminates B.C.'s variation to allow unspecified penetrations of fire separations and fire rated assemblies to be tightly fitted

Public Review– Overheating

- The Province will introduce technical provisions in the BCBC to limit the risks associated with overheating in new construction
- Changes to Part 9 and Part 6

Public Review– Radon

- Exemption for radon rough-in in certain areas will be eliminated in Table C-4 in Appendix C of Division B
- New reference standard CAN/CGSB-149.11, "Radon control options for new construction in low-rise residential buildings" (available for free online)
- Changes to technical provisions in Section 9.13.

Public Review– Seismic

- BCBC will adopt requirements for earthquake design for Part 9 Buildings in advance from the NBC 2025
- NBC 2025 Part changes are currently open for public review
- NBC 2020 contains increased seismic hazard values that may push Part 9 into Part 4 design
- PCF 1475 will be adopted in advance

Public Review– Steel Storage Racking

- BCBC 2023 to continue to reference the design requirements for steel storage racking from the 2018 BCBC
- In addition, Annex N of CSA S16 "Design of steel structures" will be referenced

Public Review– Ventilation

- NBC 2020 provisions on ventilation in Section 9.32. will be adopted while maintaining much of the unique to B.C. variations
- Reorganization of Section 9.32. code references and formatting; however, much of the technical provisions remain the same
- Technical provisions that are kept include:
  - Additional requirements for CO detection
  - Principal ventilation system supply air
  - Additional protection against depressurization

Public Review– Windows, Doors, and Skylights

- Section 5.9. of Division B of the BCBC will be further harmonized with the NBC 2020; Section 9.7. will remain unchanged
- Some reference standards related to glass in Table 1.3.1.2. of Division B have been updated to newer versions

Thank you!

QUESTIONS?

RE: MRK meeting

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Gunn, Meghan HOUS:EX <Meghan.Gunn@gov.bc.ca>, Grass, William HOUS:EX <William.Grass@gov.bc.ca>
Sent: April 26, 2023 4:13:43 PM PDT

Lots to talk about from the UDI code committee- access, seismic were the hot ones:

how does this relate to dev permits- consider application date relating to rezoning and development permits, some presold units would have to be changed .
could be offside of zoning - some zoning prescribing numbers of units. thsi could affect.

cost issue- some munis are not allowing BP to be submitted until dev permit issued. flood plain

concerns on design impacts of 100% adaptable- space requirements.

what about 500 sq ft tiny units- they may be prohibitive.

only 10% of unts need to be adaptable per BC Housing, shear walls lininig up may affectunit placement- if have to change them from DP to BP effects are substantive- need to exempt units in DP.

seismic- 4x design loads when you combine soil and foundation impacts. floor plate impacts. richmond bid impacts. need to bring munis in to this conversation- FSR, height restrictions, density restrictions.

can we hold back on seismic changes due to unique impacts?

NBC Part 4 commentary still missing! difficult to enact this without them.

lots of increased GHG from these increased structural requirements.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, April 26, 2023 1:12 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; Gunn, Meghan HOUS:EX <Meghan.Gunn@gov.bc.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>
Subject: Re: MRK meeting

That's fine. Priority for me to review is item 2. The other items can be later for me.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>

Sent: Wednesday, April 26, 2023 1:04:55 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; Gunn, Meghan HOUS:EX <Meghan.Gunn@gov.bc.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>
Subject: RE: MRK meeting

How about ASAP tomorrow to you? There's quite a bit of work there

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, April 26, 2023 12:29 PM
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Subject: RE: MRK meeting

Briefing has been scheduled for Tuesday evening (May 2).

If at all possible, I would love to get a draft of whatever updates we have by end of day, so I can provide comments and we can get materials to Bindi by end of day Thursday.

I'm also happy to make time for a discussion this afternoon, if that's helpful.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, April 26, 2023 8:33 AM
To: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; Gunn, Meghan HOUS:EX <Meghan.Gunn@gov.bc.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: MRK meeting

Hi All,

Some follow ups from the MRK briefing for the next meeting. I will need volunteers, please.

1. For each code item in the slides, provide a cost risk estimate
2. Draft options on where to draw the line on accessibility proposal for elevators
3. Ministry of Environment is proposing new regulations on moving soils that may be very costly- please find out more and provide some bullets
4. Advise on when to meet with Stephanie Cadieux to brief her on accessibility changes (I think before PR but after next meeting)
5. Provide information in final BN on what PT's have already adopted NBC and timing for others.

Thanks, all.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

FW: UDI Meeting Request and Letter

From:	MacLaren, Les EMLI:EX <Les.MacLaren@gov.bc.ca>
To:	Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>, Gilmore, Christopher EMLI:EX <Christopher.Gilmore@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc:	Diana Stephenson <diana.stephenson@bchydro.com>
Sent:	April 27, 2023 6:57:17 AM PDT
Attachments:	image004.jpg, image007.jpg, image006.jpg, image002.png, image005.jpg, image003.jpg, 2023-04-26 UDI Letter - EMLI.pdf

Incoming ….

From: Baskerville, Shannon EMLI:EX <Shannon.Baskerville@gov.bc.ca>
Sent: Wednesday, April 26, 2023 1:39 PM
To: Derricourt, Grace EMLI:EX <Grace.Derricourt@gov.bc.ca>
Cc: MacLaren, Les EMLI:EX <Les.MacLaren@gov.bc.ca>
Subject: Fwd: UDI Meeting Request and Letter

FYI

Get Outlook for iOS

From: Cassandra Smith <csmith@udi.org>
Sent: Wednesday, April 26, 2023 1:20 PM
To: EMLI.Minister@gov.bc.ca <EMLI.Minister@gov.bc.ca>
Cc: Shannon.Baskerville@gov.bc.ca <Shannon.Baskerville@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Michael Drummond <mdrummond@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Meeting Request and Letter

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon Minister Osborne,

On behalf of Anne McMullin and UDI, we're reaching out to request a meeting with you to discuss concerns within the development industry about the capacity of electrical distribution infrastructure to meet the growing demands from new homes and job spaces. UDI has been working collaboratively with BC Hydro on these challenges and would like the opportunity to discuss these issues with your office.

Attached is a letter outlining several of these challenges currently impacting housing and job space delivery across the province, along with recommendations for policy and process improvements.

We look forward to continuing to work with you in this new Ministry, on this and other topics.

Regards,
Cassandra

Cassandra Smith
Director, Policy and Research
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

Calendar hold.

Agenda topics (subject to change with full agenda to come)

* Part 3 design checklist update
* Work plan
* Grocery stores and the Energy Step Code
* Code digitization
* City of Vancouver Energy Modelling Guidelines

Microsoft Teams meeting
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s.15

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April 26, 2023

Hon. Josie Osborne
Minister of Energy, Mines & Low Carbon Innovation
PO Box 9060 Stn Prov Govt
Victoria, BC V8W 9E2

Dear Minister Osborne:

RE: Electrical Distribution Infrastructure Impacting Housing Delivery

For several years, UDI has identified BC Hydro policies and processes that have been impacting the delivery of new housing. This includes capacity constraints on delivery infrastructure and fee structures, which are being exacerbated by new provincial/municipal green building policies. BC Hydro has begun to address these issues, but will need further assistance from the Provincial Government to remove the barriers facing new housing. With the ongoing *Development Approvals Process Review* and the passage of the *Housing Supply Act* (*HSA*) last fall, local governments have made a valid point that provincial ministries and agencies can be an obstacle to projects moving forward in a timely way.

The three primary challenges facing new developments when connecting to BC Hydro that are creating approval and construction delays are:

- Gaps in distribution infrastructure capacity currently available to deliver energy to new developments in high growth areas;
- Unpredictability and unfairness of charges associated with utility connections and system upgrades; and
- BC Hydro approval delays.

These issues are exacerbated by the rapid advancement of electrical vehicle charging (EVC) and net-zero operating carbon building policies at the federal, provincial and municipal levels. These policies create higher demands on the existing and future electrical distribution network, increasing the frequency and scope of the upgrades required.

The Province can play a critical role in accelerating BC Hydro's ability to address these issues through policy or regulatory changes, and increased funding. The Ministry of Housing, through the Building and Safety Standards Branch can also provide guidance to municipalities implementing EVC and/or building electrification policies that engagement with BC Hydro on existing infrastructure capacity is necessary prior to the approval of new requirements.

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Connection Challenges

UDI has identified several BC Hydro policies and processes that have been slowing housing projects over the past few years. There are areas in fast-growing communities such as Surrey and Langley where development has slowed or stalled because local distribution infrastructure is not available.

Engagement with BC Hydro by local governments when area plans or policies such as Electrical Vehicle Charging (EVC) and building electrification are introduced is not a common practice. This can lead to surprise demands on local distribution infrastructure that is already near its capacity limits, which is difficult for BC Hydro, builders and local governments. When upgrades are required, the builder whose project pushes beyond the distribution capacity is then responsible for unplanned costs.

Even if these discussions occur, BC Hydro is not allowed to proactively provide electrical distribution infrastructure under its current regulatory framework. The Capital Budget and Electric Tariff requires BC Hydro to wait until customers pay for connections, which hinders their ability to proactively build capacity in high-growth areas. For example, when BC Hydro adds electrical infrastructure for the Surrey-Langley SkyTrain, they are not allowed to build extra capacity for all the development that will occur in station areas until paid customers are in place. This results in projects advancing through the development approvals process without a guarantee that the infrastructure will be in place to connect housing units when they are completed. BC Hydro regularly makes best efforts to deliver these connections, however this leads to a constant just-in-time approach, where a more proactive model could provide greater certainty.

In the past, this just-in-time approach was more effective, however BC Hydro, like builders is facing longer timelines due to provincial and municipal approvals. Notably, Section 10 and Section 11 Authorizations under the *Water Sustainability Act* now commonly take 12 months or more, when previously they could have been issued in weeks. Approvals from local governments are also impacting BC Hydro's infrastructure delivery schedules, and ultimately, the new development. Although BC Hydro is working with the Province and municipalities on permitting timelines, they remain a challenge.

The current fee structure to fund electrical extensions and system improvements is also an impediment. As noted above, for upgrades not included in the Capital Plan, the builder who proposes a project that will push past BC Hydro's electrical distribution infrastructure threshold in a local area must pay for any required upgrades – not just for their projects – but future projects in the area that will benefit from the increased capacity. Under the current system, the builder is likely to receive little in rebates resulting from future projects because there is a weak latecomer approach that only lasts five years, and potential rebate payments decline annually. This approach has led to:

- Uncertainty and unpredictable charges for builders, which add unnecessary risks to projects;
- Free riders (builders who receive free electrical infrastructure at the cost of another project);

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- Delays in housing projects moving forward because BC Hydro must wait until a large builder has the capacity to fund the substantial costs of electrical distribution infrastructure improvements before future housing can be built in an area;
- As these policies apply to existing building upgrades as well, provincial efforts to decarbonize our current building stock and promote electrical vehicles will face similar uncertainty; and
- Equity concerns, as owners and builders of lower income housing could be asked to subsidize the infrastructure costs of other buildings.

We are also aware of staffing shortages in several regions, which are slowing down response times and the approval of projects. This challenge extends beyond the Lower Mainland. UDI offices in the Capital Region and the Okanagan have also expressed concerns about BC Hydro staffing challenges leading to project delays.

These issues have reached a critical point because local governments now commonly mandate EVC in new buildings, and have now been given the authority through a *Zero Carbon Step Code* (*ZCSC*) to also mandate net-zero carbon operating emissions in new construction. The Ministry of Housing itself will be mandating net-zero operating carbon emissions in new buildings across the Province by 2030, with the first step in the process occurring next year.

At the same time, Renewable Natural Gas (RNG) is not an option that can be used to decarbonize buildings because FortisBC is still waiting for a decision from the British Columbia Utilities Commission (BCUC) that would allow it to offer RNG to builders. The Ministry of Housing is allowing local governments to ban the use of RNG to meet their *ZCSC* targets. It is not clear whether this policy will continue after the BCUC reaches a decision.

With the ongoing *Development Approvals Process Review* and the passage of the *Housing Supply Act* (*HSA*) last fall, local governments have made a valid point that provincial ministries and agencies can be an obstacle to projects moving forward in a timely way.

BC Hydro Initiatives

BC Hydro is aware of the above problems, and staff are taking several actions in the past year. Last summer, BC Hydro established an interdepartmental committee to start reviewing and resolving the issues, and are meeting with UDI, the Canadian Home Builders' Association of BC, other stakeholders and provincial ministries on regular basis. BC Hydro has since released a $260 million electrification plan and they are also looking to amend the Tier 2 rate structure, for higher usage levels. BC Hydro staff also met with the Energy Step Code Council to discuss several initiatives and proposals to address electrical distribution and staffing capacity issues, including:

- Their local distribution capital budget will increase by $100 million in fiscal 2024 – almost doubling it;
- They will be exploring regulatory changes that could allow them to be proactive in building local distribution infrastructure before customers are in place;
- Customer connection staffing at BC Hydro local offices have increased by 50 people this past year; and

- They are introducing a simplified "Design Lite" process for simpler projects that will allow them to focus more resources on more complex projects, and they will be more proactive in reaching out to customers.

BC Hydro is also proposing to change how builders and existing building owners are charged for extensions and system improvements (extension fees). Options being considered would alleviate the issue that is preventing BC Hydro from proactively installing and upgrading infrastructure, by removing the linkage between individual customer connections in an area and the provision of specific infrastructure. By making this change, BC Hydro could more quickly make connections available to new housing developments and reduce delays.

Overall, the costs to the industry should be less than what they are now, and the costs will be predictable. However, some builders and building owners who were not required to pay for extensive electrical distribution upgrades will likely see increases in costs for extensions and system improvements.

UDI Position and Recommendations

UDI is still awaiting further details on the approach that BC Hydro is proposing to provide comments. However, our members want to ensure that electrical capacity will be immediately available for their projects, especially when they are funding upgrades. One concern is the changes proposed by BC Hydro to address the current extension and system improvement fee structure may take several years to implement. The BCUC hearing process could take a year to complete. **We encourage the Province to consider providing direction to the BCUC or introduce regulatory changes to speed up this process.** These issues are currently impacting the delivery of housing, and even after the regulatory barriers are removed, will take time to proactively map and upgrade infrastructure.

Given the time that will be required, UDI is seeking action by the Government to begin addressing these challenges as quickly as possible. There is a role for the Province to quickly fund key local distribution infrastructure where there are current gaps in infrastructure and the development of new housing is being impacted in high-growth areas like Langley and Surrey.

Finally, the lack of engagement with BC Hydro by municipalities in their policy and area planning processes needs to be rapidly addressed. As noted above, local governments are proceeding with EVC and building electrification policies through the *ZCSC* as well as developing area plans where a tremendous amount of growth will be encouraged, which will likely exacerbate local distribution capacity issues in many places. In addition, there is an overlap between the local governments that are likely to aggressively implement the *ZCSC and* high-growth communities that have BC Hydro capacity issues. If these municipalities were to be subject to a housing target under the *HSA,* there would likely be impacts on their ability to deliver housing in these areas.

A Best Practices Guide for the implementation of *ZCSC* is being updated. It needs to include clear instructions for municipalities to engage with BC Hydro to discuss local distribution capacity constraints throughout their communities. In addition, BC Hydro could be more involved in the development of area plans where substantial growth is likely to be occurring, so

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they know where the new housing and development will be occurring in the future, and can budget and plan accordingly.

UDI is very supportive of the work currently being undertaken by BC Hydro to address many of the challenges outlined above, and we encourage the Province to provide the support required to catalyze this work. The expedited delivery of housing is a clear priority for this Provincial Government, and we hope that a housing delivery lens will be applied to these issues, spurring additional engagement with builders, municipalities and utilities to address the above challenges.

We look forward to discussing these and other topics with you, and if you have any questions, please don't hesitate to contact us.

Yours sincerely,



Anne McMullin,
President and CEO, UDI

C.C. Shannon Baskerville, Deputy Minister, Energy, Mines & Low Carbon Innovation

FW: 8761.00 - BC Housing Grant – Single Stair Study

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Baker, Jim B HOUS:EX <Jim.B.Baker@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>
Sent: April 28, 2023 11:49:59 AM PDT
Attachments: 220415_SingleEgress_03_JurisdictionalScan.pdf, 959f5f4f-6b24-4108-b20c-f4853bc8b730.png, b0ba36bc-176f-4edf-b75a-98827ab334fa.png, 11056984-f96b-4c96-9e49-c05cc7b9a4b4.png, 220418_SingleEgress_CCR_Part3_6storeys.pdf

I will provide an update at tech team but not this next one as I am off.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Darrell Li <DL@ghl.ca>
Sent: Thursday, April 27, 2023 3:31 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Andrew Harmsworth <ah@ghl.ca>
Subject: 8761.00 - BC Housing Grant – Single Stair Study

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Hi Juni,

Looks like we're playing phone tag. I'll aim to call you again tomorrow around 11am.

Wondering if BSSB was aware/looking into the attached proposed code change. We've been in touch with both BC Housing and UDI on this and wanted your thoughts on this.

Cheers,
[UNAVAILABLE WEDNESDAYS]

Darrell Li, P Eng
GHL CONSULTANTS LTD celebrating **30** years
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Supporting Documentation:

Jurisdictional Scan

Maximum Allowable Building Height with Single Egress for Multi-unit Residential Occupancies

April 2022

Related to Code Change Request:

Title: Part 9 – Single egress for multi-unit residential buildings up to 3 storeys
Code Reference(s): NBC Div. B – 9.9.8.2
Standing Committee(s): Housing and Small Buildings
Submitted to CCBFC on April 15, 2022

Title: Part 3 – Single egress for multi-unit residential buildings up to 6 storeys
Code Reference(s): NBC Div. B – 3.4.2.1
Standing Committee(s): Use and Egress, Fire Protection
Submitted to CCBFC on April 15, 2022

Proponent:

Conrad Speckert
LGA Architectural Partners

conrad.speckert@mail.mcgill.ca

Sent to CCBFC as PDF attachment via email on April 15, 2022

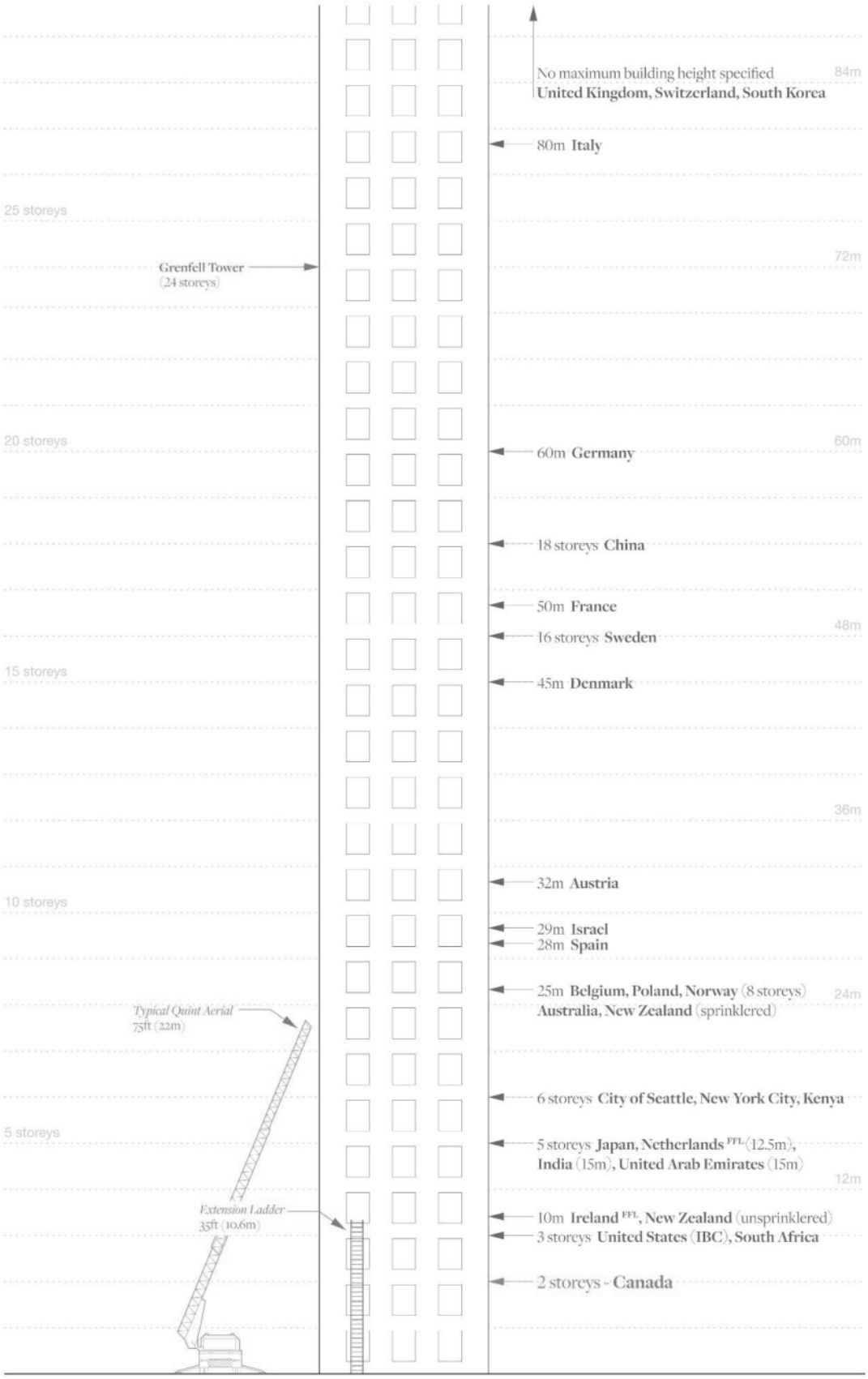
codes.changerequest@nrc-cnrc.gc.ca

Maximum Allowable Building Height with Single Egress for Multi-unit Residential Occupancies

Note: this is a reference table for the maximum building height and limits on floor area, number of dwelling units and occupant load per storey. The table is a summary and simplification of the precise requirements of each jurisdiction. Please refer to the original source documents for clarification.

Jurisdiction	Max. Building Height	Max. Units, Areas, Occupant load per storey
United States (IBC)	Three storeys	max. 4 dwelling units per storey
City of Seattle	Six storeys	max. 4 dwelling units per storey
New York City	Six storeys	max. floor area per storey: 2,000 sq. ft. (186m^2)
	Four storeys	max. 3 dwelling units per storey max. floor area per storey: 2,500 sq. ft. (232m^2)
Australia	25m	-
New Zealand	25m (sprinklered) 10m (unsprinklered)	refer to travel distance limits
United Kingdom	no height specified	max. occupant load per storey: 60 people
Ireland	10m^{FFL}	max. occupant load per storey: 50 people
Sweden	16 storeys	max. occupant load per storey: 50 people
Denmark	45m	max. 6 dwelling units per storey
Norway	8 storeys	-
France	50m	-
Belgium	25m	max. occupant load per fire compartment: 50 people
Netherlands	12.5m^{FFL}	max. floor area per dwelling unit: 150m^2
Germany	60m	-
Switzerland	no height specified	max. floor area per storey: 900m^2 max. occupant load per floor area: 100 people
Austria	32m	-
Poland	25m, 9 storeys	can exceed height limit with max. floor area: 750m^2
Italy	80m	max. floor area per storey: 500m^2
Spain	28m^{FFL}	max. total building occupant load: 500 people
Kenya	6 storeys, 17m^{FFL}	-
South Africa	3 storeys	-
United Arab Emirates	15m	max. 4 dwelling units per storey max. floor area per storey: 500m^2
India	15m	max. floor area per storey: 500m^2
China	18 storeys	max. floor area per storey: 650m^2
South Korea	no height restriction	max. 3 dwelling units per storey max. floor area per storey: 300m^2
Japan	5 storeys	max. floor area per storey: 200m^2

^{FFL} maximum building height measured as finish floor level height above ground for the uppermost storey



Maximum Allowable Building Height with Single Egress for Multi-unit Residential Occupancies

Note: the drawing assumes a floor to floor height of 3m

Jurisdictional Scan Sources

United States (IBC)	2015 International Building Code, Chapter 10: Means of Egress
City of Seattle	2018 Seattle Building Code, Chapter 10: Means of Egress
New York City	NYC Building Code 2014, Chapter 10: Means of Egress
Australia	NCC 2015 Building Code of Australia Vol. 1
New Zealand	C/AS2 Acceptable Solutions for Buildings other than Risk Group SH (2020)
United Kingdom	Building Regulations 2010, Fire Safety, Approved Document B, Volume 2
Ireland	Building Regulations 2006, Technical Guidance Document B, Fire Safety
Sweden	Boverket BBR, (English) BFS 2011:6 (2018)
Denmark (Danish original)	*Bygningsreglementets vejledning til kapitel 5 - Brand, Bilag 2* (version 1.4, 2021)
Norway (Norwegian original)	*Byggteknisk forskrift (TEK17)* (2017)
France (French original)	*Code de la construction et de l'habitation* (2021)
Belgium (Dutch original)	*Basisnormen voor de Preventie van Brand en Ontploffing* (2016)
Netherlands	*Bouwbesluit 2012* [Draft Building Decree 2012]
Germany (German original)	*Muster-Hochhaus-Richtlinie, MHHR 2008*
Switzerland (German original)	*Brandschutzrichtlinie 2017, 16-15 Flucht- und Rettungswege*
Austria (German original)	*OIB Richtlinie 2.3* (2019)
Poland (Polish original)	*Rozporządzenie Ministra Infrastruktury w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie (2002)*
Italy (Italian original)	*D.M. N. 246 del 16/05/1987 - Norme di sicurezza antincendi per gli edifici di civile abitazione (October 2020)*
Spain (Spanish original)	*Código Técnico de la Edificación, DB-SI Seguridad en caso de Incendio (2019)*
Kenya	Building Code of the Republic of Kenya (2009 Edition) (English)
South Africa	SANS 10400-T: Fire Protection (2011)
United Arab Emirates	UAE Fire & Life Safety Code of Practice, 2011 Edition
India	National Building Code of India 2005
China	Correspondence with a local architect / GB 50368-2005, Residential Building Code
South Korea	Correspondence with a local architect / 건축법 시행령 - 제34조(직통계단의 설치) (2022)
Japan	Correspondence with a local architect / 建築申請・25-7_階段 (2020)

United States

Source: International Code Council (ICC)
2015 International Building Code
Chapter 10: Means of Egress

The US model building code permits single exits in apartment buildings (R-2 occupancy) of not more than three storeys in building height, with a maximum of 4 dwelling units per storey. The building must be sprinklered throughout (NFPA 13-R).

Available online: https://codes.iccsafe.org/content/IBC2015/chapter-10-means-of-egress

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Excerpt from original:

1006.3.2 Single Exits
A single exit or access to a single exit shall be permitted from any story or occupied roof where one of the following conditions exists:

1. The occupant load, number of dwelling units and common path of egress travel distance does not exceed the values in Table 1006.3.2(1) or 1006.3.2(2).
2. Rooms, areas and spaces complying with Section 1006.2.1 with exits that discharge directly to the exterior at the level of exit discharge, are permitted to have one exit or access to a single exit.
3. Parking garages where vehicles are mechanically parked shall be permitted to have one exit or access to a single exit.
4. Group R-3 and R-4 occupancies shall be permitted to have one exit or access to a single exit.
5. Individual single-story or multistory dwelling units shall be permitted to have a single exit or access to a single exit from the dwelling unit provided that both of the following criteria are met:
   5.1. The dwelling unit complies with Section 1006.2.1 as a space with one means of egress.
   5.2. Either the exit from the dwelling unit discharges directly to the exterior at the level of exit discharge, or the exit access outside the dwelling unit's entrance door provides access to not less than two approved independent exits.

TABLE 1006.3.2(1)
STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE
Basement, first, second or third story above grade plane	R-2[a, b]	4 dwelling units	125 feet
Fourth story above grade plane and higher	NP	NA	NA

a. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1030.

b. This table is used for R-2 occupancies consisting of dwelling units. For R-2 occupancies consisting of sleeping units, use Table 1006.3.2(2).

City of Seattle

Source: Seattle Department of Construction & Inspections
Seattle Building Code 2018
Chapter 10: Means of Egress

The Seattle building code allows for single exits in apartment buildings (R-2) of not more than six storeys in building height, with a maximum of 4 dwelling units per storey. The building must be sprinklered throughout, where an interior exit stairway is provided it must be pressurized. Corridor separation is required.

Available online: http://www.seattle.gov/sdci/codes/codes-we-enforce-(a-z)/building-code#2018seattlebuildingcode

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Excerpt from original:

1006.3.3 Single Exits
A single exit or access to a single exit shall be permitted from any story or occupied roof where one of the following conditions exists:

7. Not more than 5 *stories* of Group R-2 occupancy are permitted to be served by a single exit under the following conditions:

   7.1. The building has not more than six *stories above grade plane*.

   7.2. The building does not contain a *boarding house*.

   7.3. There shall be no more than four *dwelling units* on any floor.

   7.4. The building shall be of not less than one hour fire-resistive construction and shall also be equipped throughout with an *automatic sprinkler system* in accordance with subsection 903.3.1.1. Residential-type sprinklers shall be used in all habitable spaces in each *dwelling unit*.

   7.5. There shall be no more than two single exit stairway conditions on the same property.

   7.6. An exterior stairway or interior exit stairway shall be provided. The interior exit stairway, including any related *exit passageway*, shall be pressurized in accordance with subsection 909.20. Doors in the stairway shall swing into the interior exit stairway regardless of the occupant load served, provided that doors from the interior exit stairway to the building exterior are permitted to swing in the direction of exit travel.

   7.7. A *corridor* shall separate each *dwelling unit* entry/exit door from the door to an interior exit stairway, including any related *exit passageway*, on each floor. *Dwelling unit* doors shall not open directly into an interior exit stairway. *Dwelling unit* doors are permitted to open directly into an exterior stairway,

   7.8. There shall be no more than 20 feet (6096 mm) of travel to the exit stairway from the entry/exit door of any dwelling unit.

   7.9. Travel distance measured in accordance with section 1017 shall not exceed 125 feet (38100 mm).

   7.10. The exit shall not terminate in an egress *court* where the *court* depth exceeds the *court* width unless it is possible to exit in either direction to the public way.

   7.11. Elevators shall be pressurized in accordance with section 909.21 or shall open into elevator lobbies that comply with section 713.14. Where *approved* by the *building official*, natural ventilation is permitted to be substituted for pressurization where the ventilation would prevent the accumulation of smoke or toxic gases.

   7.12. Other occupancies are permitted in the same building provided they comply with all the requirements of this code. Other occupancies shall not communicate with the Group R occupancy portion of the building or with the single-exit stairway. Exception: parking garages and occupied roofs accessory to the Group R occupancy are permitted to communicate with the exit stairway.

   7.13. The exit serving the Group R occupancy shall not discharge through any other occupancy, including an accessory parking garage.

   7.14. There shall be no openings within 10 feet (3048 mm) of unprotected openings into the stairway other than required exit doors having a one-hour fire-resistance rating.

New York City

Source: New York City Construction Codes
NYC Building Code 2014
Chapter 10: Means of Egress

The New York City building code allows for single exits in apartment buildings (R-2) of not more than six storeys in building height, with a maximum floor area of 2,000 sq. ft. (186m^2) per storey. The NYC code also allows for single exits in apartment buildings (R-2) of not more than four storeys in building height, with a maximum of three dwelling units per storey and a maximum floor area of 2,500 sq. ft. (232m^2) per storey.

Available online: https://up.codes/viewer/new_york_city/nyc-building-code-2014/chapter/10/means-of-egress#1021

Excerpt from original:

1021.2 Single Exits
Only one exit shall be required in buildings or from stories of buildings as described below:

1. Stories in buildings as described in Table 1021.2.
2. Buildings of Group R-3 occupancy.
3. Single-level buildings with the occupied space at the level of exit discharge provided that the story or space complies with Section 1015.1 as a space with one means of egress.
4. Buildings of Group R-2 occupancy where all of the following conditions are met:
   - 4.1. The building does not exceed four stories;
   - 4.2. The building contains not more than three dwelling units per story;
   - 4.3. The building is of construction Type I or II;
   - 4.4. The building does not exceed 2,500 square feet (232 m2) per story;
   - 4.5. Each dwelling unit has at least one window facing the street, or facing a lawful yard with open, unobstructed, and direct access to the street;
   - 4.6. The stairway extends to the roof surface through a stairway bulkhead complying with Section 1509.2 provided the roof has a slope not steeper than 20 degrees (0.35 rad). In lieu of the stairway bulkhead, the stair may be constructed against the street wall with one window facing the street at every landing and access to the roof is provided via a scuttle with a stationary, noncombustible access ladder;
   - 4.7. The stairway is enclosed in 2-hour fire-rated walls with all exit doors leading into the stairway having at least 11/2 - hour fire rating; and
   - 4.8. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2.
5. Buildings of Group R-2 occupancy of construction Type I or II not exceeding six stories and not exceeding 2,000 square feet (186 m2) per story.

Australia

Source: National Construction Code Series 2015 – Volume One
Building Code of Australia Class 2 to Class 9 Buildings
Section D – Access and Egress

The Building Code of Australia permits one exit for apartment buildings (Class 2 building) of not more than 25m in building height. 'Fire-isolated' (corridor separated) exit stairs are required for buildings of more than 3 storeys or 4 storeys where sprinklering or increased fire separation is provided. A maximum dead end travel distance of 6m applies.

Available online: https://ncc.abcb.gov.au/
Additional information relevant to Australia is provided in the reference document:
Wu, S. (2001). The Fire Safety Design of Apartment Buildings. Fire Engineering Research Report 01/10. University of Canterbury School of Engineering. Online: https://core.ac.uk/download/pdf/35470098.pdf

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D1.2 Number of exits required
Excerpts from the source document:

D1.2 Number of exits required

(a) **All buildings** — Every building must have at least one *exit* from each *storey*.

(b) **Class 2 to 8 buildings** — In addition to any *horizontal exit*, not less than 2 *exits* must be provided from the following:

(i) Each *storey* if the building has an *effective height* of more than 25 m.

(ii) A Class 2 or 3 building subject to C1.5.

(c) **Basements** — In addition to any *horizontal exit*, not less than 2 *exits* must be provided from any *storey* if egress from that *storey* involves a vertical rise within the building of more than 1.5 m, unless—

NCC 2015 Building Code of Australia - Volume One Page 158

D1.3 When fire-isolated stairways and ramps are required

(a) **Class 2 and 3 buildings** — Every stairway or ramp serving as a *required exit* must be fire-isolated unless it connects, passes through or passes by not more than—

(i) 3 consecutive *storeys* in a Class 2 building; or

(ii) 2 consecutive *storeys* in a Class 3 building,

and one extra *storey* of any classification may be included if—

(iii) it is only for the accommodation of motor vehicles or for other ancillary purposes; or

(iv) the building has a sprinkler system complying with Specification E1.5 installed throughout; or

(v) the *required exit* does not provide access to or egress for, and is separated from, the extra *storey* by construction having—

(A) an FRL of –/60/60, if non-*loadbearing;* and

(B) an FRL of 90/90/90, if *loadbearing*; and

(C) no opening that could permit the passage of fire or smoke.

NCC 2015 Building Code of Australia - Volume One Page 159

D1.4 Exit travel distances

(a) **Class 2 and 3 buildings—**

(i) The entrance doorway of any *sole-occupancy unit* must be not more than—

(A) 6 m from an *exit* or from a point from which travel in different directions to 2 *exits* is available; or

(B) 20 m from a single *exit* serving the *storey* at the level of egress to a road or *open space*; and

(ii) no point on the floor of a room which is not in a *sole-occupancy unit* must be more than 20 m from an *exit* or from a point at which travel in different directions to 2 *exits* is available.

New Zealand

Source: Ministry of Business, Innovation & Employment
C/AS2 – Acceptable Solution for Buildings other than Risk Group SH (2020)
Part 3: Means of Escape

The New Zealand Building Code permits one exit (single escape routes) for apartment buildings (risk group SM) where the escape height is no greater than 25m if sprinklered, and 10m if unsprinklered. Dead-end limits on travel distance apply.

Available online: https://www.building.govt.nz/assets/Uploads/building-code-compliance/c-protection-from-fire/asvm/cas2-protection-from-fire-1st-edition-2019.pdf
Additional information relevant to New Zealand is provided in the reference document:
Wu, S. (2001). The Fire Safety Design of Apartment Buildings. Fire Engineering Research Report 01/10. University of Canterbury School of Engineering. Online: https://core.ac.uk/download/pdf/35470098.pdf

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3.13 Single escape routes
Excerpt from the source document, page 79:

3.13 Single escape routes

3.13.1 Single *escape routes* shall only be permitted if:

a) The *dead end open path* length does not exceed the limits specified in Table 3.2, and

b) For all ***risk groups* excluding SI**, the total *occupant load* from all *firecells* on each level served by the *escape route* is no greater than 50, and

c) The *escape height* is no greater than:

Amend 2 Nov 2020
i) 10 m if unsprinklered, or
ii) 25 m if sprinklered, and

d) There are no more than two *basement* levels and the vertical *safe path* from the *basement* levels is preceded by a *smoke lobby* (see Figure 3.11), and

Amend 2 Nov 2020

e) In *buildings* with two or more floors, the vertical *safe path* is preceded by a *smoke lobby* on all floors except the topmost floor (refer to Paragraph 3.9.2 to determine the *smoke lobby* floor area).

C BUILDING CODE **Acceptable Solution**

Risk group SM

SM **3.13.4** In ***risk group* SM**, a single *escape route* from a floor is permitted provided that, in addition to the requirements of Paragraph 3.13.1:

a) The number of *people with disabilities* on any floor is not greater than 10, and

b) The *escape route* within each *firecell* terminates at a *final exit* or opens onto a *safe path* which complies with the requirements of Paragraphs 3.9.4 to 3.9.11, and

c) The particular requirements for *stairways*, balconies and split level *exitways*, given in Paragraphs 3.7.3 and 3.13.5, are satisfied, and

d) The length of any *safe path* on a floor does not exceed the maximum *dead end* length permitted by Table 3.2.

SM **3.13.5** In ***risk group* SM**, balconies, bridges and external *stairways* (see Figure 3.20) may be part of a single external *escape route* where:

a) The *escape height* is no greater than 16 m if unsprinklered, or 25 m if sprinklered, and

b) The *escape route* on the balcony, bridge and *stairway* meets the requirements of Paragraph 3.11 for protection, *construction* and ventilation, and

c) The *external wall* within 3.0 m of the *stairway* is provided with an *FRR* in accordance with Paragraph 2.3, or the length of any bridge between the *external wall* and *stairway* is no less than 3.0 m.

United Kingdom

Source: The Building Regulations 2010
Approved Document B, Fire Safety - Volume 2, 2019 edition
Requirement B1: Means of warning and escape

The United Kingdom does not establish a maximum height limit for single stair residential buildings. Section 2.6 of the code establishes an occupancy load limit of 60 people per storey and maximum travel distances in Table 2.1. Note that office buildings can have a single exit stair up to a floor height of 11m (Section 3.3).

Note: In response to the Grenfell Tower disaster, the Royal Institute of British Architects (RIBA) and London Fire Brigade have recently submitted concerns and a request to further study the fire safety of single exit stair high-rise residential buildings.

Available online: https://www.gov.uk/government/publications/fire-safety-approved-document-b
Additional information relevant to the United Kingdom is provided in the reference document:
Stock, B., Wallasch, K. (2020). Fire Safety Requirements for High-Rise Residential Towers in England and Germany. FeuerTrutz International 2020. Online: https://www.medien.feuertrutz.de/#doc/62580/5

2.6 Single escape routes and exits
Excerpt from the source document, page 13 (23 in pdf):

Single escape routes and exits

2.6 A single escape route is acceptable for either of the following.

a. Parts of a floor from which a storey exit can be reached within the limit for travel distance in one direction shown in Table 2.1 (see also paragraph 2.8), provided the following apply.

i. For places of assembly and bars, no one room in this situation has more than 60 people.

ii. For 'residential (institutional)' buildings (purpose group 2(a)), no one room in this situation has more than 30 people. Occupant number calculations are described in Appendix D.

b. A storey with no more than 60 people, where the limits on travel distance in one direction only are satisfied (see Table 2.1).

2.9 Number of occupants and exits
Excerpt from the source document, page 15 (25 in pdf):

Number of occupants and exits

2.9 The building design should be based on the number of occupants. If the number is not known, use the appropriate floor space factors (Appendix D).

Table 2.2 gives the minimum number of escape routes and exits from a room or storey for different numbers of occupants. This number is likely to be increased by the need to observe travel distances and other practical considerations.

The width of escape routes and exits is given in paragraph 2.18.

Table 2.2 Minimum number of escape routes and exits from a room, tier or storey

Maximum number of people	Minimum number of escape routes/exits
60	1
600	2
More than 600	3

Ireland

Source: Department of Housing, Planning and Local Government
Building Regulations 2006
Technical Guidance Document B, Fire Safety – Reprinted 2020 Edition

Ireland permits a single escape stairway for apartment buildings where the floor level of the uppermost storey is not more than 10m above ground level, and the occupancy load is not more than 50 people per storey.

Available online: https://www.gov.ie/en/collection/d9729-technical-guidance-documents/

1.2 Design for Horizontal Escape
1.2.2.5 Single escape route
Excerpt from the source document,
page 27 (40 in pdf):

1.2.2.5 Single escape route - In order to avoid occupants being trapped by fire or smoke, there should be alternative escape routes from all parts of the building except for the situations listed below where a single route can be acceptable:

(a) areas, except in a building of purpose group 2(a), Residential (Institutional), not likely to contain more than 50 persons, near enough to an exit to satisfy the limits on travel in one direction indicated in Table 1.2;

(b) rooms which are not likely to contain more than 50 people, or 20 people if the building is in Residential (Institutional) use, provided that the limits on travel in one direction only are satisfied (see Table 1.2); or

(c) a storey, except in the case of a building of purpose group 2(a), Residential (Institutional), which is not likely to contain more than 50 people, where the limits on travel in one direction only are satisfied (see Table 1.2).

In many cases the beginning of the escape route will be in one direction only (i.e. a single escape route) to a point where there are alternative escape routes. This is acceptable provided that the total travel distance to the nearest exit is within the limits for routes where escape is possible in more than one direction and the section with the single escape route does not exceed the limit for escape in one direction only (see Table 1.2 and Diagram 2(c)).

1.3 Design for Vertical Escape
1.3.3 Single Escape Stairways
Excerpt from the source document,
page 35 (48 in pdf):

1.3.3 Single Escape Stairways

The situations where a building (or part of a building) other than buildings of Purpose Group 2(a) Residential (Institutional), may be served by a single escape stairway are:

(a) if there is no storey with a floor level in the case of a Purpose Group 5 building more than 5 m above ground level, or in other cases more than 10 m above ground level, and where (in accordance with par. 1.2.2.5) every storey may have a single escape route, or

(b) if there is a basement the floor of which is not more than 3 m below ground level where (in accordance with par. 1.2.2.5) every basement storey may have a single escape route.

Sweden

Source: Swedish National Board of Housing, Building and Planning (Boverket)
Boverket's Building Regulations, BBR18 (2018)
BFS 2011:26 with amendments up to BFS 2018:4

Sweden permits one exit for class 3 (residential) buildings up to 16 storeys with a maximum occupant load of 50 people per storey and a maximum travel distance of 30m. Different requirements for the fire-protection rating/smoke-tightness standard of closures apply for buildings of not more than 8 storeys and buildings of more than 8 but not more than 16 storeys.

Available online: https://www.boverket.se
Note: Sweden provides an English translation of the code for reference purposes only

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Translated excerpt from original:

5.32 Access to escape route

In a building of more than eight but not more than sixteen storeys, each dwelling and premises shall be designed to have access to at least one Tr2 stairway. In a building with more than sixteen storeys, each dwelling and premises shall be designed to have access to at least one Tr1 stairway. *(BFS 2011:26).*

General recommendation:
In buildings with more than sixteen storeys, other stairways should be at least Tr2. *(BFS 2011:26).*

5:322 Access to only one escape route

Doors directly to a secure location may be the only escape route from spaces on the ground floor for
1. spaces in occupancy class 1 (Industrial, offices, etc.) if the means to escape may be considered satisfactory and where only a limited number of people are expected to be present.
2. smaller premises and dwellings in occupancy classes 2A, 3 (residential), 4 and 5B, that are easily surveyable where a limited number of people are expected to be present. *(BFS 2014:3).*

General recommendation
What is meant in point 1 is that the walking distance to an escape route should be a maximum of 30 meters and that the number of people does not exceed 50. What is meant in point 2 is premises and dwellings with a maximum walking distance of 15 meters to an escape route, where the escape route is visible from the main part of the premises or dwelling, and the number of people does not exceed 30. *(BFS 2014:3).*

If the conditions for satisfactory evacuation are met, a stairway Tr1 may be the only escape route from dwellings in occupancy class 3 (dwellings) and from premises in occupancy class 1. If the conditions for satisfactory evacuation are in place, stairway Tr2 must be the only escape route in the premises in occupancy class 1 in buildings with a maximum of eight storeys and from dwellings in occupancy class 3 in buildings with a maximum of sixteen storeys. *(BFS 2011:26).*

General recommendation
Evacuation is assumed to be satisfactory if the walking distance to an escape route is not more than 30 meters and the number of people in each fire compartment does not exceed 50. A stairway Tr1 can be the only escape route in buildings with up to sixteen storeys. For habitable rooms in occupancy class 3B, the preconditions for satisfactory evacuation are met even if the escape route from the habitable rooms goes through a common space in another fire compartment. (BFS 2014:3).

5:245 Stairway Tr1

Stairway Tr1 shall be designed with a separate structure to ensure that the spread of fire and smoke to the stairway is limited. *(BFS 2011:26).*

General recommendation
The separating structure should be designed in a minimum of fire resistance class EI 60. The stairway should only be connected to other spaces through a protected lobby which is open to the outside. However, the lift shaft can be placed in a stairway as part of the same fire compartment as the stairway. Neither the stairway, lift shaft or protected lobby should be connected to a floor that is situated below the floor used for escape to the outside.
Doors between the stairway and the protected lobby should be designed in a minimum of fire resistance class E 30-S200C. Doors between a dwelling or premises and the protected lobby should be designed in a minimum of fire resistance class El 60-S200C. If the protected lobby is adjacent to a connection, corridor or similar space in its own fire compartment, doors can be designed in a minimum of fire resistance class EI 30-S200C. *(BFS 2018:4).*

5:246 Stairway Tr2

Stairway Tr2 shall be designed with a separate structure to ensure that the spread of fire and smoke to the stairway is limited. *(BFS 2011:26).*

General recommendation
The separating structure should be designed in a minimum of fire resistance class EI 60. Doors to stairway Tr2 should be designed in a minimum of class E 60-S200C. If the stairway serves a building with up to eight storeys, EI 30-S200C is adequate. The stairway should only have a connection through a space in its own fire compartment with dwellings in occupancy class 3, offices in occupancy class 1 and spaces comparable therewith where people are present other than occasionally. Spaces other than dwellings in occupancy class 3, offices in occupancy class 1 and spaces comparable therewith, where people are present other than occasionally, should only have a connection to the stairway through a protected lobby. Such spaces should have access to at least one more access route for rescue services. The lift shaft can be placed in the stairway as part of the same fire compartment. A stairway Tr2 which constitutes the only escape route should not be connected with the basement floor in accordance with the requirements in 5:722. This also applies to lift shafts that are part of the same fire compartment as the stairway.

Denmark

Source: *bolig og planstyrelsen* [housing and planning agency]
Bygningsreglementets vejledning til kapitel 5 – Brand [Building regulations chapter 5 – fire]
Bilag 2 - Præ-accepterede løsninger for etageboligbyggeri (version 1.4, 2021)
[Appendix 2 – pre-accepted solutions for multi-storey residential construction]

Denmark permits a single exit for multi-unit residential (category 4) buildings up to 45m in building height, with a maximum of 4 dwelling units per storey with direct access from the dwelling unit to the exit stair (no corridor separation). For building with floors more than 22m above ground, where the rescue openings cannot be reached by rescue ladder, a pressurized "security" stair with corridor separation is required and a maximum of 6 dwelling units per storey is allowed. These are prescriptive, pre-approved conditions. According to a local architect, buildings over 45m in height require a performative code-compliance process and fire engineering consultations.

Available online: https://bygningsreglementet.dk/Tekniske-bestemmelser/05/Vejledninger/Generel_Brand
Note: translation of the original foreign language document by code change proponent, for reference only

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2.3.2.2.1 Udgange fra brandceller som boligenhed
[2.3.2.2.1 Exits from fire cells as dwelling units]
Translated excerpt from original:

Boligenheder i anvendelseskategori 4, hvor risikoen for brandspredning fra en boligenhed til en anden er begrænset, kan indrettes, så der kun er direkte adgang til én flugtvejstrappe. Der skal være direkte adgang fra boligenheden til flugtvejstrappen.
[dwelling units in use category 4, where the risk of fire spreading from one dwelling unit to another is limited, can be arranged so that there is only direct access to one exit staircase. There must be direct access from the dwelling unit to the exit staircase.]

Adgang til boligenheder via et fælles gangareal kan kun udføres i bygninger i en etage som angivet i afsnit 2.3.2.2.2.
[Access to dwelling units via a common corridor area can only be carried out in buildings on one floor as specified in section 2.3.2.2.2.]

Der må højst være adgang til 4 boligenheder på hver etage, som har adgang til samme flugtvejstrappe, se Figur 2.3.3.
[There must be a maximum of 4 dwelling units on each floor, which have access to the same exit staircase, see Figure 2.3.3.]

Ved bygninger med gulv i øverste etage mere end 22 m over terræn eller hvor redningsåbningerne ikke kan nås med redningsberedskabets stiger, skal trapper udføres som sikkerhedstrapper. Har alle boligenheder direkte adgang til sikkerhedstrappe via fælles forrum, kan der være højst 6 boligenheder pr. etage.
[For buildings with a storey more than 22 m above ground or where the rescue openings cannot be reached with the emergency services' ladders, stairs must be designed as safety stairs. If all dwelling units have direct access to the security staircase via a common vestibule, there can be a maximum of 6 housing units per floor.]

Såfremt adgang til flugtvejstrappen sker via en altangang, hvor der ikke er risiko for, at trappen bliver røgfyldt, kan der være mere end 6 boligenheder på hver etage som har adgang til samme flugtvejstrappe, se afsnit 2.3.6.
[If access to the escape route stairs is via an exterior passageway, where there is no risk of the stairs being filled with smoke, there may be more than 6 housing units on each floor which have access to the same escape route stairs, see section 2.3.6.]

For additional information see also:

2.3.8.2 Sikkerhedstrappe **[2.3.8.2 Security staircase]**

2.3.8.3 Flugtvejstrapper og sikkerhedstrapper i bygninger, hvor gulv i øverste etage er højst 22 m over terræn
[2.3.8.3 Escape stairs and safety stairs in buildings where the floor on the top floor is no more than 22 m above ground]

2.3.8.4 Flugtvejstrapper og sikkerhedstrapper i bygninger, hvor gulv i øverste etage er højst 45 m over terræn
[2.3.8.4 Escape stairs and security stairs in buildings where the floor on the top floor is no more than 45 m above ground]

Norway

Source: *Direktoratet for byggkvalitet* [Directorate for building-quality]
Byggteknisk forskrift (TEK17) med veiledning (2017)
[Building technical regulations (TEK17) with guidance]
IV Tilrettelegging for rømning og redning [IV Arrangements for escape and rescue]

Norway permits a single exit for multi-unit residential (risk class 4) buildings up to 8 storeys so long as each dwelling unit has an operable window or balcony for rescue and firefighting. A maximum travel distance of 15m from the dwelling unit entry door to the exit stair door applies.

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: https://dibk.no/regelverk/byggteknisk-forskrift-tek17/11/iv/11-13/

Kapittel 11 Sikkerhet ved brann **[Chapter 11 Fire safety]**
§ 11-13. Utgang fra branncelle **[§ 11-13. Exit from fire cell]**
Translated excerpt from original:

(2) Brannceller i byggverk i risikoklasse 4 med inntil 8 etasjer kan ha utgang til ett trapperom utført som rømningsvei. Dette forutsetter at hver boenhet har minst ett vindu eller balkong som er tilgjengelig for rednings- og slokkeinnsats, jf. § 11-17.
[(2) Fire cells in buildings in risk class 4 (residential) with up to 8 floors may have access to one stairwell designed as an escape route. This presupposes that each dwelling unit has at least one window or balcony that is accessible for rescue and firefighting efforts, cf. § 11-17.]

Veiledning til annet led: [Guidance to the second paragraph:]

> *Denne bestemmelsen må ses i sammenheng med kravet om automatisk slokkeanlegg i byggverk i risikoklasse 4 hvor det kreves heis, jf. § 11-12 første ledd bokstav a. Bygning med tre etasjer eller flere som har boenhet, skal ha heis. Unntak gjelder der atkomsten fra inngangspartiet til boenheten kun går over én etasje, jf. § 12-3 tredje ledd bokstav b.*
> [This provision must be seen in connection with the requirement for an automatic fire extinguishing system in buildings in risk class 4 where an elevator is required, cf. § 11-12 first paragraph letter a. A building with three floors or more that has a residential unit shall have an elevator. Exceptions apply where access from the entrance to the dwelling unit only extends over one floor, cf. section 12-3, third paragraph, letter b.]
>
> *Bestemmelsen innebærer at det må være direkte tilgang for brannvesenets høyderedskap (for eksempel brannbil utstyrt med maskinstige eller snorkel) til vindu eller 14alking I hver boenhet.*
> [The provision means that there must be direct access for the fire service's height equipment (for example, a fire truck equipped with a machine ladder or snorkel) to the window or balcony in each housing unit.]

Preaksepterte ytelser [Pre-accepted benefits]

> *1. Trapperommet kan være utført som Tr 1.*
> [1. The stairwell can be made as Tr 1.]
>
> *2. Der det er nødvendig med høyderedskap, må øverste gulv ikke være høyere enn 23 meter over laveste punkt på oppstillingsplassen, jf. § 11-17.*
> [2. 1. Where height equipment is required, the upper floor must not be higher than 23 meters above the lowest point on the installation site, cf. § 11-17.]

Refer to § 11-14. Rømningsvei **[§ 11-14. Escape route] for maximum travel distance limit of 15m.**

France

Source: *Code de la construction et de l'habitation* [Code for construction and housing]
Titre II : Sécurité et protection contre l'incendie [Title II: Security and protection against fire}
Chapitre II : Immeubles de grande et de moyenne hauteur
[Chapter II: High and medium-rise buildings]

France permits a single exit for residential buildings up to 50m in building height. Two means of egress and additional life safety measures are required for high-rise buildings *(immeuble de grande hauteur)* exceeding this height.

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000038485149 - Article R122-2
https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000006896053 - Article R122-9

Section 1 : Dispositions de sécurité relatives aux immeubles de grande hauteur
[Section 1: Safety Provisions for Tall Buildings]

Excerpt from Article R122-2 (2021 version)

Constitue un immeuble de grande hauteur, pour l'application du présent chapitre, tout corps de bâtiment dont le plancher bas du dernier niveau est situé, par rapport au niveau du sol le plus haut utilisable pour les engins des services publics de secours et de lutte contre l'incendie :
- à plus de 50 mètres pour les immeubles à usage d'habitation, tels qu'ils sont définis par l'article R. 111-1 (1);
- à plus de 28 mètres pour tous les autres immeubles.
Constitutes a high-rise building, for the application of this chapter, any building where the floor level of the uppermost storey is located, in relation to the highest ground level usable for the vehicles of the public emergency and firefighting services:
- more than 50 meters for residential buildings, as defined by article R. 111-1 (1);
- more than 28 meters for all other buildings.

Excerpt from Article R122-9 (2021 version)

Pour assurer la sauvegarde des occupants et du voisinage, la construction des immeubles de grande hauteur doit permettre de respecter les principes de sécurité ci-après :
2.L'évacuation des occupants est assurée au moyen de deux escaliers au moins par compartiment. Cependant, pour les immeubles de la classe G.H.W. 1, le règlement de sécurité précise les conditions auxquelles il pourra être dérogé à cette règle ;
To ensure the safety of the occupants and the neighborhood, the construction of high-rise buildings must allow compliance with the following safety principles:
2. Evacuation of occupants is ensured by means of at least two stairways per compartment. However, for class GHW 1 (office) buildings, the safety regulations specify the conditions under which this rule may be waived;

Belgium

Source: *Federale Overheidsdienst Binnenlandse Zaken* [Federal Public Service of Belgium]
Algemene Directie Veiligheid en Preventie – Directie Brandpreventie
[General Directorate of Safety and Prevention – Directorate of Fire Prevention]
Basisnormen voor de Preventie van Brand en Ontploffing (2016 version)
[Basic Standards for Prevention of Fire and Explosion]

The Belgian code is subdivided by low-rise (under 10m), mid-rise (10m to 25m) and high-rise (over 25m) building heights. Belgium allows one exit for mid-rise buildings of not more than 25m in building height with a maximum occupant load of 50 people per fire compartment.

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: https://www.besafe.be/sites/default/files/2018-03/kb_fed_basisnorm.pdf

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Bijlage 3/1 Middelhoge gebouwen (Aanvraag voor de bouw ingediend vanaf 1 december 2012)
[Annex 3/1 Medium-rise buildings (Application for construction submitted after 1 December 2012)
Translated excerpt from original:

2.2.1 Aantal uitgangen. **[2.2.1 Number of Exits]**
Elk compartiment heeft minimum:
- *één uitgang indien de gebruikers zonder door het trappenhuis te moeten gaan een gevelopening, toegankelijk voor de laddervoertuigen van de brandweer kunnen bereiken of indien zulke opening niet bestaat, een terras toegankelijk voor de ladders van de brandweer kunnen bereiken. Het terras met een voldoende grote oppervlakte ter evacuatie van de gebruikers van het compartiment, heeft een vloer REI 60 en een gevelelement E 60 of een leuning die 1 m teruggetrokken is ten opzichte van de gevel.*
- *twee uitgangen indien de bezetting 50 of meer dan 50 en minder dan 500 personen bedraagt;*
- *2 + n uitgangen waarbij n het geheel getal is onmiddellijk groter dan het quotiënt van de deling door 1000 van de maximale bezetting van het compartiment, indien de bezetting 500 of meer dan 500 personen bedraagt.*

Each compartment has at minimum:
- one exit if the users are also provided with a facade opening, accessible to the ladder vehicles of the fire brigade or if no such opening exists, a balcony which the ladders of the fire brigade can reach. The balcony with a sufficiently large surface to evacuate the users of the compartment, has a floor fire rating of REI 60 and a facade element fire rating of E 60 or a handrail set back 1 m from the facade.
- two exits if the occupancy is 50 or more than 50 and less than 500 people;
- 2 + *n* exits where *n* is the integer immediately greater than the quotient of the division by 1000 of the maximum occupancy of the floor area if the occupancy is 500 or more than 500 persons.

Bijlage 4/1 Hoge gebouwen (Aanvraag voor de bouw ingediend vanaf 1 december 2012)
[Annex 4/1 High-rise buildings (Application for construction submitted after 1 December 2012)
Translated excerpt from original:

2.2.1 Aantal uitgangen. **[2.2.1 Number of Exits]**
Elk compartiment heeft minimum:
- *twee uitgangen;*
- *2 + n uitgangen waarbij n het geheel getal is onmiddellijk groter dan het quotiënt van de deling door 1000 van de maximale bezetting van het compartiment, indien de bezetting 500 of meer dan 500 personen bedraagt.*

Each compartment has at minimum:
- two exits
- + *n* exits where *n* is the integer immediately greater than the quotient of the division by 1000 of the maximum occupancy of the floor area if the occupancy is 500 or more than 500 persons.

Netherlands

Source: European Commission Database
Bouwbesluit 2012 [Draft Building Decree 2012]
Chapter 2 Technical construction requirements to ensure safety

The Netherlands permits one exit for multi-unit residential building where the floor level of the uppermost storey is no more than 12.5m above grade (5 storeys), where the floor area served by the single exit does not exceed 800m^2, with a maximum floor area per dwelling unit of 150m^2.

The Netherlands also permits one exit for multi-unit residential buildings where the floor level of the uppermost storey is not more than 6m above grade (three storeys) with no more than 6 dwelling units served by the single exit.

Note: correspondence with a Dutch architect indicates that the 5 storey limit can be exceeded through 'alternative solutions' compliance if a "safety" stair with fire and smoke control is provided.

Available online in english:
https://ec.europa.eu/growth/tools-databases/tris/en/search/?trisaction=search.detail&year=2011&num=212

Section 2.12 Escape routes
Article 2.105 Additionally protected escape route
Excerpt from original:

1. An escape route shall be an additionally protected escape route from the exit of the fire compartment where the escape route starts, unless such exit directly adjoins the adjacent grounds.

2. The escape route referred to in the first paragraph shall not pass along a movable structural component of another residential function than the residential function in which the escape route starts. This shall not apply to the entrance of a residential function located directly opposite the entrance of the residential function in which the escape route starts.

3. The escape route referred to in the first paragraph shall not pass over a staircase.

4. The second and third paragraphs shall not apply if the route passes through a stairwell, where the exits of the residential functions depending on such route are directly adjacent to the stairwell, and such route is exclusively used by residential functions and ancillary functions thereof, and the exit of the stairwell directly adjoins the adjacent grounds, and:

    a. no more than 6 residential functions depend on such route, and none of the floors of any staying area of such residential functions is higher than 6 m above the terrain height, or

    b. the total usable area of the residential functions depending on the route does not exceed 800 m2, none of the floors of any staying area of such residential functions is higher than 12.5 m above the terrain height, and none of such residential functions has a usable area exceeding 150 m2.

Germany

Source: *Fachkommission Bauaufsicht der Bauministerkonferenz*
[Technical committee for Construction supervision of the Assembly of construction ministers]
Muster-Hochhaus-Richtlinie, MHHR 2008 [Model high-rise building code]

Germany permits a single exit for multi-unit residential buildings up to 60m in building height. Buildings over 22m with a single exit stair require additional fire safety measures including the fire separation and pressurization of the single exit stair as safety stair (Sicherheitstreppenraum) and assembly fire ratings of at least 120 minutes.

The model high-rise building code applies to high-rise buildings over 22m in building height and is prepared by the federal "Bauministerkonferenz" (assembly of construction ministers) tasked with establishing the model code referenced by the 16 individual states within Germany.

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: https://www.bauministerkonferenz.de/Dokumente/42310702.pdf

Additional information relevant to Germany is provided in the reference document:
Stock, B., Wallasch, K. (2020). Fire Safety Requirements for High-Rise Residential Towers in England and Germany. FeuerTrutz International 2020. Online: https://www.medien.feuertrutz.de/#doc/62580/5

***4 Rettungswege* [Escape paths]**
***4.2 Notwendige Treppenräume, Sicherheitstreppenräume* [Required stairs, Safety stairs]**
Translated excerpt from original:

4.2.1 In Hochhäusern mit nicht mehr als 60 m Höhe genügt an Stelle von zwei notwendigen Treppenräumen ein Sicherheitstreppenraum.
4.2.2 In Hochhäusern mit mehr als 60 m Höhe müssen alle notwendigen Treppenräume als Sicherheitstreppenräume ausgebildet sein.
4.2.1 In high-rise buildings with a building height of not more than 60 m, one safety stair can be provided instead of the required two exit stairs.
4.2.2 In high-rise buildings with a building height of more than 60 m, all required exit stairs must be safety stairs.

Additional information for buildings not more than 22m in height (Berlin, Germany):

Bauordnung für Berlin (BauO Bln) [Building Code for Berlin]
Fünfter Abschnit - Rettungswege, Öffnungen, Umwehrungen [Fifth Section – Exits, Openings, Guards]
§ 33 Erster und zweiter Rettungsweg [§ 33 First and Second Means of Egress]

1. Für Nutzungseinheiten mit mindestens einem Aufenthaltsraum wie Wohnungen, Praxen oder selbständige Betriebsstätten müssen in jedem Geschoss mindestens zwei voneinander unabhängige Rettungswege ins Freie vorhanden sein; beide Rettungswege dürfen jedoch innerhalb des Geschosses über denselben notwendigen Flur führen.
For floor areas with at least one occupancy such as dwelling units, offices or independent commercial spaces, there must be at least two independent means of egress per floor; both escape routes can however pass through the same corridor within the floor area.

2. Für Nutzungseinheiten nach Absatz 1, die nicht zu ebener Erde liegen, muss der erste Rettungsweg über eine notwendige Treppe führen. Der zweite Rettungsweg kann eine weitere notwendige Treppe oder eine mit Rettungsgeräten der Feuerwehr erreichbare Stelle der Nutzungseinheit sein. Ein zweiter Rettungsweg ist nicht erforderlich, wenn die Rettung über einen Sicherheitstreppenraum möglich ist.
For occupied floor areas per Sentence 1, that are not on the ground floor, the first means of egress must be a stair. The second means of egress can be another stair or a designated area within the occupied floor area that can be reached by the firefighting apparatus of the fire department. A second means of egress is not required if the first means of egress is a fire separated, fire safety stairwell.

3. Gebäude, deren zweiter Rettungsweg über Rettungsgeräte der Feuerwehr führt und bei denen die Oberkante der Brüstung von zum Anleitern bestimmten Fenstern oder Stellen mehr als 8 Meter über der Geländeoberfläche liegt, dürfen nur errichtet werden, wenn die Feuerwehr über die erforderlichen Rettungsgeräte wie Hubrettungsfahrzeuge verfügt. Bei Sonderbauten ist der zweite Rettungsweg über Rettungsgeräte der Feuerwehr nur zulässig, wenn keine Bedenken wegen der Personenrettung bestehen.
Buildings, for which the second egress requires the rescue apparatus of the fire department and in which the sill height of designated windows or landings is more than 8 meters above grade, may only be erected if the local fire department has aerial firefighting apparatus. In the case of special occupancy classifications, the second egress via rescue apparatus is only permitted if there are no concerns regarding occupant rescue.

Switzerland

Source: *Vereinigung Kantonaler Feuerversicherungen, VKF*
[Association of Cantonal Fire Insurance Companies]
Brandschutzrichtlinie 2017, Stand 2021 [Fire Safety Directive 2017, 2021 Version]
16-15 Flucht- und Rettungswege [16-15 Escape and Rescue Paths]

Switzerland permits a single exit for multi-unit residential buildings without a specified maximum building height with a 900m^2 maximum floor area per storey, a maximum total travel distance of 35m and a maximum occupant load of 100 per floor area. Sprinklering is typically not required. The association of cantonal fire insurance companies establishes the fire safety regulations across Switzerland.

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: https://www.bsvonline.ch/de/vorschriften/

***2.4.2 Anzahl vertikale Rettungswege* [Number of Vertical Exits]**
Translated excerpt from original:

1 *Geschosse von Bauten und Anlagen ohne ausreichende, ebenerdig ins Freie führende Fluchtwege sind wie folgt mit vertikalen Fluchtwegen zu erschliessen:*
a bei einer Geschossfläche bis 900 m2 mit mindestens einem vertikalen Fluchtweg;
b bei einer Geschossfläche von mehr als 900 m2 mit mindestens zwei vertikalen Fluchtwegen.
Storeys of buildings and facilities without sufficient escape routes leading to the outside at ground level are to be opened up with vertical escape routes as follows:
a with a floor area of up to 900 m2 with at least one vertical escape route;
b with a floor area of more than 900 m2 with at least two vertical escape routes.

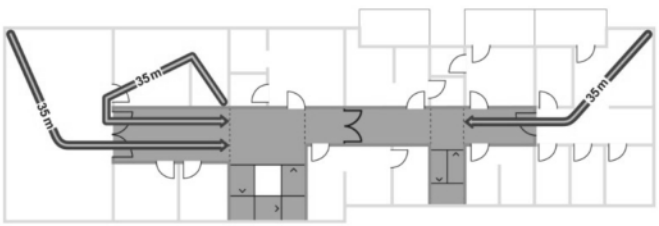
2 *Räume mit einer Personenbelegung von mehr als 100 Personen sind durch mindestens zwei vertikale Fluchtwege zu erschliessen, sofern für die Personen nicht ausreichend, ebenerdig ins Freie führende Fluchtwege zur Verfügung stehen.*
Rooms with an occupancy of more than 100 people must be opened up by at least two vertical escape routes if there are not enough escape routes leading to the outside at ground level.

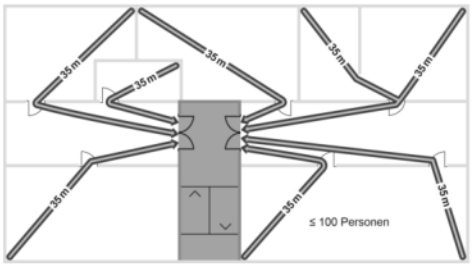
3 *In Beherbergungsbetrieben mit 3 oder mehr Geschossen sind die Bereiche, welche der horizontalen Evakuierung dienen mit mindestens je einem unabhängigen vertikalen Fluchtweg zu erschliessen.*
In accommodation establishments (hotels, hostels) with 3 or more storeys, the areas that are used for horizontal evacuation must each be opened up with at least one independent vertical escape route.

2.4.3 Gesamtlänge von Fluchtwegen [Total travel distance of exits]
Translated excerpt from original:

1 *Führen Fluchtwege nur zu einem vertikalen Fluchtweg oder einem Ausgang an einen sicheren Ort im Freien, darf deren Gesamtlänge 35 m nicht übersteigen.*
If escape routes only lead to one vertical escape route or an exit to a safe place outside, their total length must not exceed 35 m.

2 *Führen sie zu mindestens zwei voneinander entfernten vertikalen Fluchtwegen oder Ausgängen an einen sicheren Ort im Freien, darf die Gesamtlänge des Fluchtwegs 50 m nicht übersteigen.*
If they lead to at least two spaced vertical escape routes or exits to a safe outdoor location, the total length of the escape route must not exceed 50 m.





Austria

Source: *Richtlinien des Österreichischen Instituts für Bautechnik*
[Regulations of the Austrian Institute for Construction Engineering]
OIB-RICHTLINIE 2.3 - Brandschutz bei Gebäuden mit einem Fluchtniveau von mehr als 22 m
[OIB Regulation 2.3 - Fire protection for buildings with an escape level of more than 22 m]
OIB-330.2-015/19 – April 2019

Austria permits a single exit for multi-unit residential buildings up to 32m in building height. Maximum travel distances apply. Pressurization of the exit stair is required. The code distinguishes between buildings where the uppermost storey is not more than 32m above ground, between 32m and 90m above ground, and buildings more than 90m above ground.

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: https://www.oib.or.at/sites/default/files/richtlinie_2.3_12.04.19_0.pdf

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3 Gebäude mit einem Fluchtniveau von nicht mehr als 32 m
[3 Buildings with an escape level of not more than 32m]
***3.1 Fluchtwege* [3.1 Means of egress]**
Translated excerpt from original:

3.1.1 Von jeder Stelle jedes Raumes muss in höchstens 40 m Gehweglänge ein Sicherheitstreppenhaus der Stufe 1 gemäß Punkt 3.2 erreichbar sein. Bei Wohnungen wird die Gehweglänge ab der Wohnungseingangstüre gemessen. Dabei dürfen sich die Wohnungen über höchstens zwei Geschoße erstrecken.

3.1.1 A Type 1 safety stairwell in accordance with article 3.2 must be accessible within a travel distance of 40m from every point of every room. For apartments, the travel distance can be measured from the apartment entrance door. The apartments may extend over a maximum of two floors.

3.1.2 Die Fluchtwege gemäß Punkt 3.1.1 dürfen bei Wohnungen
a) auf eine Länge von höchstens 25 m gemeinsam mit dem Fluchtweg gemäß Punkt 3.1.1, oder
b) auf eine Länge von höchstens 15 m, gemessen ab der Wohnungseingangstüre, gemeinsam verlaufen (z.B. Stichgang).

3.1.2 The escape routes in Article 3.1.1 are permitted in the case of apartments
a) to have a maximum travel distance of 25 m together with the escape route according to point 3.1.1, or
b) run together over a maximum travel distance of 15 m, measured from the apartment entrance door (e.x. dead-end corridor).

4 Gebäude mit einem Fluchtniveau von mehr als 32m und nicht mehr als 90 m
[4 Buildings with an escape level exceeding 32m and not more than 90m]
***4.1 Fluchtwege* [4.1 Means of egress]**
Translated excerpt from original:

4.1.1 Von jeder Stelle jedes Raumes muss in höchstens 40 m Gehweglänge ein Sicherheitstreppenhaus der Stufe 2 gemäß Punkt 4.2 mit jeweils einem Ausgang zu einem sicheren Ort des angrenzenden Geländes im Freien erreichbar sein, wobei ohne Begrenzung der Gehweglänge zusätzlich erreichbar sein muss.
a) in jedem Geschoß mit mindestens einem Aufenthaltsraum ein unabhängiger Fluchtweg zu einem weiteren Sicherheitstreppenhaus der Stufe 2 gemäß Punkt 4.2, oder
b) ein unabhängiger Fluchtweg zu einem benachbarten Brandabschnitt mit Zugang zu einem Sicherheitstreppenhaus der Stufe 2 gemäß Punkt 4.2

4.1.1 A Type 2 safety stairwell in accordance with article 4.2, with an exit to the exterior at a safe location at grade, must be accessible from every point of every room with a travel distance of no more than 40 m, whereby the travel distance must also be accessible without limitation.
a) on each floor with at least one occupied floor area, an independent escape route to another level 2 safety stairwell in accordance with article 4.2, or
b) an independent escape route to an adjacent fire compartment with access to a type 2 safety stairwell in accordance with article 4.2.

Poland

Source: *Rozporządzenie Ministra Infrastruktury w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie (2002)* [Regulation of the Minister of Infrastructure on technical conditions to be met by buildings and their location]
Dział VI. Bezpieczeństwo pożarowe [Section VI. Fire safety]

Poland permits a single exit for medium-high multi-unit residential (Division ZL IV) buildings up to 25m in building height or of a maximum of 9 storeys above grade. A single exit is also permitted in residential buildings exceeding 25m in building height with additional life safety measures and a maximum floor area per storey of 750m^2.

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: https://budowlaneabc.gov.pl/praktyczny-przewodnik-inwestora/najwazniejsze-przepisy/rozporzadzenie-ministra-infrastruktury-z-dnia-12-kwietnia-2002-r-w-sprawie-warunkow-technicznych-jakim-powinny-odpowiadac-budynki-i-ich-usytuowanie-dz-u-2015-1422-z-pozn-zm/

Rozdział 4. Drogi ewakuacyjne **[Chapter 4. Escape routes]**
Translated excerpt from original:

§ 246.

1. *W budynku wysokim (W) i wysokościowym (WW), z zastrzeżeniem ust. 4, należy zapewnić możliwość ewakuacji do co najmniej dwóch klatek schodowych, które powinny być obudowane i oddzielone od poziomych dróg komunikacyjnych lub ewakuacyjnych oraz pomieszczeń, przedsionkiem przeciwpożarowym, odpowiadającym wymaganiom określonym w § 232.*
   In the high-rise building (L) and high-rise building (WW), subject to 4, you should provide the possibility of evacuation to at least two staircases, which should be enclosed and separated from the horizontal communication or evacuation routes and rooms, a vestibule, corresponding to the requirements set out in § 232.
2. *Klatki schodowe i przedsionki przeciwpożarowe, stanowiące drogę ewakuacyjną w budynku wysokim (W) dla stref pożarowych innych niż ZL IV i PM oraz w budynku wysokościowym (WW), powinny być wyposażone w urządzenia zapobiegające ich zadymieniu.*
2. Stairways and fire halls, constituting an escape route in a high building (W) for fire zones other than ZL IV and PM, and in a high-rise building (WW), should be equipped with devices preventing their smoke.
3. *Klatki schodowe i przedsionki przeciwpożarowe, stanowiące drogę ewakuacyjną w budynku wysokim (W) dla strefy pożarowej PM, powinny być wyposażone w urządzenia zapobiegające zadymieniu lub samoczynne urządzenia oddymiające uruchamiane za pomocą systemu wykrywania dymu.*
3. Stairways and fire lobbies, constituting an escape route in a high building (W) for the PM fire zone, should be equipped with smoke prevention devices or automatic smoke exhaust devices activated by a smoke detection system.
4. *Prowadzenie ewakuacji tylko do jednej klatki schodowej dopuszcza się w przypadku:*
   1) budynku wysokiego (W) niezawierającego strefy pożarowej ZL II, jeżeli powierzchnia wewnętrzna kondygnacji nie przekracza 750m2;
   2) strefy pożarowej ZL IV, jeżeli łączna powierzchnia wewnętrzna mieszkań na kondygnacji lub jej części nie przekracza 750m2.
4. Evacuation to only one staircase is allowed in the case of:
   1) a high-rise building (W) not containing the ZL II fire zone, if the internal floor area does not exceed 750m2;
   2) the ZL IV zone (residential), if the total internal area of flats on the storey or its parts does not exceed 750m2.
5. *W budynku wysokim (W) i wysokościowym (WW) dopuszcza się wykonywanie klatek schodowych, stanowiących drogę ewakuacyjną wyłącznie dla stref pożarowych ZL IV, bez przedsionków oddzielających je od poziomych dróg komunikacji ogólnej, jeżeli:*
   1) każde mieszkanie lub pomieszczenie jest oddzielone od poziomej drogi komunikacji ogólnej drzwiami o klasie odporności ogniowej co najmniej E I 30;
   2) klatki schodowe są zamykane drzwiami dymoszczelnymi;
   3) klatki schodowe są wyposażone w urządzenia zapobiegające zadymieniu lub w samoczynne urządzenia oddymiające uruchamiane za pomocą systemu wykrywania dymu.
5. In the high (W) and high-altitude (WW) building, it is allowed to build staircases, constituting an escape route only for ZL IV fire zones, without vestibules separating them from horizontal general communication routes, if:
   1) each apartment or room is separated from the horizontal road of general communication by a door with a fire resistance class of at least EI 30;
   2) staircases are closed with smoke-tight doors;
   3) staircases are equipped with devices to prevent smoke or automatic smoke exhaust devices activated by the smoke detection system.

The building code distinguishes buildings into groups based on height (see § 8):

1) low (N) - up to and including 12 m above ground level or residential up to 4 storeys above the ground level inclusive;
2) medium-high (SW) - more than 12 m to 25 m above the ground level inclusive or residential with a height of more than 4 to 9 above-ground storeys, inclusive;
3) high (W) - over 25 m to 55 m above the ground level inclusive or residential with a height of over 9 to 18 above-ground storeys inclusive;
4) altitude (WW) – more than 55 m above the ground level.

Italy

Source: *Dipartimento dei Vigili del Fuoco, del Soccorso Pubblico e della Difesa Civile*
[Department of Fire Brigade, Public Rescue and Civil Defense]
D.M. N. 246 del 16/05/1987 - Norme di sicurezza antincendi per gli edifici di civile abitazione
[D.M. N. 246 of 16/05/1987 Fire safety standards for residential buildings] (October 2020)

Italy permits a single exit for multi-unit residential buildings up to 80m in building height with a maximum floor area per storey of 500m^2. Further provisions for compartmentalization, elevator construction and fire ratings are required depending on building height between type a (12m to 24m), type b (24m to 32m), type c (32m to 54m), type d (54m to 80m), and type e (above 80m).

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: http://www.vigilfuoco.it/allegati/PI/RegoleTecnicheXAttivita/COORD_DM_16_05_1987_n_246.pdf

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Norme di Sicurezza Antincendi per Gli Edifici di Civile Abitazione **[Fire Safety Rules for Civil Buildings]**
2. Caratteristiche costruttive. **[2. Construction characteristics]**
Tabella A [Table A]
Translated excerpt from original:

(*) Con un minimo di 2 scale per ogni edificio. Sulla copertura dell'edificio deve essere prevista una area per l'atterraggio ed il decollo degli elicotteri di soccorso raggiungibile da ogni scala.
[(*) With a minimum of 2 stairs for each building. An area must be provided on the roof of the building for the landing and take-off of rescue helicopters reachable from any staircase.]

TABELLA A

Tipo di edificio	Altezza antincendi	Massima superficie del compartimento (m^2)	Massima superficie di competenza di ogni scala per ogni piano	Tipo dei vani scala e di almeno un vano ascensore	Caratteristica REI del vano scala e ascensore, filtri, porta, elementi di suddivisione tra i compartimenti.
a	Da 12 m a 24 m	8.000	500	Nessuna prescrizione	60 (**)
			500	Almeno protetto se non sono osservati i requisiti del punto 2.2.1	60
			550	Almeno a prova di fumo interno	60
			600	A prova di fumo	60
b	Da oltre 24 m a 32 m	6.000	500	Nessuna prescrizione	60 (**)
			500	Almeno a prova di fumo interno se non sono osservati i requisiti del punto 2.2.1	60
			550	Almeno a prova di fumo interno	60
			600	A prova di fumo	60
c	Da oltre 32 m a 54 m	5.000	500	Almeno a prova di fumo interno	90
d	Da oltre 54 m a 80 m	4.000	500	Almeno a prova di fumo interno con filtro avente camino di ventilazione di sezione non inferiore a 0,36 m^2	90
e	Oltre 80 m	2.000	350 (*)	Almeno a prova di fumo interno con filtro avente camino di ventilazione di sezione non inferiore a 0,36 m^2	120

(*) Con un minimo di 2 scale per ogni edificio. Sulla copertura dell'edificio deve essere prevista una area per l'atterraggio ed il decollo degli elicotteri di soccorso raggiungibile da ogni scala.
(**) Solo per gli elementi di suddivisione tra i compartimenti.

Spain

Source: *Código Técnico de la Edificación* [Technical Building Code]
Documento Básico SI - Seguridad en caso de Incendio (2019)
[Basic Document SI – Safety in case of fire (2019)]

Spain permits a single exit for multi-unit residential buildings up to 28m in building height measured as the floor level of the uppermost storey, where the total occupancy load of the building is not more than 500 people. The exit stair must be protected (fire separated) for residential buildings over 14m in building height.

Note: translation of the original foreign language document by code change proponent, for reference only
Available online: https://www.codigotecnico.org/pdf/Documentos/SI/DccSI.pdf

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SI 3 ***Evacuación de ocupantes*** **[Evacuation of occupants]**
3 ***Número de salidas y longitud de los recorridos de evacuación***
3 **Number of exits and length of evacuation routes**
Translated excerpt from original:

Floors or rooms that have a single floor exit or room exit, respectively
- 500 people in the entire building, in the case of exiting from a residential building

The descending evacuation height of the considered floor does not exceed 28 m, except in Public Residential use, (hotels, hostels etc.) in which case it is, at most, the second floor above the building exit (2), or 10 m when the evacuation is ascending.

(3) The exiting floor of the building must have more than one exit:
- in the case of building of residential housing occupancy, where the total occupancy of the building exceeds 500 people

Tabla 3.1. Número de *salidas de planta* y longitud de los *recorridos de evacuación*(1)

Número de salidas existentes	Condiciones
Plantas o *recintos* que disponen de una única *salida de planta* o salida de *recinto* respectivamente	No se admite en *uso Hospitalario, en* las plantas de hospitalización o de tratamiento intensivo, así como en salas o unidades para pacientes hospitalizados cuya superficie construida exceda de 90 m^2.
	La ocupación no excede de 100 personas, excepto en los casos que se indican a continuación: - 500 personas en el conjunto del edificio, en el caso de *salida de un edificio* de viviendas; - 50 personas en zonas desde las que la evacuación hasta una *salida de planta* deba salvar una altura mayor que 2 m en sentido ascendente; - 50 alumnos en escuelas infantiles, o de enseñanza primaria o secundaria.
	La longitud de los *recorridos de evacuación* hasta una *salida de planta* no excede de 25 m, excepto en los casos que se indican a continuación: - 35 m en *uso Aparcamiento;* - 50 m si se trata de una planta, incluso de *uso Aparcamiento*, que tiene una salida directa al *espacio exterior seguro* y la ocupación no excede de 25 personas, o bien de un espacio al aire libre en el que el riesgo de incendio sea irrelevante, por ejemplo, una cubierta de edificio, una terraza, etc.
	La *altura de evacuación* descendente de la planta considerada no excede de 28 m, excepto en *uso Residencial Público*, en cuyo caso es, como máximo, la segunda planta por encima de la de *salida de edificio*(2), o de 10 m cuando la evacuación sea ascendente.

(1) La longitud de los *recorridos de evacuación* que se indican se puede aumentar un 25% cuando se trate de *sectores de incendio* protegidos con una instalación automática de extinción.
(2) Si el establecimiento no excede de 20 plazas de alojamiento y está dotado de un sistema de detección y alarma, puede aplicarse el límite general de 28 m de *altura de evacuación*.
(3) La planta de *salida del edificio* debe contar con más de una *salida:*
- en el caso de edificios de U*so Residencial Vivienda,* cuando la ocupación total del edificio exceda de 500 personas.
- en el resto de los usos, cuando le sea exigible considerando únicamente la ocupación de dicha planta, o bien cuando el edificio esté obligado a tener más de una escalera para la evacuación descendente o más de una para evacuación ascendente.

Kenya

Source: National Planning and Building Authority, Kenya
Building Code of the Republic of Kenya (2009 Edition) (English)

Kenya permits a single exit for any building up to 6 storeys in building height or where the floor level of the uppermost storey is not more than 17m above grade.

Available online:
https://www.kpda.or.ke/documents/Policies/Building%20Code%202006.pdf?_sm_au_=iVVRFq5SLNDMnt7r

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Volume 4: Building Services
Section M: Stairways, Ramps, Guards and Lifts
MM4 – Means of Escape (Page 336 in pdf)
Excerpt from original:

MM4.2 Without prejudice to sub-regulation MM4.1, every building which exceeds 6 storeys in height or in which the level of the floor of the uppermost storey is more than 17m above the level of the ground at the point of discharge of the main staircase shall, in addition to the main staircase, be provided with a second staircase as means of escape in case of emergency.

South Africa

Source: South African National Standard – SANS 10400-T:2011 Edition 3
The application of the National Building Regulations
Part T: Fire protection

South Africa permits a single exit for buildings up to 3 storeys in building height.

Available online: https://www.nfast.co.za/gallery/fire%20extinguisher%20regulations.pdf

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4.16 Provision of escape routes
Excerpt from original:

4.16 Provision of escape routes

NOTE Annex D provides guidance on the application of this subclause.

4.16.1 One or more escape routes shall be provided in every building.

4.16.2 Where the travel distance, measured to the nearest escape door, is not more than 45 m, subject to the provisions of 4.16.6, 4.16.7, such escape route shall comply with the following requirements:

a) In a single-storey building, in a dwelling unit that has an escape door at ground level, or from a dwelling unit at first floor level, where such dwelling unit is served by an individual stairway to ground level, such escape route shall not be required to include any emergency route and, in the case of a dwelling unit, such escape route shall not be required to comply with the requirements of 4.17 to 4.30, inclusive.

b) In a single-storey or double-storey building with a population of less than 25 persons on either floor, the travel distance along a common path of travel shall not exceed 35 m. A secondary means of escape shall be provided where the common path of travel exceeds 35 m.

c) In a building of two or three storeys in height, such escape route shall not be required to include any emergency route, provided that a building

1) of two storeys in height where the population of the upper storey is more than 25 persons, or

2) of three storeys in height;

shall be provided with not less than two such escape routes.

d) Any building of a height of more than three storeys shall be provided with not less than two escape routes and

1) an emergency route shall form part of each such escape route, and

2) such emergency route shall include a stairway that forms part of the escape route and also that part of the escape route from the lower end of the stairway to any escape door.

United Arab Emirates

Source: Ministry of Interior, General Headquarters of Civil Defense
UAE Fire and Life Safety Code of Practice, 2011 Edition
Chapter 3: Means of Egress

The UAE permits a single exit for buildings up to 15m in building height where an automatic sprinkler system is provided, with a maximum floor area per storey of 500m^2 and where there are not more than 4 dwelling units per storey.

Available online: https://www.dcd.gov.ae/portal/eng/UAEFIRECODE_ENG.pdf

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12. Single Exit Staircase Requirements

Excerpt from original:

12.1.3 The interlocking staircase requirement can be replaced with a single exit staircase (having one entrance into exit staircase shaft) if the number of units per floor in kept to a maximum of four dwelling units. See Figure 3.52 and Figure 3.53 for illustrations.

12. Single Exit Staircase Requirements

12.1 Apartment Building

12.1.1 Any non-sprinklered dwelling unit shall be permitted to have a single exit, provided that one of the following criteria is met:

i. The dwelling unit has an exit door opening directly to the street or yard at ground level.

ii. T he dwelling unit has direct access to an outside stair and serves a maximum of two units, both of which are located on the same floor.

iii. The dwelling unit has direct access to an interior stair that serves only that unit and is separated from all other portions of the building by fire barriers having a minimum 1-hour fire resistance rating, with no opening therein.

iv. Travel distance from the anywhere in the unit shall not exceed 23m to the final discharge. See Figure 3.51.

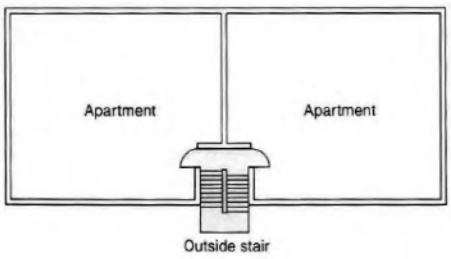

Figure 3.51: Single Exit Staircase for 2 unit apartment building

12.1.2 Any building that is protected throughout by an approved, supervised automatic residential sprinkler system having maximum building height of 15m (Low Rise) and has not more than six dwelling units per story can be permitted to have a single interlocking exit staircase (scissor staircase), provided that all of the following conditions apply:

i. The stairway is separated from the rest of the building by barriers having not less than a 2-hour fire resistance rating, with self-closing 1½-hour fire door assemblies.

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ii. The stairway does not serve more than one-half story below the level of exit discharge.

iii. All corridors serving as access to exits have a minimum 1-hour fire resistance rating with 1 hour fire doors assemblies.

iv. There is not more than 14m from the most remote point of unit to unit exit door and not more than 9m of travel distance from the entrance door of any dwelling unit to the exit staircase.

v. One hour fire-rated horizontal and vertical separation between dwelling units is provided.

vi. Smoke check doors shall be provided between the two entrances into the scissor staircase for internal corridor arrangement.

vii. Maximum total area per floor is 500m^2.

12.1.3 The interlocking staircase requirement can be replaced with a single exit staircase (having one entrance into exit staircase shaft) if the number of units per floor in kept to a maximum of four dwelling units. See Figure 3.52 and Figure 3.53 for illustrations.

12.1.4 External exit passageways, smoke proof enclosures and external exit staircases can also be adopted for the egress arrangement of residential apartments with provision of single exit staircase. See Figures 3.54 to 3.60 for examples of scissors and single exit staircase arrangement for residential apartments limited to the conditions in clauses 12.1.1, 12.1.2 and 12.1.3.

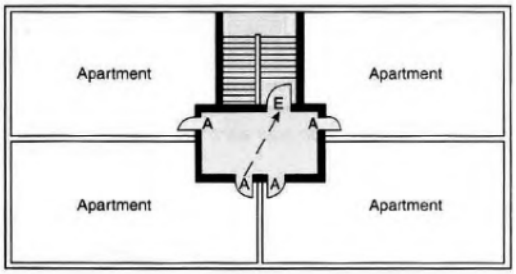

Figure 3.52: Single exit staircase replacing interlocking staircase for 4 unit apartment building (A to E ≤ 9m)

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India

Source: Bureau of Indian Standards
National Building Code of India 2005, SP 7 (Group 1)

India permits a single exit for multi-unit residential buildings up to 15m in building height with a maximum floor area of 500m^2 per storey.

Available online: https://law.resource.org/pub/in/bis/S03/is.sp.7.1.2005.pdf

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Part 4 Fire and Life Safety
4.6.2 Number of Exits
Excerpt from original:

4.6 Number of Exits

4.6.1 *General*

The general requirements of number of exits shall supplement the requirement of different occupancies in **6.1** to **6.9**.

4.6.2 All buildings, which are 15 m in height or above, and all buildings used as educational, assembly, institutional, industrial, storage, and hazardous occupancies and mixed occupancies with any of the aforesaid occupancies, having area more than 500 m^2 on each floor shall have a minimum of two staircases. They shall be of enclosed type; at least one of them shall be on external walls of buildings and shall open directly to the exterior, interior open space or to an open place of safety. Further, the provision or otherwise of alternative staircases shall be subject to the requirements of travel distance being complied with.

4.7 Doorways

4.7.1 Every exit doorway shall open into an enclosed stairway or a horizontal exit of a corridor or passageway providing continuous and protected means of egress.

27

China

Source: National Standard of the People's Republic of China
GB 50368-2005, Residential Building Code

China permits a single exit for multi-unit residential buildings up to 18 storeys in building height with a maximum floor area of 650m^2 per storey. A maximum travel distance of 15m from the dwelling unit door to the exit applies for buildings less than 10 storeys in height, which is shortened to a maximum travel distance of 10m for buildings between 10 and 18 storeys in height.

Available online for purchase only.
Description and translation provided in correspondence with a local architect.

Section 9
Translated excerpt from original:

9.5.1 Residential buildings shall be equipped with safety exits according to factors such as the fire resistance rating of the building, the number of floors, the building area, and the evacuation distance, and shall meet the following requirements:

1. For residential buildings with less than 10 floors, where the floor area of any storey of residential occupancy is greater than 650m2, or the distance from the door of any suite to the safety exit is greater than 15m, the number of exits on each floor of the residential building shall not be less than 2.

2. For residential buildings with 10 floors or more, but no more than 18 floors, where the floor area of any storey of the residential occupancy is greater than 650m2, or the distance from the door of any suite to the safety exit is greater than 10m, there should be no less than 2 safe exits.

3. For residential buildings with 19 floors or more, the number of safety exits on each floor of residential occupancy shall be not less than 2.

9．5．1 住宅建筑应根据建筑的耐火等级、建筑层数、建筑面积、疏散距离等因素设置安全出口，并应符合下列要求：

1 10层以下的住宅建筑，当住宅单元任一层的建筑面积大于650m2，或任一套房的户门至安全出口的距离大于15m时，该住宅单元每层的安全出口不应少于2个。

2 10层及10层以上但不超过18层的住宅建筑，当住宅单元任一层的建筑面积大于650m2，或任一套房的户门至安全出口的距离大于10m时，该住宅单元每层的安全出口不应少于2个。

3 19层及19层以上的住宅建筑，每个住宅单元每层的安全出口不应少于2个。

South Korea

Source: 건축법 시행령 - 제34조(직통계단의 설치) (2022)
[Building Law Enforcement Decree – Article 34 (Installation of Direct Stairs)] (2022)

South Korea does not set a maximum building height for multi-unit residential buildings with a single exit stair. The code limits single exit stair conditions only based on horizontal limits, including a maximum inhabited floor area of 300m^2 per storey and no more than 3 dwelling units per storey and travel distance limits. Article 35 requires the single exit stair to be a 'firefighting' stair (safe evacuation stair) for apartment buildings of 16 or more storeys.

Available online: https://www.law.go.kr/LSW/lsInfoP.do?efYd=20211102&lsiSeq=236629#0000
Description and translation provided in correspondence with a local architect.

Article 34 (Installation of Direct Stairs)
Translated excerpt from original:

In accordance with the standards prescribed by Ordinance of the Ministry of Land, Infrastructure and Transport, in a building whose use and scale for floors other than the evacuation floor fall under any of the following subparagraphs pursuant to Article 49 (1) of the Act, two or more direct stairs leading to the evacuation floor or the ground shall be installed:

3. A floor used for the purpose of an officetel (live/work dwelling unit) in an apartment building (excluding those with less than 4 households per floor) or business facilities, and the total floor area of the living room used for that purpose on that floor is 300 square meters or more;

□ 제34조(직통계단의 설치) ① 건축물의 피난층(직접 지상으로 통하는 출입구가 있는 층 및 제3항과 제4항에 따른 피난안전구역을 말한다. 이하 같다) 외의 층에서는 피난층 또는 지상으로 통하는 직통계단(경사로를 포함한다. 이하 같다)을 거실의 각 부분으로부터 계단(거실로부터 가장 가까운 거리에 있는 1개소의 계단을 말한다)에 이르는 보행거리가 30미터 이하가 되도록 설치해야 한다. 다만, 건축물(지하층에 설치하는 것으로서 바닥면적의 합계가 300제곱미터 이상인 공연장·집회장·관람장 및 전시장은 제외한다)의 주요구조부가 내화구조 또는 불연재료로 된 건축물은 그 보행거리가 50미터(층수가 16층 이상인 공동주택의 경우 16층 이상인 층에 대해서는 40미터) 이하가 되도록 설치할 수 있으며, 자동화 생산시설에 스프링클러 등 자동식 소화설비를 설치한 공장으로서 국토교통부령으로 정하는 공장인 경우에는 그 보행거리가 75미터(무인화 공장인 경우에는 100미터) 이하가 되도록 설치할 수 있다. 〈개정 2009. 7. 16., 2010. 2. 18., 2011. 12. 30., 2013. 3. 23., 2019. 8. 6., 2020. 10. 8.〉

② 법 제49조제1항에 따라 피난층 외의 층이 다음 각 호의 어느 하나에 해당하는 용도 및 규모의 건축물에는 국토교통부령으로 정하는 기준에 따라 피난층 또는 지상으로 통하는 직통계단을 2개소 이상 설치하여야 한다. 〈개정 2009. 7. 16., 2013. 3. 23., 2014. 3. 24., 2015. 9. 22., 2017. 2. 3.〉

1. 제2종 근린생활시설 중 공연장·종교집회장, 문화 및 집회시설(전시장 및 동·식물원은 제외한다), 종교시설, 위락시설 중 주점영업 또는 장례시설의 용도로 쓰는 층으로서 그 층에서 해당 용도로 쓰는 바닥면적의 합계가 200제곱미터(제2종 근린생활시설 중 공연장·종교집회장은 각각 300제곱미터) 이상인 것
2. 단독주택 중 다중주택·다가구주택, 제1종 근린생활시설 중 정신과의원(입원실이 있는 경우로 한정한다), 제2종 근린생활시설 중 인터넷컴퓨터게임시설제공업소(해당 용도로 쓰는 바닥면적의 합계가 300제곱미터 이상인 경우만 해당한다)·학원·독서실, 판매시설, 운수시설(여객용 시설만 해당한다), 의료시설(입원실이 없는 치과병원은 제외한다), 교육연구시설 중 학원, 노유자시설 중 아동 관련 시설·노인복지시설·장애인 거주시설(「장애인복지법」 제58조제1항제1호에 따른 장애인 거주시설 중 국토교통부령으로 정하는 시설을 말한다. 이하 같다) 및 「장애인복지법」 제58조제1항제4호에 따른 장애인 의료재활시설(이하 "장애인 의료재활시설"이라 한다), 수련시설 중 유스호스텔 또는 숙박시설의 용도로 쓰는 3층 이상의 층으로서 그 층의 해당 용도로 쓰는 거실의 바닥면적의 합계가 200제곱미터 이상인 것
3. 공동주택(층당 4세대 이하인 것은 제외한다) 또는 업무시설 중 오피스텔의 용도로 쓰는 층으로서 그 층의 해당 용도로 쓰는 거실의 바닥면적의 합계가 300제곱미터 이상인 것
4. 제1호부터 제3호까지의 용도로 쓰지 아니하는 3층 이상의 층으로서 그 층 거실의 바닥면적의 합계가 400제곱미터 이상인 것
5. 지하층으로서 그 층 거실의 바닥면적의 합계가 200제곱미터 이상인 것

③ 초고층 건축물에는 피난층 또는 지상으로 통하는 직통계단과 직접 연결되는 피난안전구역(건축물의 피난·안전을 위하여 건축물 중간층에 설치하는 대피공간을 말한다. 이하 같다)을 지상층으로부터 최대 30개 층마다 1개소 이상 설치하여야 한다. 〈신설 2009. 7. 16., 2011. 12. 30.〉

④ 준초고층 건축물에는 피난층 또는 지상으로 통하는 직통계단과 직접 연결되는 피난안전구역을 해당 건축물 전체 층수의 2분의 1에 해당하는 층으로부터 상하 5개층 이내에 1개소 이상 설치하여야 한다. 다만, 국토교통부령으로 정하는 기준에 따라 피난층 또는 지상으로 통하는 직통계단을 설치하는 경우에는 그러하지 아니하다. 〈신설 2011. 12. 30., 2013. 3. 23.〉

⑤ 제3항 및 제4항에 따른 피난안전구역의 규모와 설치기준은 국토교통부령으로 정한다. 〈신설 2009. 7. 16., 2011. 12. 30., 2013. 3. 23.〉

[전문개정 2008. 10. 29.]

Japan

Source: 建築申請・25-7_階段
[Building Application Memo 2020]

Japan permits a single exit for multi-unit residential buildings of up to 5 storeys in building height with a maximum floor area per storey of 200m2 for non-combustible construction and 100m2 for other/combustible construction. This applies equally for apartment buildings as well as hotels, boarding houses, dormitories and ryokans (traditional Japanese inns).

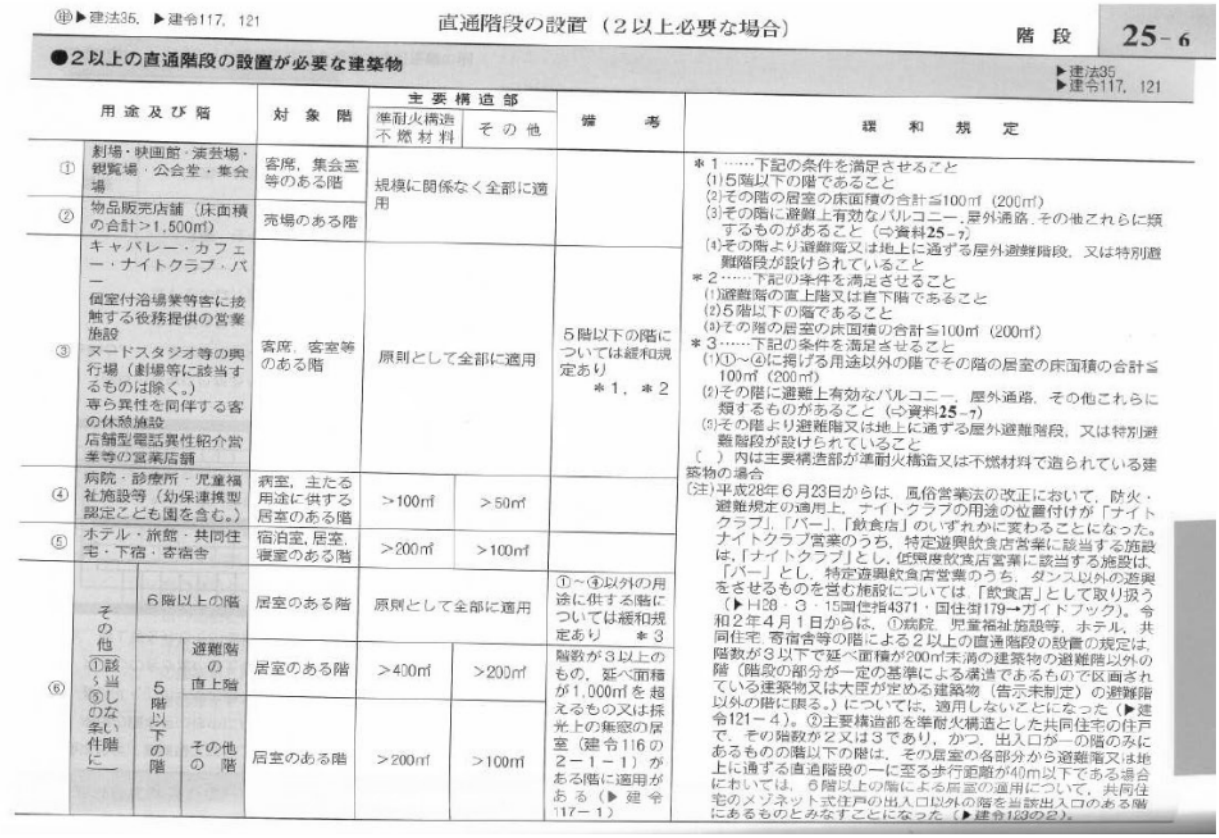
Description and translation provided in correspondence with a local architect.

Installation of direct stairs (where 2 or more are required)
Translated excerpt from original:

1 Satisfy the following conditions:
(1) Must be on the 5th floor or lower
(2) Total floor area of the living room on that floor is 100m2 (200m2)
(3) An exterior balcony or passageway is provided for evacuation, or a safe evacuation staircase.

Buildings that require the installation of two or more direct stairs:

Category 5. Hotels, Inns, Communal residences, boarding houses, dormitories	For non-combustible construction >200m2	For other construction >100m2



㊟▶建法35，▶建令117，121　直通階段の設置（2以上必要な場合）　階段　25－6

●2以上の直通階段の設置が必要な建築物　▶建法35 ▶建令117，121

	用途及び階			対象階	主要構造部 準耐火構造 不燃材料	主要構造部 その他	備考	緩和規定
①	劇場・映画館・演芸場・観覧場・公会堂・集会場			客席，集会室等のある階	規模に関係なく全部に適用			＊1……下記の条件を満足させること (1)5階以下の階であること (2)その階の居室の床面積の合計≦100㎡（200㎡） (3)その階に避難上有効なバルコニー，屋外通路，その他これらに類するものがあること（⇨資料25－7） (4)その階より避難階又は地上に通ずる屋外避難階段，又は特別避難階段が設けられていること ＊2……下記の条件を満足させること (1)避難階の直上階又は直下階であること (2)5階以下の階であること (3)その階の居室の床面積の合計≦100㎡（200㎡） ＊3……下記の条件を満足させること (1)①～④に掲げる用途以外の階でその階の居室の床面積の合計≦100㎡（200㎡） (2)その階に避難上有効なバルコニー，屋外通路，その他これらに類するものがあること（⇨資料25－7） (3)その階より避難階又は地上に通ずる屋外避難階段，又は特別避難階段が設けられていること （　）内は主要構造部が準耐火構造又は不燃材料で造られている建築物の場合 (注)平成28年6月23日からは，風俗営業法の改正において，防火・避難規定の適用上，ナイトクラブの用途の位置付けが「ナイトクラブ」，「バー」，「飲食店」のいずれかに変わることになった。ナイトクラブ営業のうち，特定遊興飲食店営業に該当する施設は，「ナイトクラブ」とし，低照度飲食店営業に該当する施設は，「バー」とし，特定遊興飲食店営業のうち，ダンス以外の遊興をさせるものを営む施設については，「飲食店」として取り扱う（▶H28・3・15国住指4371・国住街179→ガイドブック）。令和2年4月1日からは，①病院，児童福祉施設等，ホテル，共同住宅，寄宿舎等の階による2以上の直通階段の設置の規定は，階数が3以下で延べ面積が200㎡未満の建築物の避難階以外の階（階段の部分が一定の基準による構造であるもので区画されている建築物又は大臣が定める建築物（告示未制定）の避難階以外の階に限る。）については，適用しないことになった（▶建令121－4）。②主要構造部を準耐火構造とした共同住宅の住戸で，その階数が2又は3であり，かつ，出入口が一の階のみにあるものの階以下の階は，その居室の各部分から避難階又は地上に通ずる直通階段の一に至る歩行距離が40m以下である場合においては，5階以上の階による居室の適用について，共同住宅のメゾネット式住戸の出入口以外の階を当該出入口のある階にあるものとみなすことになった（▶建令123の2）。
②	物品販売店舗（床面積の合計＞1,500㎡）			売場のある階				
③	キャバレー・カフェー・ナイトクラブ・バー 個室付浴場業等客に接触する役務提供の営業施設 ヌードスタジオ等の興行場（劇場等に該当するものは除く。） 専ら異性を同伴する客の休憩施設 店舗型電話異性紹介営業等の営業店舗			客席，客室等のある階	原則として全部に適用		5階以下の階については緩和規定あり ＊1，＊2	
④	病院・診療所・児童福祉施設等（幼保連携型認定こども園を含む。）			病室，主たる用途に供する居室のある階	＞100㎡	＞50㎡		
⑤	ホテル・旅館・共同住宅・下宿・寄宿舎			宿泊室，居室，寝室のある階	＞200㎡	＞100㎡		
⑥	その他①該当しない⑤の条件に	6階以上の階		居室のある階	原則として全部に適用		①～④以外の用途に供する階については緩和規定あり ＊3	
		5階以下の階	避難階の直上階	居室のある階	＞400㎡	＞200㎡	階数が3以上のもの，延べ面積が1,000㎡を超えるもの又は採光上の無窓の居室（建令116の2－1－1）がある階に適用がある（▶建令117－1）	
			その他の階	居室のある階	＞200㎡	＞100㎡		

Code Change Request

Title	Part 3 – Single egress for multi-unit residential buildings up to 6 storeys	
Description	This request for change proposes additional sentences under NBC Div.B Section 3.4.2.1 to introduce single exit multi-unit residential buildings of up to six storeys, requiring additional life safety measures and placing limits on the occupant load and number of dwelling units per storey served by the single exit.	
Proponent	Conrad Speckert *LGA Architectural Partners*	David Hine *David Hine Engineering Inc.*
Submitted	2014-04-18	
Code Reference(s)	NBC Div. B – 3.4.2.1	
Standing Committee(s)	Use and Egress, Fire Protection	
Related CCR(s)	Part 9 – Single egress for multi-unit residential buildings up to 3 storeys	

Problem:

What is the problem? Why should the existing provision be revised, or if requesting an addition to the Code, what is missing?

The requirement for two means of egress in multi-unit residential buildings exceeding two storeys may be an outdated condition of pre-modern fire safety practices in combustible construction. The National Building Code of Canada is inconsistent with (and does not allow for the same design flexibility as) building codes in other jurisdictions and fails to recognize that a second egress may be unnecessary for mid-rise housing typologies where other life safety measures are provided.

By prohibiting single egress designs at this scale, the National Building Code limits the feasibility of buildings that are between low-rise single-family homes and high-rise apartment buildings. Making it difficult to build mid-rise housing prevents urban areas from developing more sustainable growth and increasing the balanced supply of housing with an expanded range of affordable options.

This code change request recognizes that the requirement for two means of egress is appropriate for larger buildings and non-residential occupancies. However, requiring a second egress is a prohibitive burden for smaller multi-unit residential projects, whereas one exit is permitted in many other jurisdictions:

- The United States model building allows for single exits in R-2 occupancies up to 3 storeys above grade with a maximum of 4 dwelling units per storey.
- The City of Seattle (SBC 2018: 1006.3.3.7 Single Exits) allows single exits in R-2 occupancies up to 6 storeys above grade with a maximum of 4 dwelling units per storey. New York City is similar with a maximum floor area per storey (NYC Building Code 2014: 1021.2.5 Single Exits).
- Australia (NCC 2015 Vol. 1: D1.2) requires two exits for residential buildings of more than 25m in height. New Zealand (C/AS2 - 3.13.1.) requires two exits for buildings above 25m in height if the building is sprinklered, and above 10m in height if the building is not sprinklered.
- The United Kingdom (Building Regulations 2010 – Fire Safety: Approved Document B) does not establish a maximum building height for single exit residential buildings, only a maximum occupant load of 60 people per storey and a maximum travel distance. In response to the Grenfell Tower inquiry, the Royal Institute of British Architects (RIBA) and London Fire Brigade have submitted a request for the further study of high-rise residential buildings with a single exit stair.
- Note: the supporting documentation to this code change request includes a jurisdictional scan of several building codes for the maximum allowable building height with a single egress.

This code change request falls within several of the CCBFC's strategic technical and policy priorities as a select fire and life safety topic and as a targeted topic. Accessibility is also addressed in terms of egressibility, the proposed life safety measures (particularly pressurization and better closures) improve the protection and fire safety for disabled occupants remaining in their suite during an emergency.

Single egress also indirectly addresses the priorities of climate change mitigation and adaptation, and energy-efficiency, given the improved building form factor, design flexibility for passive ventilation and daylighting, and the sustainable urban development benefit of single stair buildings. This CCR also relates to the priority of alterations to existing buildings in future code editions, for instance, as an opportunity for a five-storey apartment building with additional structural capacity to construct a sixth-storey addition provided the limitations and life safety measures of the proposed code change are met.

Requested change/addition:

What is the proposed solution and how does it address the problem?

Part 3 of the National Building Code should allow for a single means of egress in multi-unit residential buildings of up to 6 storeys above grade. See proposed life safety measures below and code wording on next page.

A related CCR will be submitted for Part 9.

The proposed code change includes reasonable limitations and additional life safety measures based on the acceptable solutions in the NBC, a review of building codes in other jurisdictions, as well as the attached reference literature and studies of fire safety in residential buildings:

- a total occupant load of 60 people on any storey served by the single exit, similar to 3.4.1.2.(2)
- no more than 4 dwelling units per storey, based on Seattle SBC 2018, 1006.3.3.7 Single Exits
- a maximum floor area of 150m^2 per dwelling unit, based on Table 3.4.2.1.-B
- Note: sprinklering is not a proposed measure for the Part 3 CCR, given the code already requires such buildings to be sprinklered throughout (NFPA 13-R up to 4 storeys, NFPA-13 exceeding 4 storeys, as required by 3.2.5.12.)
- requiring positive pressurization of the exit stair, based on the requirement for smoke control measures in high-rise buildings above 18m in building height (3.2.6.2. Limits to Smoke Movement and 3.2.6.6. Venting to Aid Firefighting) and based on the pressurization requirements of the Seattle SBC 2018, 1006.3.3.7.
- increased minimum fire-protection rating of dwelling unit entrance door closures from a 20 min rating to 45 min rating, similar to the closure ratings required by several European jurisdictions
- requiring a fire alarm system without exception, and requiring automatic monitoring of the fire alarm system in conformance with 3.2.4.7. Signals to Fire Department.

Additional life safety measures that may be appropriate to add:

- requiring sprinklering of balconies (based on Calder and Senez's 2016 study of "The Key Modes of Fire Spread in Wood-Framed Apartment Buildings, see attachments).

Proposed Wording in Part 3 – New Sentence in Section 3.4.2.1.

2025 National Building Code of Canada, Volume 1, Division B, Part 3

3.4.2. Number and Location of Exits from Floor Areas

3.4.2.1 Minimum Number of Exits

1) Except as permitted by Sentences (2) to (5), every *floor area* intended for *occupancy* shall be served by at least 2 *exits*.

2) A *floor area* in a *building* not more than 2 *storeys* in *building height*, is permitted to be served by one *exit* provided the total *occupant load* served by the *exit* is not more than 60, and

a) in a *floor area* that is not *sprinklered* throughout, the *floor area* and the travel distance are not more than the values in Table 3.4.2.1.-A, or

b) in a *floor area* that is *sprinklered* throughout

i) the travel distance is not more than 25 m, and

ii) the *floor area* is not more than the value in Table 3.4.2.1.-B.

3) Except as permitted by Sentence (4), if Sentence (2) permits a single *exit* from a *floor area* classified as Group B or Group C *occupancy*, the *exit* shall be an exterior doorway not more than 1.5 m above adjacent ground level.

4) The requirements of Sentences (1) and (2) are permitted to be waived for *dwelling units* that have an *access to exit* conforming to Sentences 3.3.4.4.(1) to (4).

5) A *floor area* classified as Group C *occupancy* in a *building* not more than 6 *storeys* in *building height* is permitted to be served by a single *exit* provided the total *occupant load* on any storey served by the *exit* is not more than 60, and

a) there shall be no more than four *dwelling units* on any storey *served* by the *exit* and the *floor area* of each *dwelling unit* does not exceed 150m^2,

b) the *building* is sprinklered throughout,

c) unless an exterior stairway is provided, an interior stairway including any related *exit* passageway or *public corridor* shall be pressurized and designed in accordance with Article 3.2.6.2 to limit the danger to occupants and firefighters from exposure to smoke in a building fire,

d) openings in required *fire separations* shall be protected with a *closure* with a *fire-protection rating* of not less than 45 min and shall be installed in conformance with Chapters 2 to 14 of NFPA 80 “Standard for Fire Doors and Other Opening Protectives”,

e) a fire alarm system is provided without exception (See 3.2.4.1. Determination of Requirement for a Fire Alarm System), and the fire alarm system is designed to notify the fire department that an alarm signal has been initiated (See 3.2.4.7. Signals to Fire Department),

f) the *floor area* classified as Group C *occupancy* served by a single *exit* is not intended for use as a retirement home.

6) *Exits* are not required directly from rooftop enclosures that are provided with *access to exits* in conformance with Sentences 3.3.1.3.(5) and (6).

References to Sentence 3.4.2.1.(5) are to be added as Exceptions in the following conflicting Sentences:

3.3.1.3. Means of Egress

9) Except as permitted by this Section and by Sentence 3.4.2.1.(2) and (5), at the point where a doorway referred to in Sentence (8) opens onto a public corridor or exterior passageway, it shall be possible to go in opposite directions to each of 2 separate exits.

3.3.4.4. Egress from Dwelling Units

6) Except as provided in Sentence 3.4.2.1.(5), if a dwelling unit has a second and separate means of egress, one means of egress from a dwelling unit is permitted to pass through

a) an interior corridor served by a single exit,
b) an exterior balcony served by a single exit stairway, or
c) an exterior passageway served by a single exit stairway.

Objective(s):

Which of the stated objectives and functional statements of the Code will the proposed solution assist in achieving?

The Functional Statement and Objective attributions to existing sentences may not have to be changed. The attributions to the new Article being introduced may be made up of the following selection, which is consistent with the code provisions the CCR complements:

2015 NBC Div. A Part 2 - Objective Statements

OS Safety
An objective of this Code is to limit the probability that, as a result of the design, construction or demolition of the building, a person in or adjacent to the building will be exposed to an unacceptable risk of injury.

OS1 - Fire Safety
An objective of this Code is to limit the probability that, as a result of the design or construction of the building, a person in or adjacent to the building will be exposed to an unacceptable risk of injury due to fire. The risks of injury due to fire addressed in this Code are those caused by—

OS1.2 - fire or explosion impacting areas beyond its point of origin

OS1.5 - persons being delayed in or impeded from moving to a safe place during a fire emergency

OS3 - Safety in Use
An objective of this Code is to limit the probability that, as a result of the design or construction of the building, a person in or adjacent to the building will be exposed to an unacceptable risk of injury due to hazards. The risks of injury due to hazards addressed in this Code are those caused by—

OS3.7 - persons being delayed in or impeded from moving to a safe place during an emergency

2015 NBC Div. A Part 3 - Functional Statements

F02 To limit the severity and effects of fire or explosions.

F03 To retard the effects of fire on areas beyond its point of origin.

F05 To retard the effects of fire on emergency egress facilities.

F06 To retard the effects of fire on facilities for notification, suppression and emergency response.

F10 To facilitate the timely movement of persons to a safe place in an emergency.

F11 To notify persons, in a timely manner, of the need to take action in an emergency.

F12 To facilitate emergency response.

F13 To notify emergency responders, in a timely manner, of the need to take action in an emergency.

Impact Analysis:

What are the cost/benefit implications? Will the change entail any added costs? Will it provide benefits that are measurable?

The benefits in efficiency, cost and improved livability for a single egress building significantly outweigh the cost of the additional life safety measures. The proposed code change offers the measurable benefit of increased floor area efficiency and reduced hard construction costs for mid-rise housing types, as well as making such buildings feasible on smaller properties.

The proposed code change also has additional benefits for the environmental, spatial, and social quality of multi-unit residential buildings, such benefits include:

- making it easier for dwelling units to receive natural daylight from both sides as “through units”,
- allowing for cross-ventilated dwelling units rather than the deep, single-orientation layouts typical of double-loaded corridor buildings requiring two means of egress,
- balancing the exposure of each dwelling unit to urban and traffic noise, such that bedrooms can be placed on the quiet side and living areas along the street facing side of the building,
- making it easier to design larger, family-oriented dwelling units with three to four bedrooms, and
- improving the sense of community and social interaction in an apartment building by decreasing the number of dwelling units sharing an exit.

The proposed code change does not result in additional costs compared to buildings adhering to the existing acceptable solutions requirement for two means of egress. The proposed code change enables the alternative of a single stair design, with limitations on the building size and requirements for additional life safety measures to compensate for providing one exit. This additional design flexibility may be cost neutral or, in some cases, lead to cost savings. It may also bring buildings back into feasibility on smaller sites where the lot size does not accommodate a design complying with the second egress requirement.

Enforcement Implications:

What are the enforcement implications? Can the requested change be enforced by the infrastructure available to enforce this Code? Will its enforcement require an increase in resources?

The proposed code change can be enforced within the current enforcement framework of design review and permit approvals, as well as the administrative requirements for evacuation plans.

Additional Comments:

This code change request is being submitted in response to the official correspondence on March 31, 2022, from the Ontario MMAH (Ministry of Municipal Affairs and Housing) requesting the CCBFC to prioritize a code change to allow for “a single means of egress in some residential buildings as a Building Code change that could enable the construction of more gentle density and multi-unit housing.”

In January 2022, several architects, planners and developers co-signed a letter sent to the Ontario Housing Affordability Task Force recommending a building code change to “permit residential buildings of up to six storeys with a single exit stair” with additional life safety measures.

This code change request has been prepared by Conrad Speckert, an architectural designer at LGA Architectural Partners in Toronto, ON with the support of building code expert David Hine of David Hine Engineering. The code change request and related research is funded by the DIALOG Architects 2021 Michael Evamy Scholarship and a CMHC-SSHRC Collaborative Housing Research Network, Balanced Supply of Housing Node grant under the supervision of Prof. Nik Luka at McGill University.

The proponent is willing to provide a presentation and is willing to provide additional supporting documentation and information.

Supporting Documentation (attached):

1. “Ontario MMAH – Single Egress.” Correspondence with CCBFC. March 31, 2022.
2. “Re: Building Code Change to Enable Single Stair Residential Buildings up to Six Storeys.” Letter to the Ontario Housing Affordability Task Force. January 27, 2022.
3. Jurisdictional Scan: Maximum Allowable Building Height with Single Egress for Multi-Unit Residential Occupancies. April 2022. Prepared by proponent.
    - United States - 2015 International Building Code, Chapter 10: Means of Egress
        - City of Seattle - 2018 Seattle Building Code, Chapter 10: Means of Egress
        - New York City - NYC Building Code 2014, Chapter 10: Means of Egress
    - Australia - NCC 2015 Building Code of Australia Vol. 1
    - New Zealand - C/AS2 Acceptable Solutions for Buildings other than Risk Group SH (2020)
    - United Kingdom - Building Regulations 2010, Fire Safety, Approved Document B, Volume 2
    - Ireland - Building Regulations 2006, Technical Guidance Document B, Fire Safety
    - Sweden - Boverket BBR, (English) BFS 2011:6 (2018)
    - Denmark (Danish original) - *Bygningsreglementets vejledning til kapitel 5 - Brand, Bilag 2 (2021)*
    - Norway (Norwegian original) - *Byggteknisk forskrift (TEK17)*
    - France (French original) - *Code de la construction et de l'habitation (2021)*
    - Belgium (Dutch original) - *Basisnormen voor de Preventie van Brand en Ontploffing (2016)*
    - Netherlands (Dutch original) - *Bouwbesluit 2012* [Draft Building Decree 2012]
    - Germany (German original) - *Muster-Hochhaus-Richtlinie, MHHR 2008*
    - Switzerland (German original) - *Brandschutzrichtlinie 2017, 16-15 Flucht- und Rettungswege*
    - Austria (German original) - *OIB Richtlinie 2.3* (2019)
    - Poland (Polish original) - *Rozporządzenie Ministra Infrastruktury w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie (2002)*
    - Italy (Italian original) - *D.M. N. 246 del 16/05/1987 - Norme di sicurezza antincendi per gli edifici di civile abitazione (October 2020)*
    - Spain (Spanish original) - *Código Técnico de la Edificación, DB-SI Seguridad en caso de Incendio (2019)*
    - Kenya - Building Code of the Republic of Kenya (2009 Edition) (English)
    - South Africa - SANS 10400-T: Fire Protection (2011)
    - United Arab Emirates - UAE Fire & Life Safety Code of Practice, 2011 Edition
    - India - National Building Code of India 2005
    - China (Chinese original) - GB 50368-2005, Residential Building Code
    - South Korea - 건축법 시행령 - 제34조(직통계단의 설치) (2022) [Building Law Enforcement Decree]
    - Japan - 建築申請・25-7_階段 (2020) [Building Application Memo 2020]
4. Case Study Plans: Examples of Single Exit Stair Multi-unit Residential Buildings in other Jurisdictions. April 2022. Prepared by proponent.

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RE: UDI Letter regarding BC Hydro distribution challenges

From: May, Zachary HOUS:EX
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>, Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>, Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Sent: April 28, 2023 2:12:53 PM PDT
Attachments: image001.png, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg

We have been tracking the BC Hydro commitments on this file through the Energy Step Code Council. Happy to share the details if anyone is interested.

As noted in the letter, we are working on the development of a best practices guide for local governments that would advise them to consult with BC Hydro as they plan for voluntary adoption of zero carbon (e.g. all electric) requirements. Victoria and Saanich have recently adopted zero carbon requirements, although I'm not sure what kind of engagement they may have had with BC Hydro.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, April 28, 2023 9:33 AM
To: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: FW: UDI Letter regarding BC Hydro distribution challenges

info

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, April 27, 2023 3:08 PM
To: Minister, HOUS HOUS:EX <HOUS.minister@gov.bc.ca>
Cc: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter regarding BC Hydro distribution challenges

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Minister Kahlon,

In previous discussions we have raised some of our concerns regarding BC Hydro's distribution capacity delaying new housing. Further to those discussions, we've written to Minister Osborne to seek a meeting and outline our concerns. We've attached that letter for your reference.

Regards,
Cassandra

Cassandra Smith
Director, Policy and Research
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



FW: UDI Letter regarding BC Hydro distribution challenges

From: Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
To: Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: April 28, 2023 3:09:54 PM PDT
Attachments: image003.jpg, image005.jpg, image007.jpg, image008.png, image006.jpg, image004.jpg, 2023-04-26 UDI Letter - EMLI.pdf

For your interest

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, April 28, 2023 9:33 AM
To: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: FW: UDI Letter regarding BC Hydro distribution challenges

info

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

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From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, April 27, 2023 3:08 PM
To: Minister, HOUS HOUS:EX <HOUS.minister@gov.bc.ca>
Cc: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>
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Cassandra

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Director, Policy and Research
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

FYI: CleanBC Building Code commitments for new buildings

From: May, Zachary HOUS:EX
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>, Clay GCPE:EX Suddaby (Clay.Suddaby@gov.bc.ca) <Clay.Suddaby@gov.bc.ca>
Sent: April 28, 2023 4:08:48 PM PDT

Hi Bindi and Clay,

The ENV GCPE team is planning on putting out a news release on Monday related to the new Zero Carbon Step Code requirements in the BC Building Code.

This will likely get picked up and shared widely within the sustainability community. This is the most ambitious and detailed zero carbon regulation for new buildings in Canada (and arguably North America), and builds on BC's internationally recognized leadership with the BC Energy Step Code.

This news may also receive some less favourable responses from those who see new regulations as a potential barrier to new housing, especially coming less than a month after the release of the new housing strategy. This does relate to some of the recent correspondence from UDI related to BC Hydro's capacity to support new developments.

No action needed. Please reach out if need any further info.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Wong, Hugo HOUS:EX
Sent: Tuesday, April 25, 2023 12:28 PM
To: Lowe, Sonia GCPE:EX <Sonia.Lowe@gov.bc.ca>
Cc: Borghese, Matthew GCPE:EX <Matthew.Borghese@gov.bc.ca>
Subject: RE: CleanBC Building Code commitments for new buildings

Hi all,

The attached is a draft of a website update we want to do which should answer some key questions for you. It's not quite finished, but enough to get started.

Hugo

From: Lowe, Sonia GCPE:EX <Sonia.Lowe@gov.bc.ca>
Sent: Tuesday, April 25, 2023 9:48 AM
To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Cc: Borghese, Matthew GCPE:EX <Matthew.Borghese@gov.bc.ca>
Subject: FW: CleanBC Building Code commitments for new buildings

Hi Hugo,
Travis forwarded me your email, we (ENV GCPE) will be writing a short news release to go out to announce the upcoming May 1st CleanBC Building Code commitments for new buildings.

Do you have any Q&As prepared on the ministry side that you could share that would better help me draft the NR?
I will also send the draft your way in advance for review as well.

Thanks,
Sonia

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Friday, April 21, 2023 12:13 PM
To: Lowe, Sonia GCPE:EX <Sonia.Lowe@gov.bc.ca>; XT:Borghese, Matt GCPE:IN <mborghese@bchousing.org>
Subject: FW: CleanBC Building Code commitments for new buildings

Hi
Here's all that I had shared with me, as well as Hugo Wong as a contact.
I think Hugo is quite on top of it.
Happy to help track down anything specific you can think of.
Travis

From: Sawchuk, Bindi OHCS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: February 10, 2023 12:48 PM
To: Hewitt, Jeremy ENV:EX <Jeremy.Hewitt@gov.bc.ca>; MacLaren, Les EMLI:EX <Les.MacLaren@gov.bc.ca>
Cc: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Gosman, Nat EMLI:EX <Nathaniel.Gosman@gov.bc.ca>; Gilmore, Christopher ENV:EX <Christopher.Gilmore@gov.bc.ca>
Subject: CleanBC Building Code commitments for new buildings

Hello Jeremy and Les,

I wanted to let you know that Minister Kahlon has signed the regulation to update the BC Building Code with a 20% improvement in energy efficiency and a voluntary carbon pollution standard for new buildings. The regulation will be official when published in the Gazette next Thursday, and has an effective date of May 1, 2023. We are working with GCPE to prepare Q&As for the Minister and email communication to stakeholders.

If you have any specific questions, please reach out to Zachary May.

Have a great weekend!

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

RE: UDI Pre-Event Meeting Minutes & Attendee List

From: May, Zachary HOUS:EX
To: Verna Yu <vyu@udi.org>, Roberto Pecora <roberto@zebx.org>, Sheryl Peters <speters@bchousing.org>, Sampliner, Laura <LSampliner@coquitlam.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Sent: April 30, 2023 10:22:30 PM PDT
Attachments: image001.png, image003.jpg, image005.jpg, image006.jpg, image002.jpg, image004.jpg, UDI 2 May 2023 Step Code Seminar.pptx

Sorry for the delay. Slides attached.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Tuesday, April 25, 2023 5:46 PM
To: 'Roberto Pecora' <roberto@zebx.org>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sheryl Peters <speters@bchousing.org>; 'Sampliner, Laura' <LSampliner@coquitlam.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: UDI Pre-Event Meeting Minutes & Attendee List

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Everyone,

It was great seeing you all this afternoon. Further to our conversation, I have attached a our current attendee list for your reference on the participant demographics and a copy of the event run down for Tuesday.

You will be able to share your screen for your presentations, but we would appreciate a copy by the end of the week as back-up.

Post-event, we will be sending an email out to all participants registered with a copy of your slides, presentation, and resource links. If there are key resource and information you would like to share with the participants, please forward them to me and I will incorporate that into our email after the event.

Thank you all once again! Please let me know if you have any questions.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
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Web: udi.bc.ca

Cleaner, More Energy Efficient New Buildings

Zachary May, Executive Director
Building and Safety Standards Branch
May 2, 2023

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

ZERO CARBON STEPCODE

Agenda

- **New** Energy Efficiency requirements
- **New** voluntary Zero Carbon Step Code
- National Building Code / National Energy Code

Energy Efficiency in the BC Building Code

Timeline for Energy Efficiency Regulatory Requirements in the BC Building Code

Here's what the province's CleanBC plan will mean for new-construction requirements.

	PART 9 BUILDINGS	PART 3 BUILDINGS	NET-ZERO ENERGY-READY UP TO:
2032	STEP 5	STEP 4	80%
2027*	STEP 4	STEP 3	40%
May 1, 2023	STEP 3	STEP 2	20%

*NEW TARGET DEADLINES

Energy-efficiency improvement above 2018 BC Building Code requirements

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

Energy Step Code

- Most new housing is already building to the May 1, 2023 requirements.
- Local Governments can still require any available energy efficiency step.


ZERO CARBON
STEPCODE

Zero Carbon in the BC Building Code

"**By 2030, all new buildings will be zero carbon**, and all new space and water heating equipment will meet the highest standards for efficiency."

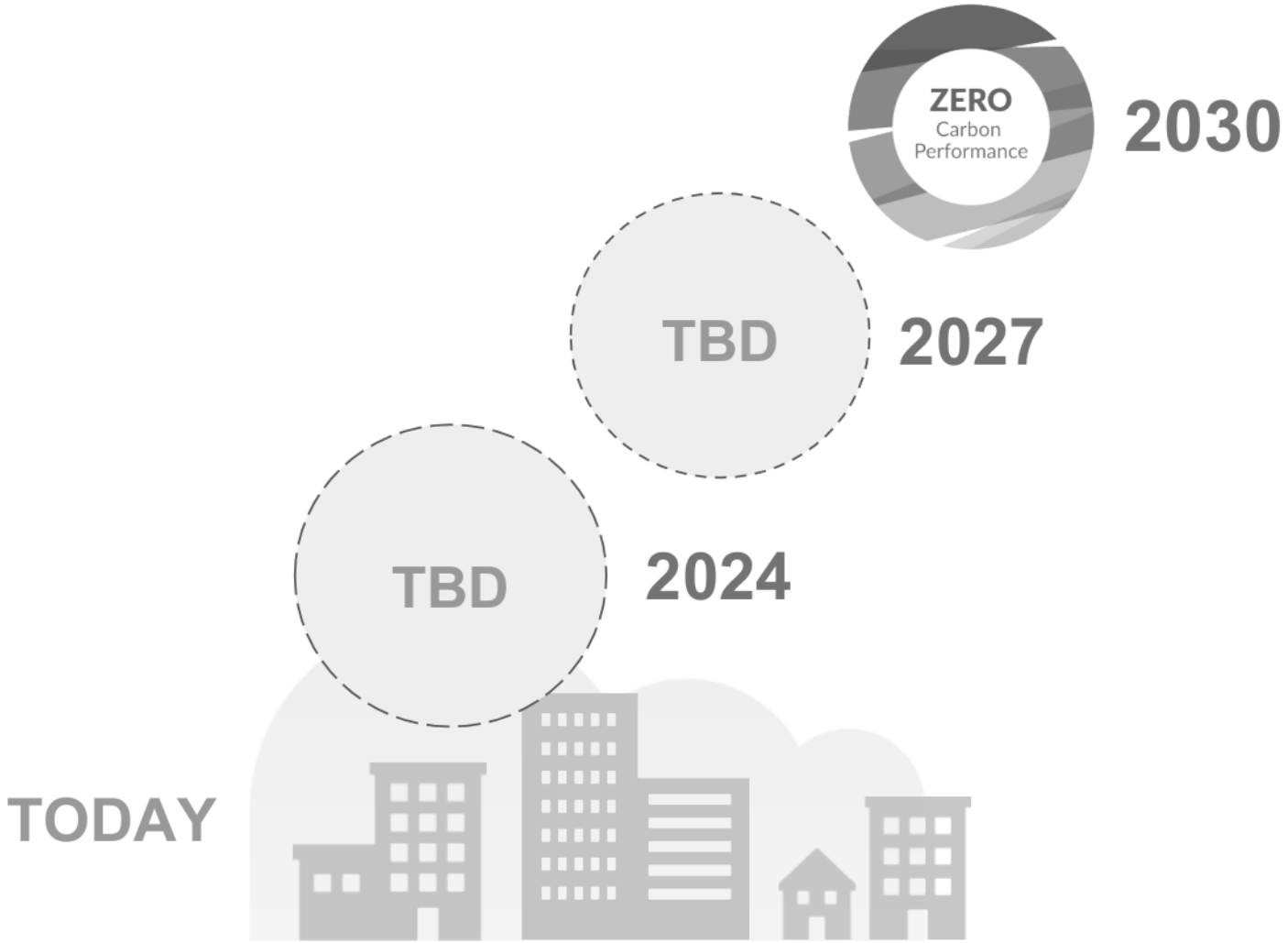
– CleanBC Roadmap to 2030



ZERO CARBON STEPCODE

➡ Effective May 1, 2023

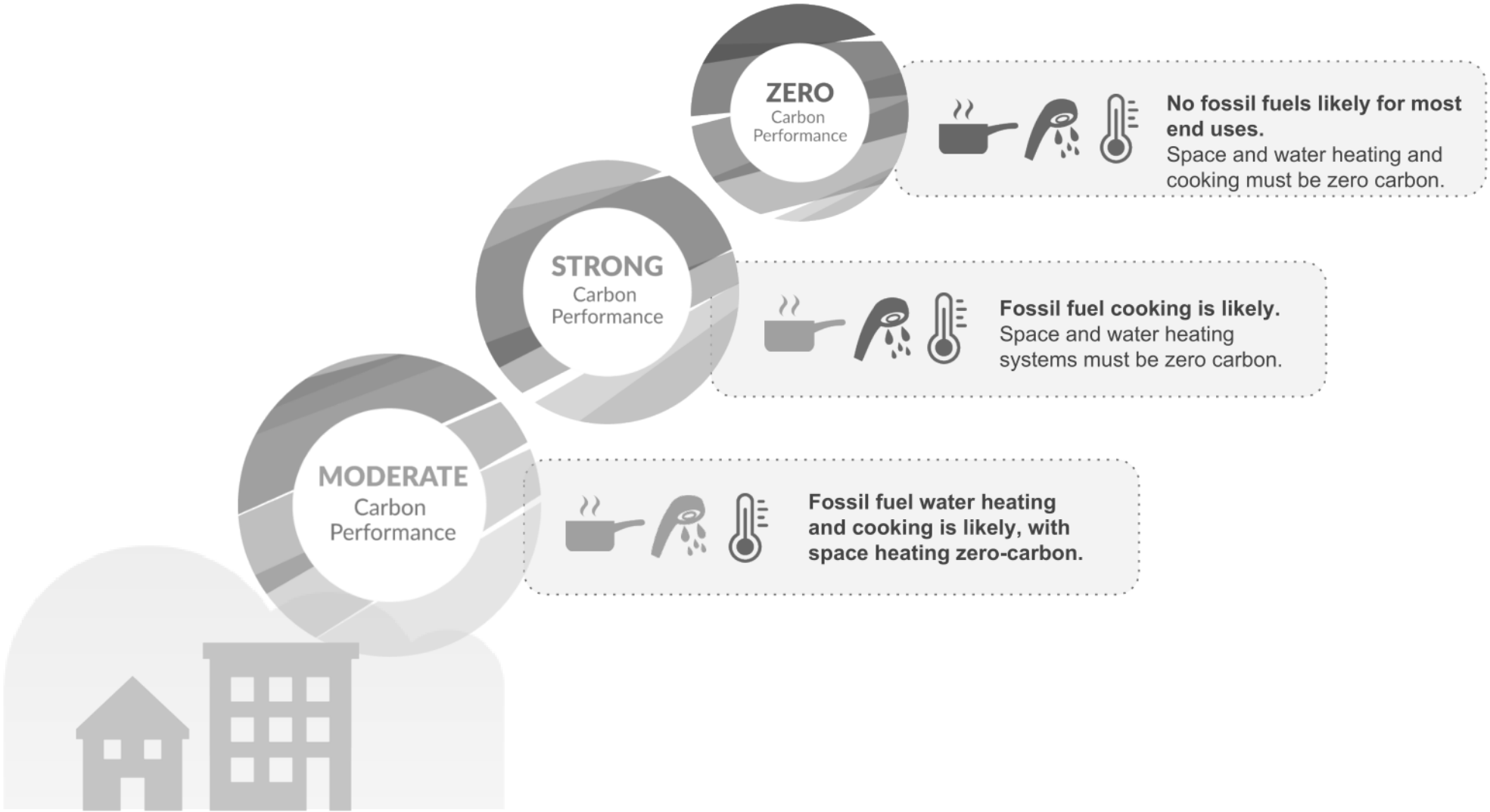
Provincial Pathway: Stepping up to 2030



Mandatory Carbon Limits: Stepping up to 2030



Likely <u>outcomes</u> for Part 3 buildings



Energy and Zero Carbon Step Code

- The Zero Carbon Step Code is voluntary, except when specifically required by local governments.
- Local governments can require any available zero carbon step, above the minimum.

National Codes Harmonization

- National Codes now include ‘tiered’ energy codes, based on the BC Energy Step Code.
- National Codes are developing zero carbon requirements, with input from BC.



Thank you!

ZERO CARBON STEPCODE

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15

Reminder: UDI Webinar: Zero Carbon Step Code & BC Energy Step Code - Changes You Need to Know starts in 1 day

From: Zoom <no-reply@zoom.us>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: May 1, 2023 10:13:50 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary May,

This is a reminder that your webinar will begin in 1 day:

UDI Webinar: Zero Carbon Step Code & BC Energy Step Code - Changes You Need to Know

Date & Time May 2, 2023 09:30 AM Vancouver

Webinar ID s.15

Add to: Google Calendar | Outlook Calendar(.ICS) | Yahoo Calendar

You can cancel your registration at any time.

Please submit any questions to: vyu@udi.org

Thank you!

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San Jose, CA 95113

RE: UDI Pre-Event Meeting Minutes & Attendee List

From: Verna Yu <vyu@udi.org>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: May 1, 2023 11:02:38 AM PDT
Attachments: image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Zach!

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: April 30, 2023 10:23 PM
To: Verna Yu <vyu@udi.org>; 'Roberto Pecora' <roberto@zebx.org>; Sheryl Peters <speters@bchousing.org>; 'Sampliner, Laura' <LSampliner@coquitlam.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: UDI Pre-Event Meeting Minutes & Attendee List

Sorry for the delay. Slides attached.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Verna Yu <vyu@udi.org>
Sent: Tuesday, April 25, 2023 5:46 PM
To: 'Roberto Pecora' <roberto@zebx.org>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sheryl Peters <speters@bchousing.org>; 'Sampliner, Laura' <LSampliner@coquitlam.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: UDI Pre-Event Meeting Minutes & Attendee List

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Everyone,

It was great seeing you all this afternoon. Further to our conversation, I have attached a our current attendee list for your reference on the participant demographics and a copy of the event run down for Tuesday.

You will be able to share your screen for your presentations, but we would appreciate a copy by the end of the week as back-up.

Post-event, we will be sending an email out to all participants registered with a copy of your slides, presentation, and resource links. If there are key resource and information you would like to share with the participants, please forward them to me and I will incorporate that into our email after the event.

Thank you all once again! Please let me know if you have any questions.

Kind regards,
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct:604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office:604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



RE: BSSB presentation to UDI - May 2

From: Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>
To: Verna Yu <vyu@udi.org>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: May 1, 2023 11:37:01 AM PDT

Great. Thanks Verna.

From: Verna Yu <vyu@udi.org>
Sent: Monday, May 1, 2023 11:07 AM
To: Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: BSSB presentation to UDI - May 2

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Scott,

Thank you for letting me know. I will send you a separate link for your login tomorrow morning.

Cheers,
Verna

From: Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>
Sent: May 1, 2023 10:53 AM
To: Verna Yu <vyu@udi.org>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: BSSB presentation to UDI - May 2

Hi Verna,

I will be attending tomorrow's presentation to UDI to provide any technical support to Zac as needed.
Attached is the invite provided to Zac, which he forwarded to me.

Given that Zac is a panelist, will this link work for me too?

Thanks,

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15

FW: 2023 Codes Public Review - MRK/PSRR Briefing Summary

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>
Sent: May 9, 2023 12:57:32 PM PDT

We have a new, sooner date for PR

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Tuesday, May 9, 2023 12:46 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: 2023 Codes Public Review - MRK/PSRR Briefing Summary

Super, thank you!

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, May 9, 2023 12:43 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: 2023 Codes Public Review - MRK/PSRR Briefing Summary

Next steps:

- BSSB to launch public review week of May 15th
- BSSB to work with PS Chant to engage with Stephanie Cadieux and support PS Chant presentation of proposed changes to a June 2 meeting of the Provincial Accessibility Committee
- Minister Kahlon to provide an update on key code changes to Cabinet Committee on Economy at the next opportunity
    - Public Review of proposed code changes does not need to wait for this presentation

Accessibility:

- Briefing note has been updated in eapprovals to include key decisions on accessibility: 70735 - 57976 MIN IBN Status update on the public review of proposed BC Building Code changes
    - Elevators – only required in large (Part 3) buildings
        - Harmonized with 2020 National Building Code (NBC)
        - No BC variation on elevators
    - Adaptable dwelling units
        - 100% of dwelling units to be adaptable in large buildings where elevators and accessible path of travel is required
        - Single storey ground level units required to be adaptable in all buildings
        - 2-3 storey SSMUD buildings are **not** required to be adaptable, even when a shared hallway is provided
        - **All residential suites in all building types** will need a wider entry door and backing for handrails in the bathrooms

Seismic:

- Proposed changes to the 2023 BC Building Code will be reviewed in detail by representatives from Engineers and Geoscientists of BC, UDI, the Architectural Institute of BC, and other key stakeholders to fully understand the design implications of the new seismic risk factors
- This group of stakeholders will provide input on updating design guidelines for building 4-6 storey wood frame buildings in high seismic zones

BC Builds / Lisa Helps:

- Through recent engagement with Lisa Helps, a possible opportunity to add 'pre-approved designs' to the 4-6 storey design guidelines was identified
    - BSSB will ask the committee to determine if pre-approved designs would be a useful addition to the design guidelines
    - BSSB has agreed to report back to Lisa Helps in the summer

Best,

Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Stakeholder List

From:	Scott, Cory HOUS:EX <Cory.Scott@gov.bc.ca>
To:	May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc:	Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>, King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent:	May 11, 2023 10:32:39 AM PDT
Attachments:	34 - OHCS Stakeholder List.docx

Hi Zac,

I understand at Exec Leads today that Bindi asked for a list of Stakeholders for our Division, and you mentioned we had a recent list on the LAN. Can you have a look at the attached and tell me if this is what you were referring to? It's the best I can find but hoping you may be able to confirm with a quick peak?

Thank you!
Cory

Cory Scott | Documents Coordinator
Assistant Deputy Minister Bindi Sawchuk
Housing & Land Use Policy Division
Ministry of Housing
Ph: 778-405-3465 Email: Cory.Scott@gov.bc.ca

Ministry of Housing
Key Stakeholders

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Planning Institute of British Columbia	Lesley Cabott Board President 604.696.5031 info@pibc.bc.ca Dave Crossley Executive Director 604.696.5031 Ext 102 dave.crossley@pibc.bc.ca	Professional association of planners in British Columbia and the Yukon. PIBC is the westernmost affiliate of the Canadian Institute of Planners	• Development approvals and other land use planning issues related to construction standards and housing supply
OHCS	Urban Development Institute	John Stovell Chair 604-669-9585 anicholls@udi.org ; (UDI main desk) Anne McMullin, President & CEO Jeff Fisher Vice President & Senior Policy Advisor jfisher@udi.org 604- 661- 3031	UDI is an association of the development industry (including land planning) and its related professions. With an aim of fostering communication between industry, government and the public, UDI serves as the voice of the real estate development industry with government.	• Development approvals and other land use planning issues related to construction standards and housing supply • Required contributions to Contingency Reserve Funds for strata developments. • Implementation of Climate, Carbon, and Energy Policy

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Northern Development Initiative Trust	Margo Wagner Board Chair 250-561-2525 info@northerndevelopment.bc.ca Joel McKay CEO 250-561-2525 joel@northerndevelopment.bc.ca	A non-profit corporation that stimulates economic growth through investments in grassroots, community-led projects.	• Delivers Northern Healthy Communities Fund (LNG impacts mitigation)
OHCS	British Columbia Association of Aboriginal Friendship Centres (BCAAFC)	Leslie Varley Executive Director LVarley@bcaafc.com Mobile: 250-893-0494 Office: 250-388-5522 ext 202 http://www.mfa.bc.ca/	The BCAAFC is funded through the CGG program to provide support to aboriginal not-for-profits that wish to apply for CGGs and to build the required skill sets in aboriginal organizations to facilitate successful applications for grants. The organization also provides input to the CGG Branch regarding policy and outreach. Works with Friendship Centres, partner organizations, and government institutions to develop and improve resources that support the health, wellness, and prosperity of urban Indigenous people and communities.	• The BCAAFC has been a strong partner for the CGG Branch and has assisted in the facilitation of grants for aboriginal organizations for many years. • The organization also supports the Indigenous Sport, Physical Activity and Recreation Partners Council (formerly Aboriginal Sports, Recreation and Physical Activity Partners Council) • Housing and social supports for urban Indigenous people.

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Local Government Management Association (LGMA)	Candace Witkowskyj Executive Director 250.383.7032 Ext. 223 cwitkowskyj@lgma.ca office@lgma.ca	Represents non-elected local government officials within the province. Strives to promote professional management and leadership excellence in local government, and to create awareness of the local government administrator's role in the community. Supports local government through education, training, professional development, and networking.	• Matters affecting local government administrators with particular focus on education and training and concerns about good governance of local governments in the province (e.g. codes of conduct; elected-staff relations; local government procedures). • Supports implementation of building official qualifications

OHCS	Union of British Columbia Municipalities (UBCM)	Councillor Laurey-Anne Roodenburg, President (from City of Quesnel)
		l_roodenburg@yahoo.ca
		250. 255-5394
		
		Gary MacIsaac, Executive Director
		gmacisaac@ubcm.ca
		604. 270.8226 ext 105 (Vancouver)
		250. 356.2956 (Victoria)
			The UBCM was formed in 1905 to provide a common voice for local government. The annual UBCM Convention is the main forum for UBCM policymaking, and policy resolutions passed at Convention are communicated to Government for response. Housing Policy and Building and Safety Standards branches respond to UBCM resolutions, participate in meetings with local governments and deliver presentations.	Complete range of issues related to local government / provincial interactions such as:
				• Consultation (statutorily required on certain legislative changes)
				• Education:
				  ○ Board of Examiners LG scholarship program
				• Green Communities Committee
				  ○ Joint UBCM-MAH initiative
				• Provincial / UBCM working groups.
				• Provincial program administration.

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Aboriginal Housing Management Association (AHMA)	Margaret Pfoh, CEO mpfoh@ahma-bc.org 604-921-2462	AHMA is a provincially-funded organization composed of 57 Members that provide low-income Indigenous Housing off-reserve.	To lead and advance the housing rights of all Indigenous people living off-reserve in urban, rural and northern communities across BC. Actively lobbying the Minister for a broader mandate.
OHCS	First Nation Housing and Infrastructure Council	Joseph Wabegijig, Executive Director executive.director@fnhic-bc.ca 604-259-2929	The FNHIC-BC was established in 2017 by the First Nation Leadership Council to develop an authority for housing and infrastructure program delivery on-reserves across BC, and to deliver associated services.	Devolution of federal services and programs such as CMHC and capital funding for Indigenous housing on-reserve. Implementing provincial building policy on reserve (for both Treaty and non-Treaty First Nations).
OHCS	Metis Nation BC	Bailey Mumford, Senior Director, Ministry of Housing and Homelessness	OHCS	Metis Nation BC

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	BC Housing (BCH)	Vincent Tong, Acting CEO vtong@bchousing.org Mobile: (778) 222-3706 Michelle Hayes A/Executive Director and Registrar, Licensing and Consumer Services mhayes@bchousing.org Office: +1 (604) 646-7062	Crown agency that works in partnership with the private and non-profit sectors, provincial health authorities and ministries, other levels of government and community groups to develop a range of housing options. Primary contact for Indigenous housing development and programs.	Set via mandate letter from government Provided input for the Existing Buildings Renewal Strategy.
OHCS	BC Non-Profit Housing Association (BCNPHA)	Jill Atkey, CEO jill@bcnpha.ca Mobile: 778-867-8159 Work: 778-945-2155 Name: Marika Albert Title: Policy Director Phone: 778 945-2164 Email: marika@bcnpha.ca	Umbrella organization representing BC's non-profit housing sector (alongside AHMA & CHF BC), responsible for education, advocacy and research.	Part of RTB's operational stakeholder group that meets quarterly. Provided input for the Existing Buildings Renewal Strategy.. W/CHFBC advocating for 'Acquisition Fund' to purchase aging existing purpose built rental to maintain affordable rental housing
OHCS	Metro Vancouver Housing	Jade Hume, Division Manager, Maintenance and Capital Planning jade.hume@metrovancouver.org	Provides safe and affordable rental homes.	Provided input for the Existing Buildings Renewal Strategy.

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Baptist Housing Society	Erich Klein, Director of Sustainability eklein@baptisthousing.org	Provides 21 senior living communities	Provided input for the Existing Buildings Renewal Strategy.
OHCS	Applied Science Technologists & Technicians of BC	Theresa McCurry, CEO tmccurry@asttbc.org	Regulates technologists and technicians, including those working on buildings and building codes	BC Builidng, Plumbing, Fire Code issues
OHCS	Building Owners and Managers Association of BC (BOMA)	Damian Stathonikos, President Zach Segal, Director of Government Affairs zsegal@boma.bc.ca	Association for the commercial real estate industry.	Provided input for the Existing Buildings Renewal Strategy..
OHCS	Co-op Housing Federation of BC	Thom Armstrong CEO tarmstrong@chf.bc.ca	Provincial housing co-operative network, Community Land Trust development arm	Affordable housing, non-profit, co-op
OHCS	Landlord BC	David Hutniak, CEO davidh@landlordbc.ca 604-733-9440 ext 202	Member education, resources and support to those owning and managing rental properties in BC.	Part of RTB's operational stakeholder group that meets quarterly. Provided input for the Existing Buildings Renewal Strategy..

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Technical Safety BC	Phil Gothe, President and Lead Executive Officer @technicalsafetybc.ca George Abbott, Board Chair	Independent, self-funded organization that oversees the safe installation and operation of technical systems and equipment across the province.	Delegated authority to enforce Safety Standards Act Provided input for the Existing Buildings Renewal Strategy.
OHCS	Architectural Institute of BC	Mark Vernon, CEO mvernon@aibc.ca 604.683.8588, ext. 308	The Architectural Institute of British Columbia is an independent, professional self-regulatory body established in 1920 the Architects Act. In the interest of the public, the Architectural Institute of British Columbia regulates the profession of architecture and provides representation (from design review to technical input) on a wide range of government and industry-related committees, liaises with provincial and national industry-related associations and other regulatory bodies, and provides a voice on important professional issues at all levels of government.	Scope of professional practice in the building regulatory sector. Development of codes and standards.
OHCS	Engineers and Geoscientists BC	Heidi Yang, CEO and Registrar info@egbc.ca 604-430-8035	Engineers and Geoscientists BC regulates and governs these professions under the authority of the Professional Governance Act. Provides input to legislation and policy that impact registrants for the benefit of the public interest.	Scope of professional practice in the building regulatory sector. Development of codes and standards.

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Building Officials' Association of BC	Tyler Wightman, Executive Director and Registrar tyler.wightman@boabc.org	Administers regulation of building officials in BC, having objectives of: ensuring consistent Code interpretation; providing a forum for discussion; education, standards of Code knowledge to its membership, and a administering a technical certification program for its membership. BOABC members serve on many provincial committees that review building regulatory issues in the Province of B.C.	Scope of professional practice in the building regulatory sector. Development of codes and standards.
OHCS	Canadian Home Builder Association – BC	Neil Moody, Chief Executive Officer neilmoody@chbabc.org 604-432-7112 Carmina Tupe, Manager, Government and Public Relations carmina@chbabc.org 604-432-7112 ext. 302 Pauline Rupp, Director, Technical and Building Innovation pauline@chbabc.org 604-432-7112 ext. 307	Bring industry related concerns to the government on behalf of all members at the local, provincial and national levels.	Technical Safety BC Proposed Fee Changes 2021 – 2023 Housing Supply and Affordability B.C. Sectoral Targets Skilled Trades Certification Implementation of Climate, Carbon, and Energy Policy

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Homebuilders Association Vancouver (HAVAN)		Members include builders, developers, renovators, designers, suppliers, sub-trades and leading professionals in Metro Vancouver. HAVAN provides both industry and consumer education, and actively liaises with local municipal governments with the focus of meeting Metro Vancouver's housing needs. A not-for-profit association, affiliated with both the provincial CHBA BC, and national CHBA offices.	Implementation of Climate, Carbon, and Energy Policy
OHCS	BC Hydro	Robyn Wark, Team Lead, Sustainable Community Program Robyn.Wark@bchydro.com Toby Lau, Codes and Standards Principal Toby.Lau@bchydro.com Office: 604 623-3625	Utility Provider	Implementation of Climate, Carbon, and Energy Policy
OHCS	FortisBC	Bea Bains, Manager, Energy Products and Services bea.bains@fortisbc.com Office: 604 592-7897	Utility Provider	Implementation of Climate, Carbon, and Energy Policy
OHCS	Aboriginal Coalition to End Homelessness	Name: Fran Hunt-Jinnouchi Title: Executive Director Email: diretor@ACEHsociety.com	Non-profit, works to identify and address systemic and structural barriers, share information, resources, and lessons learned, while also providing cultural supports, connections, and housing stability	Homelessness, supports and services for Aboriginal people.

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Greater Victoria Coalition to End Homelessness	Name: Kelly Roth Title: Executive Director kroth@victoriahomelessness.ca	The Greater Victoria Coalition to End Homelessness is a partnership of local service providers, non-profit organizations, businesses and all levels of government working to address the region's commitment to end homelessness.	Homelessness supports and programs.
OHCS	A Way Home Kamloops	Name: Kira Cheeseborough Title: Peer Navigator Phone: 250-828-0446 Email: kira@awayhomekamloops.com	A grassroots collective founded by a youth with lived experience of homelessness. Seeks to raise the voice of youth with lived expertise into the discussion for homelessness solutions.	• Youth Homelessness • Youth Conference
OHCS	PHS Community Services Society	Name: Michael Vonn Title: CEO Email: Info@phs.ca	Charitable non-profit that provides housing, healthcare, harm reduction and health promotion for some of the most vulnerable and under-served people in Vancouver and Victoria.	Encampment support
OHCS	BC Coalition to End Youth Homelessness	Name: Sarah Stewart Title: Executive Director Email: sstewart@auntleahs.org	Coalition of organizations from all across B.C. Mission is to develop a provincial plan to end youth homelessness that ensures every youth has access to safe housing and the supports needed to sustain it.	Youth Homelessness Youth Conference
OHCS	DTES Women's Centre Association	Name: Kate Gibson Title: A/Executive Director Email: centre@dewc.ca	Shelter, support services for women	Shelter, Homelessness, supports for women.

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Foundry	Name: Kelly Veillette Title: Director, Government and Indigenous Relations Phone: 250.514.1135 Email: kveillette@foundrybc.ca	Province-wide network of integrated health and social service centres for young people ages 12-24, providing access to mental health care, substance use services, primary care, social services and youth and family peer supports.	Youth Homelessness Youth Services
OHCS	Homelessness Services Association of BC	Name: Stephen D'Souza Title: CEO Phone: 778-945-7789 Email: stephen.dsouza@hsa-bc.ca	Member-driven organization supporting shelters, drop-in centres, homeless outreach teams, and other service provider addressing the needs of persons experiencing homelessness with the goal to ending homelessness.	General Homelessness
OHCS	WISH Drop In Centre	Name: Mebrat Beyene Title: Executive Director Email: executivedirector@wishdropincentre.org	WISH works to improve the health, safety and well-being of women who are involved in Vancouver's street-based sex trade.	Homelessness, services to sex workers
OHCS	Canadian Mental Health Association – Kamloops	Alfred Achoba A/Executive Director alfred.achoba@cmha.bc.ca	Providing homelessness services, supports and programs in Kamloops	Homelessness, partner in Homelessness Strategy PWLE Engagement
OHCS	KSAN Society Terrace	Michelle Demoe Community co-ordinator <michelle.demoe@ksansociety.ca	**'Ksan Society** has been providing homelessness outreach, prevention and shelter programs to Terrace, and surrounding area, since 1979.	Homelessness, Indigenous, partner in Homelessness Strategy PWLE Engagement

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Engaged Communities Canada Society	Upkar Singh Tatlay Executive Director upkar@eccsociety.org	Engaged Communities Canada Society and works with racialized homeless people and men in particular in the Surrey area	Homelessness, Immigrant, Racialized people, partner in Homelessness Strategy PWLE Engagement
OHCS	Surrey Area Network of Substance Users	Nancy Fitzpatrick Co-ordinator s.22	Peer-based network support for PWLE of homelessness and drug users	Homelessness, partner in Homelessness Strategy PWLE Engagement, drug user network
OHCS	BCRentBank.ca	Name: Melissa Giles Title: Project Lead Phone: (604) 877-8453 Email: melissa@bcrentbank.ca	BC Rent Bank is a project of Vancity Community Foundation, and funded by the Province of BC. Current strategic focus is on establishing a province-wide infrastructure.	BC Rent Bank network
OHCS	Social Planning and Research Council (SPARC BC)	Name: Lorraine Copas Title: Executive Director Phone: (604) 718-7736 Email: lcopas@sparc.bc.ca	An independent, non-partisan, registered charity that works with BC communities in building a just and healthy society for all.	Community Homelessness Grants
OHCS	Tenants Resource & Advocacy Centre (TRAC)	Andrew Sakamoto – Executive Director Phone: (604) 255-3099 ext. 222 Email: andrew@tenants.bc.ca	The Tenant Resource & Advocacy Centre provides research, information, education, and support on residential tenancy matters to protect tenants in British Columbia	Advocates for tenant issues under the RTA, MHPTA and with Branch operations. Part of RTB's operational stakeholder group that meets quarterly.

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Manufactured Home Park Owners Alliance of British Columbia (MHPOABC)	Email: info@mhpo.com	(MHPOABC) provide services, products and representation to park owners.	Advocate for Manufactured Park Owners and emphasize the difference between residential tenancies and those in Manufactured Home parks. Part of RTB's operational stakeholder group that meets quarterly.
OHCS	Active Manufactured Home Owners Association BCMHO	Elaine Stuart Elaine Stuart email: elaine@bcmho.ca	Non-profit association working on behalf of owners of manufactured homes.	Advocate for Manufactured Home Owners and living in Manufactured Home parks. Part of RTB's operational stakeholder group that meets quarterly.
OHCS	Community Legal Assistance Society (CLAS)	Danielle Sabelli – Lawyer, Community Law Program Phone: (604) 673-3138 Email: dsabelli@clasbc.net	Community Legal Assistance Society provides legal advice and assistance to people who are physically, mentally, socially, economically or otherwise disadvantaged or whose human rights need protection.	Advocate for tenants under the RTA and MHPTA identifying legislative and operational issues. Part of RTB's operational stakeholder group that meets quarterly.
OHCS	Condominium Home Owners Association	Tony Gioventu, Executive Director tony@choa.bc.ca 1 (604) 515-9683	CHOA is a BC consumer based non-profit association that promotes the understanding of strata property living and the interests of strata property owners. Members include strata corporations, individual owners, and businesses that serve the strata industry.	• The Strata Property Act and legislation that affects strata corporation governance. • Strata corporation insurance

Branch	Organization	Contact(s)	Description	Key Issues
OHCS	Strata Property Agents of BC	Nizam Dossa, Executive Director info@spabc.org 604-618-9497	Industry association with a mandate to represent the interests and issues of strata management companies in BC.	• The Strata Property Act and legislation that affects strata corporation governance. • Strata corporation insurance.
OHCS	Vancouver Island Strata Owners Association	Wendy Wall, President president@visoa.bc.ca	An independent, non-profit organization supported solely by membership fees. • Provides information and support to assist strata lot owners and strata councils. • Offers educational seminars and workshops on aspects of ownership and management. • Advocates for strata corporations and lot owners.	• The Strata Property Act and legislation that affects strata corporation governance. • Strata corporation insurance.

For Approval: QA for MRK upcoming luncheon

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: May 12, 2023 9:37:08 AM PDT
Attachments: QA UDI May Luncheon - May 18.docx

Hi Zac

Can you signoff or confirm Jun'ichi's signoff is good to go, he helped me with No 7.

I believe it's just No 7 but feel free to scan all highlighted questions

Thanks
Travis

Travis Paterson | Senior Public Affairs Officer
Government Communications and Public Engagement
Ministry of Housing
250-882-8105
he, him

Draft Speaker Question List

Key Topics/focus Areas (What do our members want to know?)

1. BC Builds Launch/Housing Strategy
2. *Housing Supply Act* and Targets
3. Rental Housing Incentives
4. Streamlining Approvals
5. Provincial Permitting improvements

Draft Questions for Fireside:

Priority Questions:

1. BC's population is expected to grow substantially over the coming years, as Canada welcomes over 1 million new residents. How is the Province planning for these changing demographics, specifically for the housing, amenities and infrastructure that will be needed?
    a. Is the Province requesting extra resources from the Federal government?

2. The Mayor of Surrey has repeatedly said that school infrastructure is not keeping up with housing and population growth in her community. Will the Province be funding more new schools in high-growth areas?

FROM EDUC

- Government is actively working with stakeholders to explore all opportunities for future school development in high-growth areas.
- The Province is working with School Board partners in Surrey and other high-growth areas to build more schools and expansions for families.
    - For example, since 2017, 16 new schools and expansions have been completed for Surrey kids.
    - That is in comparison to zero new schools and one expansion complete from 2014 to 2017, during the former government.
- Since September 2017, the Province has approved over half a billion dollars ($520 million) for capital projects in Surrey, which is bringing over 10,000 new student seats to the district, the equivalent of over 400 classrooms.
- To continue accommodating growth in Surrey, additional new schools and expansions are in development, as well as five expansions in business case development.
    - Expansions at both Fleetwood Park (800 seat addition) and Clayton Heights Secondary (500 seat addition) are currently in business case development.
- After years of underfunding, we are making historic investments in school capital projects to give students the best educational experience possible.
- Government is working with districts and cities to make planning more efficient, reducing delays and improving work to get construction started faster and working across government to tackle labour shortages by training more tradespeople.

3. Will housing targets under the *Housing Supply Act* reflect the latent demand for housing that exists in many communities?

b. For example, household formation has been slowed due to high prices and low housing supply, while many remain underhoused. How will housing targets reflect this demand?

- We'll have news on the targets in the coming months – we're on track to bring in the Act into force as planned in mid-2023.
- Through the Housing Supply Act, we will be working with our municipal partners to speed up housing developments and increase supply in the fastest growing communities and places with the greatest need.
- This makes sure the right type of housing is built in the right communities.

c. The development process is very lengthy, how will housing targets measure progress, and what will the consequences be for municipalities that fail to deliver enough new homes?

- In the event that a municipality is unable to achieve a housing target or make satisfactory progress toward the target, the process will allow the Minister to appoint an advisor to gain a fuller understanding of the opportunities and barriers that a municipality faces.
- Overriding a local government decision would be a last resort. The goal is to work collaboratively with our municipal partners to increase housing supply.

5. In the refreshed Housing Strategy, the Province has committed to allowing more small-scale multi-unit residential housing (missing middle) - up to 3 or 4 units per lot. Additional density will be permitted in areas "well-serviced by transit"...how will this be defined?

- This initiative will focus on accessing land that is suitable to be acquired near transit hubs and transforming this land into thriving communities.
- Work on this is underway, but we envision a few additional units on single-family lots in areas close to regular and rapid transit service, including SkyTrain and rapid bus lines.
- We're talking to local governments about this, and we'll continue to as we work on the legislation.
- More information on this will come as we get closer to introducing the legislation the fall.

a. How much more density are you envisioning? In New Zealand, for example, certain municipalities are required to pre-zone up to 6 storeys around transit.

- Our budget commits new funding as an initial investment to allow us to acquire land to deliver up to 10,000 units at or near transit hubs over the next 10-15 years. ($394 million through Budget 2023)
- We know that similar changes in places like New Zealand have already delivered tens of thousands of new homes, and had a measurable impact on rent and housing prices.
- This is also a minimum density. It will still be possible to rezone for higher densities – as it is today.

- We'll be out talking to local governments about that as we fine-tune the legislation.
- We'll make sure that there is some flexibility in place for local governments to reflect local realities.

- Under the DAPR: transit-centred development includes **select communities**, setting a minimum number of dwelling units per lot for single-family zones, and setting a minimum number of dwelling units per lot for single-family zones near frequent transit.

6. Rental housing has been a primary focus of this government, will the Province consider introducing new incentives for developers who want to build new rental housing, especially market rental housing, which is already very challenging to deliver?

- We're going to work with partners to find new opportunities and ways to build new rental buildings.
- It's all part of focusing on purpose-built rentals and how we can encourage more developers and landlords to build more homes dedicated to renters and protect existing rental units.
- Among the groups we wish to involve are Landlord BC, the Urban Development Institute, Indigenous organizations and municipal representatives.

BC Hydro connections have become much more expensive and time-consuming in recent years. We expect this trend to continue as more municipalities are starting to require more buildings be fully electric. Is there work that your ministry can do to help address these issues with your counterparts in Energy, Mines & Low Carbon Innovation?

FROM EMLI

- BC Hydro and the Province are committed to ensuring new projects and developments have access to power.
- The current demand for connections from large commercial and industrial projects is unprecedented.
- And BC Hydro is committed to reducing connection timelines.
- Over the last year, BC Hydro has undertaken several measures to policy and internal processes to improve customer communication, reduce timelines and improve the end-to-end connection process.
- BC Hydro also hired more staff to help reduce connection timelines, and they are exploring options to update their Distribution Extension Policy to standardize the process which will reduce connection timelines and address uncertainty around costs.
- BC Hydro's Integrated Resource Plan outlines how it will meet the electricity needs of its customers over the next 20 years.
- The BC Hydro Task Force recently announced within our new energy action framework will also look at generation planning and procurement to ensure we have the clean, renewable electricity we need to power our economy while keeping rates affordable.

8. Are there any specific jurisdictions that your Ministry is looking at as best practices for speeding up the delivery of new housing?
9. Will your government be looking to streamline approvals for mass timber and modular construction projects to speed up housing delivery, while addressing climate change objectives and labour constraints?

Additional Questions (time permitting)

General:

1. When will the Province be launching BC Builds? And will BC Builds be partnering with the private sector to deliver middle-income housing?
2. Will the Province be using paramountcy on its sites? Would they be open to TransLink and other broader public sector organizations being given paramountcy power?

- The Province looks to use Statutory Immunity only in exceptional cases and with the support of local governments.
- The goal is to support new housing and to support municipalities to expedite the permitting process for new projects and we are doing that through our work on small scale, multi-unit zoning changes, BC Builds, speeding up provincial and local permitting, Housing Supply Act.

*Background: Statutory Immunity (often inaccurately referred to as Paramountcy which is a different legal concept), has legal limitation to developments which the government or its agent controls. It cannot be used for other developments/developers.

Housing Supply Act:

3. We understand that housing targets are going to be established, how will the Province be setting these targets and what is the vision for targets in the future?

Housing Strategy: *Homes for People:*

4. The Housing Strategy references a new anti-flipping tax, is this currently under development, and what is the objective of this tax?
    a. Could this affect pre-sales or new construction, which is already heavily regulated?
    b. Would this tax affect developers as they assemble and service sites?
5. The Housing Strategy also mentions increasing tenant protections in cases of redevelopment. Many municipalities currently have tenant relocation and protection policies in place, will the province be creating its own version and if so, will additional density be provided, as Burnaby has done?

- As government works to advance measures to increase housing supply, there is additional need to ensure that renters are better protected from displacement due to redevelopment of rental buildings.
- As such, the Province is examining ways to better protect tenants whose homes may be threatened by redevelopments.

- We'll have more to share on this as that work continues.

Streamlining Approvals

6. The provincial DAPR process and Federal-Provincial Expert Panel on Housing Supply and Affordability both made recommendations to streamline the approvals process for new housing, at the provincial level. How is your ministry working with other ministries that affect the approval of new housing to speed up the process?

7. When provincial policies and regulations are developed, they often have an impact on the approval process for new housing. Will you be applying a housing lens when new policies are developed, for example building code changes or updates to the Energy Step Code?

- We apply a housing lens to new building code policies.
- We are working together with industry, so B.C. can meet our housing needs and our climate goals.
- Building more housing is a key priority, and building the right kind of housing is just as important so that housing is safe, healthy, energy efficient and more accessible.
- We are working towards housing that is resilient and meets the future needs of British Columbians in the context of climate change, accessibility, and resistance to earthquakes.

8. Can you speak more about the work that your ministry is doing with the Digital Supercluster to digitize the BC Building Code and automate code compliance checks?

RE: 8761.00 - BC Housing Grant – Single Stair Study

From: Andrew Harmsworth <ah@ghl.ca>
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>, Darrell Li <DL@ghl.ca>
Cc: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Sent: May 18, 2023 11:03:51 PM PDT
Attachments: image002.jpg, image003.jpg, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Juni and Stephen – I we are on the same page.

We have not done our formal review of this, but our at a quick glance it provides good comparison to other codes, but does not quantitatively demonstrate that it meets the level of performance required by the Canadian Code.

We agree that an analysis to demonstrate we are not reducing the level of safety in the Code is required, and the issue of persons with disabilities is needed. We are making recommendations to assess and address these items.

Other organizations, including UDI, have expressed interest.

Andrew Harmsworth, M Eng, P Eng, PE, CP, FEC

AWAY March 16 to 31st.

GHL CONSULTANTS LTD celebrating **30** years
Building Codes & Fire Science
700 W Pender Street, Suite 800, Vancouver, BC V6C 1G8
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From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, April 28, 2023 11:49 AM
To: Darrell Li <DL@ghl.ca>; Andrew Harmsworth <ah@ghl.ca>
Cc: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Subject: RE: 8761.00 - BC Housing Grant – Single Stair Study

Hi Darrell and Andrew,

Here are the initial thoughts I got back from Stephen, who sits on SCFP for us. As I mentioned, we would likely support the committee developing this in the interest of housing affordability, but with heavy caution that we do not want to take a step back in fire and life safety. One other thing I didn't mention is evacuation for persons with disabilities could be affected since we no longer have areas of refuge and this would further cut back on safe places in fire for that occupant profile. Stephen does allude to this below with his comments on aging populations. I do support the idea of GHL and SCFP looking at this in a holistic and scientific way to make appropriate recommendations.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing

250 858 1325

From: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Sent: Friday, April 28, 2023 8:53 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: 8761.00 - BC Housing Grant – Single Stair Study

My first thoughts :

The NFC regulates occupancy load after construction and is calculated per room.

Under the NFC, each suite with a single door would allow 60 persons when the net floor area, when divided up based on .4m2 per person, will allow that number.

This means would mean that the NFC would need to be changed as well to place a restriction on the occupancy load for this type of building. (also note that regulating and enforcing the occupy load in a private dwelling may be problematic for fire code enforcement officials.)

There is also an assumption that there is a responding fire department, as we know Part 3 buildings should not be built in an area that has not fire department but this is a local government decision.

The Code would need to actually state that there must be a responding fire department in order to allow a building to be built with 1 exit, not just that there must be a fire alarm to notify the fire department.

Maintenance of the life safety systems (smoke alarms, fire alarms, sprinkler, fire doors kept closed when not in use), to ensure they are functioning as designed, will become even more critical for a building with only on exit.

45min closures are used in 1hr fire separations but they don't mention the fire separation requirements other than for the closure.

I'm also not sure how one would regulate the building to not be used for persons to retire in if they own the suite. (if all suite owners are retired does it become a retirement home?)

Stephen Watt | *Senior Codes Administrator*
Ph: 236-478-0578
Building and Safety Standards Branch | Ministry of Housing

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, April 27, 2023 8:27 PM
To: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Subject: FW: 8761.00 - BC Housing Grant – Single Stair Study

For discussion…

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Darrell Li <DL@ghl.ca>
Sent: Thursday, April 27, 2023 3:31 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Andrew Harmsworth <ah@ghl.ca>
Subject: 8761.00 - BC Housing Grant – Single Stair Study

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Juni,

Looks like we're playing phone tag. I'll aim to call you again tomorrow around 11am.

Wondering if BSSB was aware/looking into the attached proposed code change. We've been in touch with both BC Housing and UDI on this and wanted your thoughts on this.

Cheers,
[UNAVAILABLE WEDNESDAYS]

Darrell Li, P Eng
GHL CONSULTANTS LTD celebrating **30** years
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700 W Pender Street, Suite 800, Vancouver, BC V3N 1G8
P 604 689 4449 Ext 120 \ **E** dl@ghl.ca \ **W** www.ghl.ca

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RE: Digital permitting engagement Roundtable meetings

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: May 23, 2023 11:46:44 AM PDT

Great. I will follow-up with Mark in MO to determine whether they are expecting that specific group to meet with Minister or whether we can use the June 12 group in place.

s.13

John

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, May 23, 2023 11:02 AM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: Re: Digital permitting engagement Roundtable meetings

We have notified all participants from the roundtable in our planning for the 12th of June. They will be asked to participate as reps for appropriate organizations like UDI, building officials, etc. Still sorting out details of who would be on a smaller roundtable going forward.

Zac

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: Tuesday, May 23, 2023 10:33:28 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: FW: Digital permitting engagement Roundtable meetings

Hi Zac & Nicole –

Please see this request from the MO below. Did you understand there was an expectation that the group of stakeholders they brought together would be meeting regularly?

John

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Tuesday, May 23, 2023 10:16 AM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: Digital permitting engagement Roundtable meetings

Hi Teri and John,

I hope you both are well.

Just emailing to give you a heads-up that Minister would like an update on the schedule for engaging with the digital permitting roundtable group that we met with previously. Please let me know if you have any questions on this.

Looking forward to connecting with you soon and all the best,

Mark
Mark Hosak, *he/him*
Ministerial Advisor to
The Honourable Ravi Kahlon
Minister of Housing
Cell: 250-886-1834

FW: List of invitees to Housing methodology meeting

From: Corpe, Cimarron HOUS:EX
To: Gartner, Candice HOUS:EX <Candice.Gartner@gov.bc.ca>, Pittroff, Sandra HOUS:EX <Sandra.Pittroff@gov.bc.ca>, Penz, Rebecca HOUS:EX <Rebecca.Penz@gov.bc.ca>
Sent: May 23, 2023 11:57:34 AM PDT
Attachments: image001.png, image003.png
FYI

Cimarron Corpé
a/Executive Director

Housing Targets Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Tuesday, May 23, 2023 11:56 AM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>
Cc: Karimi, Nina HOUS:EX <Nina.Karimi@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: List of invitees to Housing methodology meeting

Hi folks,

The following people were invited last Friday. Bolded ones are Minister's additions. I still need to invite Max Fawcett but have to track down his email address.

Tx,
Siân

ORGANIZATION	First Name	Last name	EMAIL
UBC, Generation Squeeze	Paul	Kershaw	paul.kershaw@ubc.ca
UBC Centre Urban Economics	Tom	Davidoff	thomas.davidoff@sauder.ubc.ca
SFU City Program	Andy	Yan	ayan@sfu.ca
SFU Renewable Cities	Leanne	Sawatzky	leanne_sawatzky@sfu.ca
Mountain Math	Jens	von Bergmann	jens@mountainmath.ca
Ivey Business School at Western University	Mike	Moffatt	mmoffatt@ivey.uwo.ca
Urban Lands Institute	Duncan	Wlodarczak	duncan.wlod@gmail.com
UDI	Cassandra	Smith	csmith@udi.org
Urbanarium	Amy	Nugent	amy@urbanarium.org
Abundant Housing	Owen	Brady	owen@abundanthousingvancou
CCPA	**Alex**	**Hemingway**	**alex@policyalternatives.ca**
Rennie	**Andrew**	**Ramlo**	**aramlo@rennie.com**
Small Housing	**Akua**	**Shatz**	**akua@smallhousingbc.org**
CHBA	**Carmina**	**Tupe**	**carmina@chbabc.org**
	Max	**Fawcett**	

Siân Madoc-Jones *she/her*
Chief of Staff to the Honourable Ravi Kahlon

Minister of Housing
Cell: 778-867-6774

For review/edit - to be emailed this afternoon

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: May 23, 2023 12:18:04 PM PDT
Attachments: Reach out to Early Engagment Partners_Architects_Engineers.docx

Hi Zac,
Hoping you can review/edit this draft email to go out to early engagement participants (User Research and April 6 Roundtable folks). I can make changes.

Hoping to get this out to this afternoon, to give these folks a chance to reach out to their respective associations

Just compiling email addresses and will locate in card, for you to send out once email is ready to go. Same process as invites that were sent on Friday.

Please let me know if questions or changes required

Thanks a bunch,
Julie

Julie Leggett
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Housing
UC: 250-856-0964 | Email: Julia.leggett@gov.bc.ca

I extend my gratitude to the ***Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples*** *on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.*

Proposed Attendee List
See Excel Sheet on Teams

Subject: Save the date: Digital Permitting Workshop – June 12th, 2023

Email Body:

Greetings,

Thank you for your participation in early conversations and research with the Ministry of Housing exploring ways to digitize the BC Building Code and implement innovative collaboration technologies to help project teams work more effectively with housing development regulators.

Momentum is continuing to build around this work. On June 12th, the Ministry of Housing with the support from the Ministry of Citizen's Services is hosting a hybrid engagement event to dig deeper into to the challenges users experience during the housing permit process and develop a shared understanding of the opportunities to resolve issue.

The AIBC, EGBC, UDI and CHBA have been given an allotment of 4 'tickets" per organization for this event. We encourage you to reach out to your association if you would like to support the association's representation at the event. We have asked the associations for a list of invitees by EOD May 26.

I have attached the specific invite sent to each of these associations, to provide some background and details about the event.

Looking forward to continuing to work with you.

Sincerely,

June invite list_4.docx

Commented [LJH1]: To be updated and add user research and April 6 roundtable invitees

Commented [LJH2]: Need full names of each

Commented [LJH3]: Added as an attachment to email

Save the date: Digital Permitting Workshop – June 12th, 2023

From:	May, Zachary HOUS:EX
To:	Rick Bortolussi <Rick.Bortolussi@townline.ca>,[s.22] mbarros@daustudio.ca, mzupan@daustudio.ca, andy.chong@introba.com, keith.davidge@introba.com, max@naikoon.ca, luke@aryze.ca, riley@focaleng.com, Ron@havan.ca
Cc:	Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent:	May 23, 2023 9:09:07 PM PDT
Attachments:	Save the date: Digital Permitting Workshop – June 12th, 2023

Greetings,

Thank you for your participation in early conversations and research with the Ministry of Housing exploring ways to digitize the BC Building Code and implement innovative collaboration technologies to help project teams work more effectively with housing development regulators.

Momentum is continuing to build around this work. On June 12th, the Ministry of Housing with the support from the Ministry of Citizen's Services is hosting a hybrid engagement event to dig deeper into to the challenges users experience during the housing permit process and develop a shared understanding of the opportunities to resolve issue.

The Architectural Institute of British Columbia (AIBC), Engineers and Geoscientists BC (EGBC), Urban Development Institute (UDI) and Canadian Home Builders Association (CHBA) have been asked to identify representatives for their respective organizations for this event. We encourage you to reach out to your association if you would like to support the association's representation at the event. We have asked the associations for a list of invitees by EOD May 26.

If you are not a member of any of these organizations, please feel free to reach out to me directly and our team will ensure you are still able to be part of this initiative.

I have attached the specific invite sent to each of these associations, to provide some background and details about the event.

Looking forward to continuing to work with you.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Save the date: Digital Permitting Workshop – June 12th, 2023

From: HOUS Building & Safety Standards Branch HOUS:EX
To: mgatensby@aibc.ca, jfisher@udi.org, pauline@chbabc.org, afehr@egbc.ca
Sent: May 19, 2023 2:41:39 PM PDT

Greetings,

The Ministry of Housing is committed to making B.C. a North American leader in digital permitting and construction. The Ministry of Housing, with the support from the Ministry of Citizens' Services, is working on modernizing housing permitting and approvals by digitizing the BC Building Code, advancing the adoption of digital permitting processes across B.C., integrating permit systems across the housing sector, and supporting collaboration technologies that help project teams work more effectively with housing development regulators.

The Ministries are hosting a hybrid engagement event to discuss the challenges users experience during the housing permit process and develop a shared understanding of the opportunities to resolve issues.

Event Details

- **Date**: June 12, 2023
- **Time**: 8:00 AM to 4:15 PM
- **Location**: In-person (lower mainland – specific location will be shared once confirmed) and remote

An agenda will be provided closer to the event.

Your organization has a total of **four (4) invites** to ensure your organization and membership are represented. We will be connecting with individuals who participated in our early user research and engagement to let them know you have received the invite, and to reach out to you to support your organization's representation at the event.

Please let us know by EOD Friday May 26th your list of participants including their name, email address, organization, and an early indication of whether attendance is anticipated to be in-person or remote. We will provide the meeting invite to participants directly.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

News Release: Homes for People plan, an action plan to deliver more homes for people, faster

News Release: B.C. invests in digital permitting to get homes built faster

RE: June Digital Permitting Event_Agenda

From: May, Zachary HOUS:EX
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: May 23, 2023 9:23:41 PM PDT

FYI - Emails to everyone went out on Friday, except the additional April 6th roundtable participants who were emailed today.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: May, Zachary HOUS:EX
Sent: Tuesday, May 23, 2023 9:22 PM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Subject: FW: June Digital Permitting Event_Agenda

Hi John,

As discussed previously, we are aiming for a max in-person attendance on June 12th of 40 attendees, with online facilitation for additional participants who can't be there in person. The list of invitees is in the table at the bottom of this email.

- Local governments/regional districts/districts – these communities were selected based on past involvement with DAPR, growth-leader cities, housing targets, and regional representation. This list includes the key associations (UBCM, LGMA, PIBC, and BOABC).
- We have invited several Indigenous nations and organizations – most are Treaty Nations and communities/organizations we engaged in the past.
- We have given the professional and industry associations a seat allocation and allow them to select their participants.
- April 6 Roundtable participants not captured on this list were emailed directly and invited to reach out to organizations they are members of (most are part of EGBC, UDI, or CHBA-BC), and if they were not members of any organizations on the list to reach out to be included in future engagement directly.
- User Research and April 6 Roundtable list:
  - Adera Development - s.22
  - Dau Studios - mbarros@daustudio.ca
  - Dau Studios - mzupan@daustudio.ca
  - Introba - andy.chong@introba.com
  - Introba - keith.davidge@introba.com
  - Naikoon Contracting - max@naikoon.ca
  - Townline - Rick.Bortolussi@townline.ca
  - Aryze Developments (Homes for People) - luke@aryze.ca
  - Focal Engineering - riley@focaleng.com
  - HAVAN - ron@havan.ca

This will bring us to 89 invitees – full list below and assuming not all will be able to attend.

*communities with digital permitting technology (from DAPR survey)
Blue text indicates confirmed interest from our emails.

Local Governments etc. (41)	Indigenous Communities & Organizations (19)	Engineers & Architects (10)	Industry (12)	Academia & Housing Providers (4)

1. City of Abbotsford*
2. Regional District of Alberni-Clayoquot
3. City of Burnaby*
4. City of Campbell River
5. Regional District of Central Okanagan
6. District of Chetwynd
7. Regional District of Columbia Shuswap
8. Regional District of Comox Valley*
9. City of Coquitlam*
10. Regional District of Cowichan Valley
11. City of Cranbrook
12. City of Delta
13. Regional District of Fraser Valley
14. Regional District of Fraser-Fort George
15. City of Kamloops
16. City of Kelowna*
17. City of Kimberly
18. District of Lake Country
19. City of Langley
20. Township of Langley
21. District of Mackenzie
22. City of Nanaimo*
23. Regional District of Nanaimo*
24. City of Nelson
25. City of North Vancouver*
26. City of Port Coquitlam
27. City of Prince George
28. City of Quesnel
29. Regional District of Buckley-Nechako
30. City of Richmond*
31. Township of Spallumcheen

1. Ka:'yu:'k't'h'(Kyuquot) / Che:k'tles7et'h' (Checleseht) First Nations (Maa-nulth Treaty Society)
2. Upper Nicola Band
3. Leq'a:mel First Nation
4. Naut'sa mawt Nation (Tribal Council)
5. Nisga'a Lisims Government
6. Nuxalk Nation
7. Penticton Indian Band
8. Snuneymuxw First Nation
9. Tla'amin First Nation
10. Toquaht Nation
11. Tsawwassen First Nation
12. Uchecklesaht Tribe Government
13. Ucluelet First Nation
14. M'akola Development Services
15. First Nations National Building Officers Association
16. First Nations Technology Council
17. HeBear Consulting
18. First Nations Housing and Infrastructure Council
19. Aboriginal Housing and Management Association

- Architectural Institute of BC (4)
- Engineers and Geoscientists of British Columbia (4)
- Applied Science Technologists & Technicians of BC (2)

- Urban Development Institute (4)
- Canadian Home Builders Association of BC (4)
- British Columbia Construction Association (4)

- BC Non-Profit Housing Association (1)
- BC Housing (2)
- University of British Columbia (1)

32. District of Sparwood* 33. District of Summerland* 34. City of Surrey* 35. City of Terrace* 36. City of Vancouver* 37. City of Victoria 38. Building Officials Association of British Columbia 39. Union of BC Municipalities 40. Planning Institute of BC 41. Local Government Management Association				

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: June Digital Permitting Event_Agenda

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: May 24, 2023 1:14:31 PM PDT

Thanks Zac – I will check-in and see re: virtual only. I find these things work best as one or the other, not both.

John

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, May 24, 2023 9:13 AM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Subject: RE: June Digital Permitting Event_Agenda

We have a draft engagement strategy that will provide more answers to the questions about what follows the June 12th session. Consistent with your highlighted text. Happy to send you the draft this week for feedback.

Also, we are getting most responses to our save the date as wanting to participate remotely. We're also having challenges sorting out a venue, **so I'm wondering if the MO would have any issues with us just pivoting to a virtual session on June 12th?** We are still working towards a hybrid meeting on the 12th, but signs are starting to look like virtual for this large engagement might be the most effective for participants and our team.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: Wednesday, May 24, 2023 8:57 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: FW: June Digital Permitting Event_Agenda

Hi Zac –

Please see my email below to Mark. Note my additions highlighted. We will need to build structure into our approach to engagement to bring consistency in participation, strategy to focus our efforts with the willing champions and those we need. Practically, this looks like named groups/tables, with lists of members and contact information, records of happenings and plans of when they need to be brought together.

I see in another email you are moving on the hiring, so I appreciate some of this will have to wait for folks to join but it is clear Minister expects something formalize, consistent and regular.

Thanks.

John

From: Thomson, John HOUS:EX
Sent: Wednesday, May 24, 2023 8:53 AM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: FW: June Digital Permitting Event_Agenda

Hi Mark -

Below is the list of organizations invited to the June 12 event. We will have capacity for 40 people in person, with online facilitation for additional participants who can't be there in person. The list of invitees is in the table at the bottom of this email is broken into 5 categories to ensure appropriate representation across the range of stakeholders.

- Local governments/regional districts/districts – these communities were selected based on past involvement with DAPR, growth-leader cities, housing targets, and regional representation. This list includes the key associations (UBCM, LGMA, PIBC, and BOABC).
- We have invited several Indigenous nations and organizations – most are Treaty Nations and communities/organizations we engaged in the past.
- We have given the professional and industry associations a seat allocation and allow them to select their participants.
- April 6 Roundtable participants not captured on this list were emailed directly and invited to reach out to organizations they are members of (most are part of EGBC, UDI, or CHBA-BC), and if they were not members of any organizations on the list to reach out to be included in future engagement directly.
- User Research and April 6 Roundtable list:
  - Adera Development - s.22
  - Dau Studios - mbarros@daustudio.ca
  - Dau Studios - mzupan@daustudio.ca
  - Introba - andy.chong@introba.com
  - Introba - keith.davidge@introba.com
  - Naikoon Contracting - max@naikoon.ca
  - Townline - Rick.Bortolussi@townline.ca
  - Aryze Developments (Homes for People) - luke@aryze.ca
  - Focal Engineering - riley@focaleng.com
  - HAVAN - ron@havan.ca

This bring us to 89 invitees – but we assume many will not be able to attend in person, and some won't participate online. This constitutes a comprehensive list of stakeholders that we'll bring together as a whole at regular intervals to share updates, seek advice, and champion this initiative. We will pull from this list, smaller groups of people to deal with specific topics and we will recommend a core group of champions from each of the 5 groupings for the Minister.

Please let me know if you have any questions about this list.

John

Local Governments etc. (41)	Indigenous Communities & Organizations (19)	Engineers & Architects (10)	Industry (12)	Academia & Housing Providers (4)
1. City of Abbotsford* 2. Regional District of Alberni-Clayoquot 3. City of Burnaby* 4. City of Campbell River 5. Regional District of Central Okanagan 6. District of Chetwynd 7. Regional District of Columbia Shuswap 8. Regional District of Comox Valley* 9. City of Coquitlam*	1. Ka:'yu:'k't'h'(Kyuquot) / Che:k'tles7et'h' (Checleseht) First Nations (Maa-nulth Treaty Society) 2. Upper Nicola Band 3. Leq'a:mel First Nation 4. Naut'sa mawt Nation (Tribal Council) 5. Nisga'a Lisims Government 6. Nuxalk Nation 7. Penticton Indian Band 8. Snuneymuxw First Nation 9. Tla'amin First Nation 10. Toquaht Nation 11. Tsawwassen First Nation 12. Uchecklesaht Tribe Government 13. Ucluelet First Nation 14. M'akola Development Services	• Architectural Institute of BC (4) • Engineers and Geoscientists of British Columbia (4) • Applied Science Technologists & Technicians of BC (2)	• Urban Development Institute (4) • Canadian Home Builders Association of BC (4) • British Columbia Construction Association (4)	• BC Non-Profit Housing Association (1) • BC Housing (2) • University of British Columbia (1)

10. Regional District of Cowichan Valley 11. City of Cranbrook 12. City of Delta 13. Regional District of Fraser Valley 14. Regional District of Fraser-Fort George 15. City of Kamloops 16. City of Kelowna* 17. City of Kimberly 18. District of Lake Country 19. City of Langley 20. Township of Langley 21. District of Mackenzie 22. City of Nanaimo* 23. Regional District of Nanaimo* 24. City of Nelson 25. City of North Vancouver* 26. City of Port Coquitlam 27. City of Prince George 28. City of Quesnel 29. Regional District of Buckley-Nechako 30. City of Richmond* 31. Township of Spallumcheen 32. District of Sparwood* 33. District of Summerland* 34. City of Surrey* 35. City of Terrace* 36. City of Vancouver* 37. City of Victoria 38. Building Officials Association of British Columbia 39. Union of BC Municipalities 40. Planning Institute of BC 41. Local Government Management Association	15. First Nations National Building Officers Association 16. First Nations Technology Council 17. HeBear Consulting 18. First Nations Housing and Infrastructure Council 19. Aboriginal Housing and Management Association			

*communities with digital permitting technology (from DAPR survey)
Blue text indicates confirmed interest from our emails.

FW: June Digital Permitting Event_Agenda

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: May 24, 2023 3:34:54 PM PDT
FYI – please see Mark's comments and additional invitee.

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Wednesday, May 24, 2023 2:47 PM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: RE: June Digital Permitting Event_Agenda

Hi John,

Thanks so much for the list and the go-forward plan. It looks like a great group of folks that will be able to provide the insight we need. The champion idea for each sector to meet with the Minister sounds like a fantastic way to make this more manageable as we drive toward a high-level consensus by September.

Our only thought was to include BC Land Title and Survey in the discussion. They met the Minister the other day and expressed interest in being of service to the project due to the digital services they already provide.

Gregory Steves
VP
Policy and Legal Services
Gregory.steves@itsa.ca
250-361-0579

I look forward to connecting soon and all the best,

Mark

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: Wednesday, May 24, 2023 8:53 AM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: FW: June Digital Permitting Event_Agenda

Hi Mark -

Below is the list of organizations invited to the June 12 event. We will have capacity for 40 people in person, with online facilitation for additional participants who can't be there in person. The list of invitees is in the table at the bottom of this email is broken into 5 categories to ensure appropriate representation across the range of stakeholders.

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- Introba - andy.chong@introba.com
- Introba - keith.davidge@introba.com
- Naikoon Contracting - max@naikoon.ca
- Townline - Rick.Bortolussi@townline.ca
- Aryze Developments (Homes for People) - luke@aryze.ca
- Focal Engineering - riley@focaleng.com
- HAVAN - ron@havan.ca

This bring us to 89 invitees – but we assume many will not be able to attend in person, and some won't participate online. This constitutes a comprehensive list of stakeholders that we'll bring together as a whole at regular intervals to share updates, seek advice, and champion this initiative. We will pull from this list, smaller groups of people to deal with specific topics and we will recommend a core group of champions from each of the 5 groupings for the Minister.

Please let me know if you have any questions about this list.

John

Local Governments etc. (41)	Indigenous Communities & Organizations (19)	Engineers & Architects (10)	Industry (12)	Academia & Housing Providers (4)
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19. City of Langley 20. Township of Langley 21. District of Mackenzie 22. City of Nanaimo* 23. Regional District of Nanaimo* 24. City of Nelson 25. City of North Vancouver* 26. City of Port Coquitlam 27. City of Prince George 28. City of Quesnel 29. Regional District of Buckley-Nechako 30. City of Richmond* 31. Township of Spallumcheen 32. District of Sparwood* 33. District of Summerland* 34. City of Surrey* 35. City of Terrace* 36. City of Vancouver* 37. City of Victoria 38. Building Officials Association of British Columbia 39. Union of BC Municipalities 40. Planning Institute of BC 41. Local Government Management Association				

*communities with digital permitting technology (from DAPR survey)

Blue text indicates confirmed interest from our emails.

RE: Part 3 subcommittee meeting

From: Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>

To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, bea.bains@fortisbc.com, rbaker@tol.ca, ebaudinaud@communityenergy.bc.ca, luiz.bezerra@passivehousecanada.com, stephen_e_gatz@whirlpool.com, alexandre.bigonesse@canada.ca, Rick.Bortolussi@townline.ca, GCarignan@communityenergy.bc.ca, jim.comtois@canada.ca, NConnolly@richmond.ca, francois.dubrous@canada.ca, warrington_ellacott@whirlpool.com, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, ngazo@naimacanada.ca, greg.gerke@townline.ca, nheap@richmond.ca, Alex.Hutton@fraserhealth.ca, tao.jiang@surrey.ca, anna.joynt@canada.ca, kadulski@direct.ca, mkapuscinski@naimacanada.ca, Pete.Koepfgen@fortisbc.com, toby.lau@bchydro.com, wileung@bchousing.org, charling.li@vancouver.ca, susan@focaleng.com, Lisa.Mak@bchydro.com, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, gregory.mccall@vancouver.ca, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, Mihailo.Mihailovic@nrc-cnrc.gc.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, kramlu@tol.ca, grichards@jensenhughes.com, trothery@communityenergy.bc.ca, gerry@3westbec.com, psundberg@frescoltd.com, asurendran@tol.ca, ralph.wells@ubc.ca, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>

Sent: May 24, 2023 5:55:18 PM PDT

Hi everyone. I wanted to let you know that this meeting will be postponed to June 6th 10 am -12:30 pm.
A revised meeting invite will be sent tomorrow morning.
Our apologies for the late notice and any inconveniences this may cause.

Regards,
Scott

-----Original Appointment-----
From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Sent: Thursday, April 27, 2023 9:04 AM
To: Wong, Hugo HOUS:EX; bea.bains@fortisbc.com; rbaker@tol.ca; ebaudinaud@communityenergy.bc.ca; luiz.bezerra@passivehousecanada.com; stephen_e_gatz@whirlpool.com; alexandre.bigonesse@canada.ca; Rick.Bortolussi@townline.ca; GCarignan@communityenergy.bc.ca; jim.comtois@canada.ca; NConnolly@richmond.ca; francois.dubrous@canada.ca; warrington_ellacott@whirlpool.com; patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; ngazo@naimacanada.ca; greg.gerke@townline.ca; nheap@richmond.ca; Alex.Hutton@fraserhealth.ca; tao.jiang@surrey.ca; anna.joynt@canada.ca; kadulski@direct.ca; mkapuscinski@naimacanada.ca; Pete.Koepfgen@fortisbc.com; toby.lau@bchydro.com; wileung@bchousing.org; charling.li@vancouver.ca; susan@focaleng.com; Lisa.Mak@bchydro.com; May, Zachary HOUS:EX; gregory.mccall@vancouver.ca; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; Mihailo.Mihailovic@nrc-cnrc.gc.ca; Mohareb, Adrian ENV:EX; roberto@zebx.org; hradhakrishnan@egbc.ca; kramlu@tol.ca; grichards@jensenhughes.com; trothery@communityenergy.bc.ca; gerry@3westbec.com; psundberg@frescoltd.com; asurendran@tol.ca; ralph.wells@ubc.ca; Williams, Scott B HOUS:EX; XT:Wimmers, Guido CITZ:IN
Subject: Part 3 subcommittee meeting
When: Thursday, May 25, 2023 10:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Calendar hold.

Agenda topics (subject to change with full agenda to come)

- Part 3 design checklist update
- Work plan
- Grocery stores and the Energy Step Code
- Code digitization
- City of Vancouver Energy Modelling Guidelines

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting

s.15

RE: Save the date: Digital Permitting Workshop – June 12th, 2023

From: pauline@chbabc.org
To: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: May 26, 2023 2:11:01 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon,

Thank you for the invitation to this engagement. Please see below four representatives from our association for this session:

Tom Eggers, s.22 , Chimera Construction (CHBA Central Interior), Kamloops: In-person
Pauline Rupp, pauline@chbabc.org, CHBA BC: In-person
Carmina Tupe, carmina@chbabc.org, CHBA BC: In-person
Cassidy deVeer, cassidy@3rdgenhomes.com, 3rd Generation Homes (CHBA Central Okanagan), Kelowna: Remote

Regards,
Pauline Rupp
Director, Technical & Building Innovation

Canadian Home Builders' Association of BC
400-6400 Roberts Street, Burnaby, BC V5G 4C9
t. 604-432-7112 ext. 307
www.chbabc.org

From: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>
Sent: Friday, May 19, 2023 2:42 PM
To: 'mgatensby@aibc.ca' <mgatensby@aibc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'afehr@egbc.ca' <afehr@egbc.ca>
Subject: Save the date: Digital Permitting Workshop – June 12th, 2023

Greetings,

The Ministry of Housing is committed to making B.C. a North American leader in digital permitting and construction. The Ministry of Housing, with the support from the Ministry of Citizens' Services, is working on modernizing housing permitting and approvals by digitizing the BC Building Code, advancing the adoption of digital permitting processes across B.C., integrating permit systems across the housing sector, and supporting collaboration technologies that help project teams work more effectively with housing development regulators.

The Ministries are hosting a hybrid engagement event to discuss the challenges users experience during the housing permit process and develop a shared understanding of the opportunities to resolve issues.

Event Details

- **Date**: June 12, 2023
- **Time**: 8:00 AM to 4:15 PM
- **Location**: In-person (lower mainland – specific location will be shared once confirmed) and remote

An agenda will be provided closer to the event.

Your organization has a total of
four (4) invites to ensure your organization and membership are represented. We will be connecting with individuals who participated in our early user research and engagement to let them know you have received the invite, and to reach out to you to support
your organization's representation at the event.

Please let us know by EOD Friday May 26th your list of
participants including their name, email address, organization, and an early indication of whether attendance is anticipated to be in-person or remote. We will provide the meeting invite to participants directly.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

News Release: Homes for People plan, an action plan to deliver more homes for people, faster

News
Release:
B.C. invests in digital permitting to get homes built faster

As requested: draft email to key partners

From: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: May 30, 2023 2:21:51 PM PDT
To: AIBC, ASTT, BOABC, EGBC, UDI plus CoV and NRC

Cc: Aura, Shannon

Subject: Ministry of Housing's BC Codes 2023 Public Review

Body:

Greetings,

I am writing to inform you that the Province is currently seeking feedback on proposed changes for the BC Codes 2023. Feedback will be accepted until June 16, 2023.

The BC Codes 2023 are anticipated to be adopted later this year with an effective date of December 2023, pending ministerial approval.

A video recording of the proposed changes will also be available for viewing. I will reach out again once the video has been posted online.

In the meantime, I am happy to answer any questions you may have about the public review.

Sincerely,

JJ

RE: Sq ft costs for a laneway house

From: May, Zachary HOUS:EX
To: Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>, Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Cc: Cramer, Leslie HOUS:EX <Leslie.Cramer@gov.bc.ca>
Sent: May 31, 2023 12:13:50 PM PDT
Attachments: image001.png

	Archetype:	Climate Zone (HDD)	Area (m2)	CZ Cost Multiplier	Base Construction Cost ($/m2) no adjustments	Base Construction Cost ($)
1	Laneway House	4 (Vancouver 2825 HDD)	69.7	1.000	2,851	198,750
		5 (Summerland 3350 HDD)	69.7	1.073	2,851	213,259
		6 (Cranbrook 4400 HDD)	69.7	1.126	2,851	223,793
		7A (Fort St. John 5750 HDD)	69.7	1.502	2,851	298,523
		7B (Fort Nelson 6710 HDD)	69.7	1.502	2,851	298,523
		8 (Uranium City 7500 HDD)	69.7	1.502	2,851	298,523

This is from page 150 of this report: https://energystepcode.ca/app/uploads/sites/257/2022/10/BC-Energy-Step-Code_Metrics-Report_2022-09-29-R1-Compressed.pdf

Data is based on 2021 Altus construction costs, which is based on 2020 data.

These laneway homes are 750 ft2 and price converts to $265/ft2 in Vancouver. Inflation since 2020 impact these costs, but this is a good baseline that was vetted by our partners on the Energy Step Code Council (UDI/CHBA) as valid numbers.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>
Sent: Wednesday, May 31, 2023 11:48 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Cc: Cramer, Leslie HOUS:EX <Leslie.Cramer@gov.bc.ca>
Subject: Sq ft costs for a laneway house

Can someone in your area in the next couple hours provide me with the approximate construction costs per sq ft of doing this (i.e., a stand alone ADU not a secondary suite), say in the lower mainland or Victoria, not including land costs? Ball park or range is fine.

Thanks

Gord

	Archetype:	Climate Zone (HDD)	Area (m2)	CZ Cost Multiplier	Base Construction Cost ($/m2) no adjustments	Base Construction Cost ($)
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		8 (Uranium City 7500 HDD)	69.7	1.502	2,851	298,523

Greetings everyone,

In advance of the June 12 Digital Permitting engagement session, we are having a quick virtual information session on June 7th at 12:00 PM (PST) – 12:30 PM (PST).

During the call, we will:

· Outline our objectives for the event,

· Walk through the agenda,

· Share how we are approaching this work, and

· Answer any questions you may have about June 12th.

We hope that this session provides you with the information you need to feel ready to participate on the 12th.

Thank you,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca<mailto:zachary.may@gov.bc.ca>

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15

FW: Save the date: Digital Permitting Workshop – June 12th, 2023

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Grass, William HOUS:EX <William.Grass@gov.bc.ca>
Sent: June 1, 2023 3:57:05 PM PDT
Emails to be added for June 7 and June 12 (we already have Jeff)

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, June 1, 2023 3:55 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Save the date: Digital Permitting Workshop – June 12th, 2023

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Nicole,

For clarity:

Virtual: Jeff Fisher, UDI (Jfisher@udi.org) and Chris Ho, Polygon Homes (cho@polyhomes.com)
In-person: Jeff Mitchell, GHL Consultants (jdm@ghl.ca)

Apologies for the delay,
Cassandra

Cassandra Smith
Director, Policy and Research
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: June 1, 2023 3:31 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>
Subject: RE: Save the date: Digital Permitting Workshop – June 12th, 2023

Nicole, in addition to myself, Chris Ho from Polygon and Jeff Mitchell from GHL will be attending.

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Wednesday, May 31, 2023 3:33 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: RE: Save the date: Digital Permitting Workshop – June 12th, 2023

Hi Jeff,

Hope you are doing well. I just wanted to follow up to see whether your organization is able to have representation at our June 12th engagement event on the digital permitting work? I have sent you the meeting invite for the now fully

virtual event, please feel free to directly forward the invite to others in your membership that you think should be involved in this conversation.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Manager, Policy and Regulation
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: HOUS Building & Safety Standards Branch HOUS:EX
Sent: Friday, May 19, 2023 2:42 PM
To: 'mgatensby@aibc.ca' <mgatensby@aibc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'afehr@egbc.ca' <afehr@egbc.ca>
Subject: Save the date: Digital Permitting Workshop – June 12th, 2023

Greetings,

The Ministry of Housing is committed to making B.C. a North American leader in digital permitting and construction. The Ministry of Housing, with the support from the Ministry of Citizens' Services, is working on modernizing housing permitting and approvals by digitizing the BC Building Code, advancing the adoption of digital permitting processes across B.C., integrating permit systems across the housing sector, and supporting collaboration technologies that help project teams work more effectively with housing development regulators.

The Ministries are hosting a hybrid engagement event to discuss the challenges users experience during the housing permit process and develop a shared understanding of the opportunities to resolve issues.

Event Details

- **Date**: June 12, 2023
- **Time**: 8:00 AM to 4:15 PM
- **Location**: In-person (lower mainland – specific location will be shared once confirmed) and remote

An agenda will be provided closer to the event.

Your organization has a total of **four (4) invites** to ensure your organization and membership are represented. We will be connecting with individuals who participated in our early user research and engagement to let them know you have received the invite, and to reach out to you to support your organization's representation at the event.

Please let us know by EOD Friday May 26th your list of participants including their name, email address, organization, and an early indication of whether attendance is anticipated to be in-person or remote. We will provide the meeting invite to participants directly.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

News Release: Homes for People plan, an action plan to deliver more homes for people, faster

News Release: B.C. invests in digital permitting to get homes built faster

URGENT: Materials for eApp 75201

From: Scott, Cory HOUS:EX <Cory.Scott@gov.bc.ca>
To: Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>, Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>
Cc: Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>, Doerksen, Heather HOUS:EX <Heather.Doerksen@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>, Thomson, Lia HOUS:EX <Lia.Thomson@gov.bc.ca>, Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>, Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Sent: June 5, 2023 10:40:36 AM PDT

Hi everyone,

The DMO just sent me an urgent request in eApp 75201 for MRK KMs for a meeting with UDI on Thursday (June 8). It has been sent to Gord but Bindi advised we will likely need input from each branch. Please keep an eye out for this as it's due back to the DMO ASAP.

Thank you

Cory Scott | Documents Coordinator
Assistant Deputy Minister Bindi Sawchuk
Housing & Land Use Policy Division
Ministry of Housing
Ph: 778-405-3465 Email: Cory.Scott@gov.bc.ca

(Update June 6, 2023): Full agenda now attached
· Part 3 design checklist update
· Work plan
· Grocery stores and the Energy Step Code
· Code digitization
· City of Vancouver Energy Modelling Guidelines

Microsoft Teams meeting

Join on your computer, mobile app or room device

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ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

ZERO CARBON STEPCODE

Energy Step Code Part 3 / Part 9 Non-Residential Subcommittee
Meeting Agenda

Tuesday, June 6th, 2023 | 10:00am to 12:30pm
Online Meeting (Zoom)

Timing	Topic
10:00	**Welcome / Introductions** *Led by Co-Chairs: Toby Lau, BC Hydro; Norm Connolly, City of Richmond; Scott Williams, BSSB*
10:10	**Agenda and Attendee Check** *All, led by Co-Chairs*
10:20	**High Process Load and Small Commercial Occupancies and the BC Energy Step Code** *Curt Hepting, Principal, EnerSys Analytics; and* *Ajeen Surendran, Building Energy Specialist, Township of Langley*
10:40	**Cooling Requirements in Proposed Code Language (Part 6, BCBC 2023)** *Discussion led by Scott Williams, BSSB*
11:00	**Code Digitization for BCBC; Integration with BIM** *Update by Scott Williams, BSSB*
11:15	**Update on Part 3 Compliance Checklist** *Susan MacDougall, Principal, Focal Engineering*
11:30	**City of Vancouver Energy Modelling Guidelines** *Charling Li, Green Building Planner, City of Vancouver* **Whole Building Energy Modelling Standard (CSA/ANSI Z5020:23)** *Maura Gatensby, AIBC; and Toby Lau*
12:00	**Updated Subcommittee Work Plan** *Preliminary discussion on proposed work plan tasks for 2023-2024*
12:15	**New Business** *Existing Buildings Commissioning (CCR)*
12:30	**Adjourn**

7252969

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Sent on behalf of BC Housing and the MBAR Team:

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Invitation to our next Roundtable Event
This is an event to bring together thought and practice leaders to discuss drought resilient residential and urban design.

DETAILS
* Date: Wednesday, June 14, 2023
* Time: 10:45am – 12:00pm PST
* Location: Online

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ABOUT THIS SESSION

In the last decade in BC, climate change has increasingly impacted our water systems throughout the province, through extreme heat, floods, drought, and wildfires. Water security is critical not just for human life but to protect the health of the ecosystems that support the livelihoods of all British Columbians. In BC last year, many communities experienced drought, and many more expect to experience significant 2023, and the frequency, severity and duration of climate related drought is expected to increase and will impact water availability, agriculture, infrastructure, and public health.

Designing drought resilience into housing and urban settings is crucial to mitigating the impacts of water scarcity on individuals and communities. Water conservation in housing can reduce strain on local water resources and promotes responsible water usage. Housing that can protect and sustain people during drought may ensure communities have access to as drinking water, sanitation, and hygiene during other crises such as wildfire and earthquake.

We welcome you to join us as we discuss this important issue. We will also be sharing updates and announcements from BC Housing and others in the MBAR community and there will be time for networking to allow you to speak with—and get to know—others in the group.

Please accept the attached invitation and forward to others who should be involved.

CONVERSATION STARTERS & UPDATES FROM:

* Gord Baird, District of Highlands Councillor, Chair of the CRD Regional Water Supply Commission, and Chair of the Juan de Fuca Water Distribution Commission
* Dr. Stewart Cohen, Author, Doctor Climate Change Blog and Former Researcher at Environment and Climate Change Canada
* Robert Boyd, Senior Construction Manager, Toronto Community Housing
* Elizabeth Kee, Assistant Project Engineer, Metro Vancouver

FOR MORE INFORMATION

Please visit our events page<s.15

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on the BC Housing website to discover other learning opportunities.

Check our Research Centre Library to read the latest technical and socio-economic housing research

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You are receiving this email because you are a member of the MBAR community.

BC Housing Research Centre
Suite 1701 – 4555 Kingsway
Burnaby, BC V5H 4V8

For more information, visit
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RE: SSMUH questions for MRK

From: May, Zachary HOUS:EX
To: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Sent: June 14, 2023 9:22:20 AM PDT
approved

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Sent: Wednesday, June 14, 2023 9:22 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: SSMUH questions for MRK

Hi Zachary,

One more response for your review, please. This was signed off by Nicole.

1. **Kelowna is quickly becoming a leader, using AI to review permit applications. What is the Province doing to support this initiative? This is innovative and what can the Province do to encourage other municipalities to take this step, and do more than simply shifting from paper to PDFs?**

    - HOUS is aware of the innovative work Kelowna is doing on an AI-powered interface to answer questions and automate certain tasks for permit applications. The work that Kelowna is doing is contributing to help make B.C. a North American leader in digital permitting and construction.
    - Many of our local government partners in B.C. have started to modernize their development permitting processes using e-permitting software to coordinate workflows but many approval processes are still paper/pdf-based.
    - Advancing the adoption and integration of digital permitting and construction processes across B.C. is a commitment of the Homes for People Plan, which was announced on April 3, 2023.
    - We are facilitating digital innovation in the housing construction sector by digitizing the BC Building Code and building permitting processes, with pilots in select local governments in 2024. We are actively collaborating with local governments, industry, and Indigenous partners to understand the challenges users experience during the permitting process and ensure we are focused on addressing the highest priority issues.
    - Our digital solutions will build on and integrate with (not duplicate) existing local government technology, such as AI, e-permitting, building information modelling, GIS technologies and others.

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, June 13, 2023 2:03 PM
To: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Subject: RE: SSMUH questions for MRK

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Sent: Tuesday, June 13, 2023 10:27 AM
To: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: SSMUH questions for MRK

Hi Zachary,

Following up on the second question below. Is MRK able to comment on this yet?

Thanks,

Liam Butler
Communications Manager
Ministry of Housing
Government Communications and Public Engagement
778 584-2433 | liam.butler@gov.bc.ca

From: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>
Sent: Friday, June 9, 2023 3:19 PM
To: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: SSMUH questions for MRK

Hi Liam, I've suggested a response to Q 1 below. Cc'ing Zac for his thoughts on the second one.

Cheers
Jessica

From: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Sent: Friday, June 9, 2023 3:11 PM
To: Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>; Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>
Subject: SSMUH questions for MRK

Hi folks,

MRK is speaking at the UDI annual general meeting in Kelowna next Friday. During the fireside chat portion, he will be asked the following questions about SSMUH. Do you mind providing assistance on his responses? I'm not sure if we are able to comment on these actions yet.

1. In the refreshed Housing Strategy, the Province has committed to allowing more small-scale multi-unit residential housing (missing middle) – up to 3 or 4 units per lot. Additional density will be permitted in areas 'well serviced by transit' – will this include areas with frequent transit networks or planned routes?
   - Work to clarify the area that this density would apply to is underway. I look forward to sharing more details soon.
2. When Provincial policies and regulations are developed, they often have an impact on the approval process for new housing. Will you be applying a housing lens when new policies are developed, for example: building code changes – like the ones currently being consulted on.
   - For reference, these changes would require 100% of new multi-family units to be made adaptable, and will significantly impact unit sizes and layouts, making it more difficult to deliver more housing faster.
   - **We are responsible for balancing a range of provincial priorities when developing new building regulations, including accessibility, climate, the economy, and housing.**
   - **We work hard to find a flexible and cost-effective approaches, based on input from groups like UDI. For accessibility, this meant setting requirements that improve the baseline adaptability in homes, but don't require the full expense of accessibility features that might not work for all people.**
   - **I am committed to continuing to work collaboratively with industry groups like UDI to help us balance governments priorities and deliver on the housing commitments in the Homes for People plan.**

Thank you,

Liam Butler
Communications Manager
Ministry of Housing
Government Communications and Public Engagement
778 584-2433 | liam.butler@gov.bc.ca

Follow-up: June 12th Digital Innovation in Housing Construction Workshop

From: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>

To: Paul Bogunovic <pbogunovic@abbotsford.ca>, pcaraher@ahma-bc.org, sfralin@ahma-bc.org, jjung@asttbc.org, katy.fairley@bccassn.com, saafrin@bchousing.org, srutherford@bchousing.org, jpatel@bchousing.org, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, tyler.wightman@boabc.org, Jason.berlin@rdbn.bc.ca, jason.llewellyn@rdbn.bc.ca, jason.watt@burnaby.ca, Trevor.Sweeney@campbellriver.ca, carmina@chbabc.org, cassidy@3rdgenhomes.com, pauline@chbabc.org, jmitchell@coquitlam.ca, Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>, esangster@daustudio.ca, mbarros@daustudio.ca, TSwardh@delta.ca, msangret@delta.ca, sGervais@digitalsupercluster.ca, spaish@digitalsupercluster.ca, afehr@egbc.ca, jmunroe@fninspector.ca, bharasimiuk@rdffg.bc.ca, kjonkman@rdffg.bc.ca, diana@havan.ca, ron@havan.ca, george.hemsley@introba.com, brad.walton@jensenhughes.com, tpollock@kimberley.ca, jkassel@lakecountry.bc.ca, jdelrosario@langleycity.ca, Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>, Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>, max@naikoon.ca, Abe.lang@nanaimo.ca, Darcy.fox@nanaimo.ca, jeremy.holm@nanaimo.ca, reed.botwright@nanaimo.ca, pthompson@rdn.bc.ca, Iain.Macdonald@nrc-cnrc.gc.ca, amcintyre@nelson.ca, echow@cnv.org, tryce@cnv.org, aboel@oakbay.ca, HStewart@oakbay.ca, rmacleod@portmoody.ca, <rmacleod@portmoody.ca>, Wil.Wedel@princegeorge.ca, tturner@quesnel.ca, ftewfik@richmond.ca, lindsay.chase@saanich.ca, hgoodland@scius.ca, psorfleet@sparwood.ca, bdollevoet@summerland.ca, RDube@surrey.ca, richards@syncraconstruction.com, nbrooks@terrace.ca, sean.mckinnon@tn-bc.ca, p.zadeh@civil.ubc.ca, ssf@civil.ubc.ca, jfisher@udi.org, amy.vilis@vancouver.ca, Rebecca.Doel@vancouver.ca, andrew.wroblewski@vancouver.ca, Calvin Gray <cgray@victoria.ca>, Grass, William HOUS:EX <William.Grass@gov.bc.ca>, Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>, Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>, Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>, Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>, Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>, King, David J M JEDI:EX <David.King@gov.bc.ca>

Sent: June 16, 2023 2:12:40 PM PDT

Attachments: Concept process map for June 12 engagement.pdf, Concept Ecosystem map for June 12 engagement.pdf

Greetings everyone,

Thank you for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction. We appreciate the perspectives and insights you shared with us, and we are hard at work analyzing your feedback.

For those who would like to provide additional feedback, please note that the Mural board we used on Monday is now closed. We are still accepting feedback until EOD Wednesday June 21, 2023, via two methods:

1. An after-hours self-serve Mural board (link) that contains both breakout activities
2. Email to the building.safety@gov.bc.ca

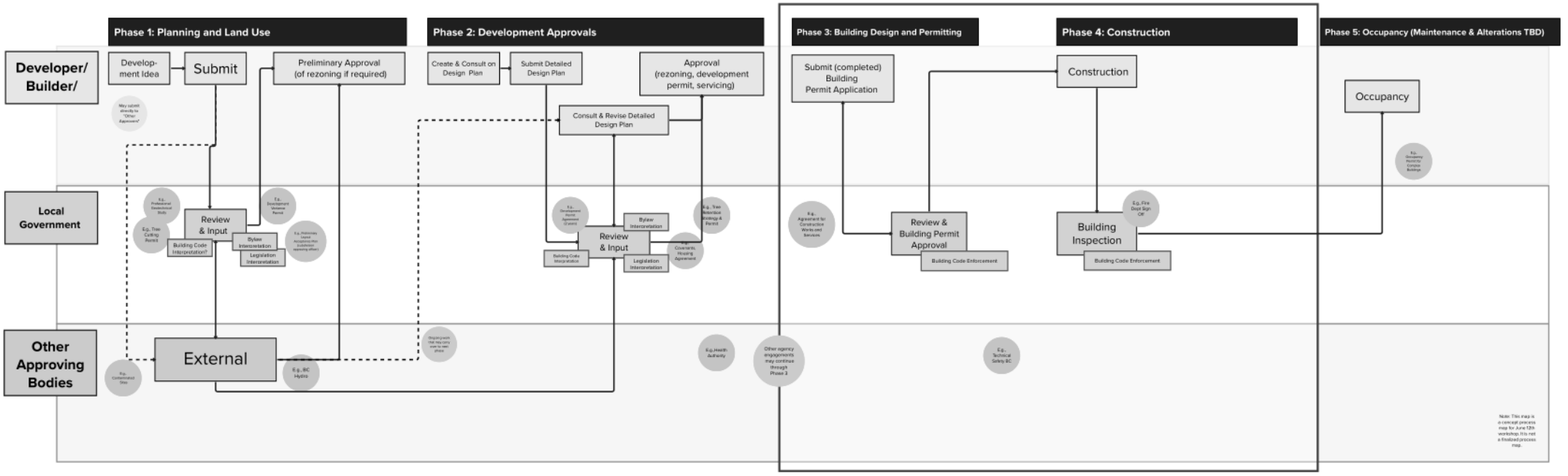
We are working to share a summary report of the engagement in the coming weeks.

Have a great day,

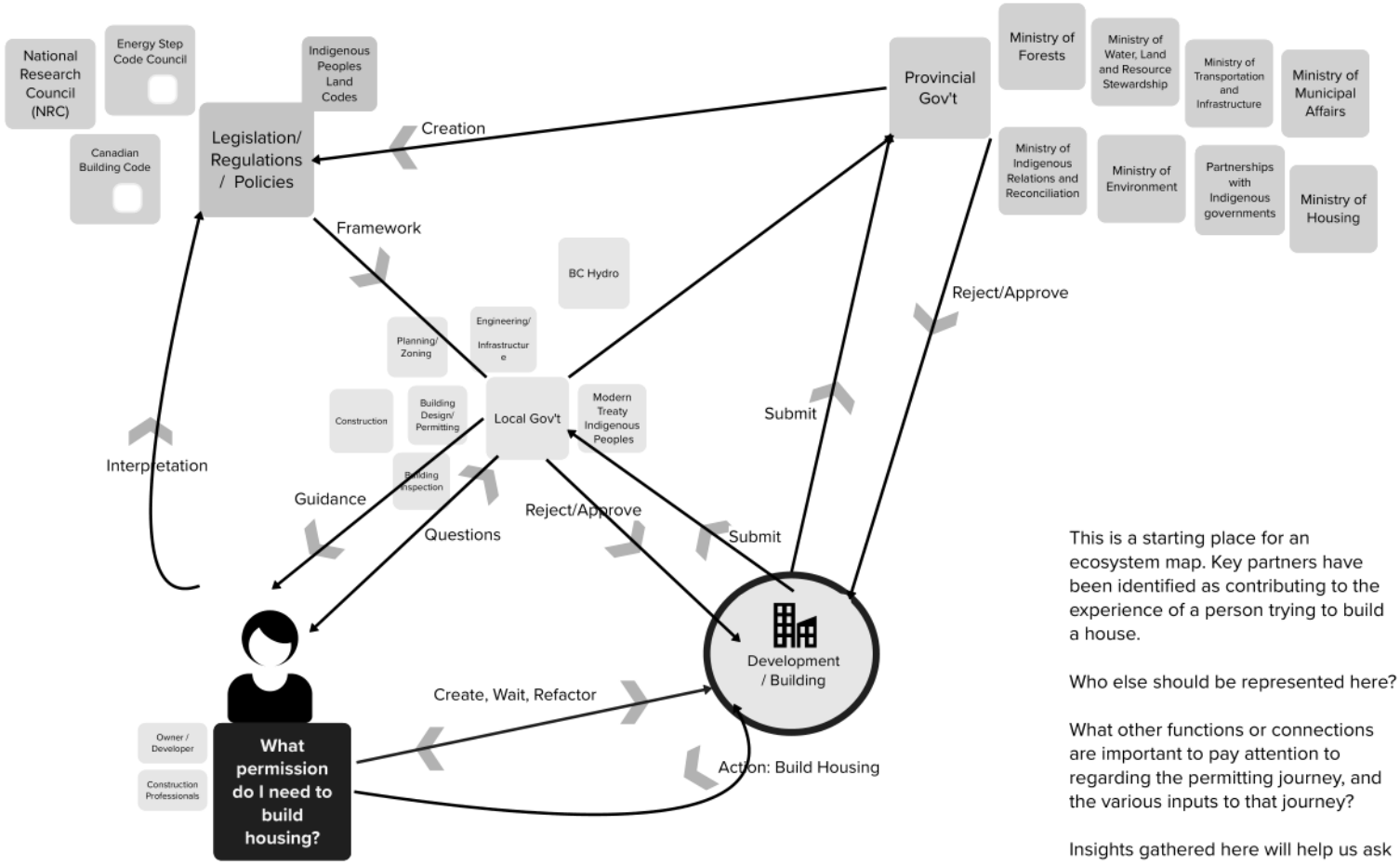
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Process flow overview



Ecosystem Map overview



This is a starting place for an ecosystem map. Key partners have been identified as contributing to the experience of a person trying to build a house.

Who else should be represented here?

What other functions or connections are important to pay attention to regarding the permitting journey, and the various inputs to that journey?

Insights gathered here will help us ask better questions about what problems to solve for first and who to include in our research and colloboration.

RE: UDI Submission: proposed B.C.-specific Building Code changes

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Cassandra Smith <csmith@udi.org>, HOUS BSSB Public Review HOUS:EX <BSSB.public.review@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Anne McMullin <AMcMullin@udi.org>, Jeff Fisher <jfisher@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: June 16, 2023 3:49:01 PM PDT
Attachments: image001.jpg, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg

Hi Cassandra, Anne, Lily and Jeff,

Thank you for your thoughtful comments and for engaging your membership. The team will review these comments in detail and they will inform decisions going forward. As discussed last week, there may be some mitigation built in to an adoption relating to development permits, but I also acknowledge not all projects will have applied for a development permit by the proposed effective date of the code in December. There are many more points in your comments to consider and discuss as well; please be assured this will happen over the coming weeks. We will reach out if we need further clarification or discussion.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, June 16, 2023 1:17 PM
To: HOUS BSSB Public Review HOUS:EX <BSSB.public.review@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon,

On behalf of Anne McMullin, President & CEO of UDI and our members, please find attached our submission on the proposed B.C.-specific Building Code changes. Throughout our letter we recommend that additional time be taken before implementation to analyze the impacts of the proposed changes and develop offsets to mitigate them. We reiterate our appreciation for the work being done by the Building and Safety Standards Branch, and would be pleased to provide support if it is determined that further analysis will be done.

If you would like to discuss any of our recommendations further, please let us know.

Regards,

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

FW: UDI Submission: proposed B.C.-specific Building Code changes

From:	Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To:	McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc:	Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent:	June 16, 2023 3:52:58 PM PDT
Attachments:	2023-06-16 UDI Letter - BSSB - 2023 BCBC Changes.pdf, image004.jpg, image006.jpg, image007.jpg, image002.jpg, image005.jpg, image003.jpg

I assume this is logged as it cam in to the PR inbox, but Aura, please ensure so.

Zac- it would be worthwhile to have a discussion about reliance on the NBC public reviews. This letter states that we have not adequately indicated impacts of Part 3 seismic because it is not part of the BC PR. And yet that is and has always been our policy for PR. And needs to be even more so now under CCRA. I'll put this on our check in as a starting point, but we likely need some further communications and expectations management related to this.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, June 16, 2023 1:17 PM
To: HOUS BSSB Public Review HOUS:EX <BSSB.public.review@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon,

On behalf of Anne McMullin, President & CEO of UDI and our members, please find attached our submission on the proposed B.C.-specific Building Code changes. Throughout our letter we recommend that additional time be taken before implementation to analyze the impacts of the proposed changes and develop offsets to mitigate them. We reiterate our appreciation for the work being done by the Building and Safety Standards Branch, and would be pleased to provide support if it is determined that further analysis will be done.

If you would like to discuss any of our recommendations further, please let us know.

Regards,

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

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1100-1050 West Pender Street
Vancouver, BC V6E 3S7

URBAN
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SUITE 1100
1050 W PENDER STREET
VANCOUVER, BC V6E 3S7

June 16, 2023

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch (BSSB)
PO Box 9844 Stn Prov Govt
Victoria BC V8W 9T2

Re: B.C. Building Code 2023 Public Review

Dear Mr. Jensen:

The Urban Development Institute Pacific Region (UDI) would like to thank you for meeting with our members on April 26th regarding the proposed *B.C. Building Code* (*BCBC*) changes that the Ministry would like to be implemented by the end of the year. We understand the Province's objectives to make buildings more accessible by increasing the adaptable features in them as well as improving health/safety with the proposed seismic design requirements. However, as discussed in our meeting, UDI has concerns about the substantial impact of these changes on the designs of buildings/units as well as the floor area and costs of projects. We have several recommendations, including:

1. Delaying the adoption and implementation of the accessibility and seismic design and accessibility requirements to allow additional time to understand the impacts on new housing supply and ways to mitigate them;
2. Working with staff in the Planning and Land Use Management Branch, and Ministry of Municipal Affairs to develop mitigation measures to protect housing supply; and
3. Enhance in-stream protection for projects already in the municipal approvals process.

Accessibility

UDI recognizes the need for the *BCBC* to include robust provisions related to accessibility and the development of adaptable units across the housing continuum, and many of the adaptable provisions such as the location of switches and plugs can be accommodated in all units. However, the proposed changes that will increase the space

in bathrooms and bedrooms far exceed the current requirements and present multiple challenges for the development industry to provide much-needed housing.

Impacts on Design and Housing Delivery

The proposed change to "*[Require] 100 per cent of dwelling units to be adaptable in new, large apartments and condos...*" could have significant adverse impacts on the number of homes being delivered and the affordability of these homes. This is especially true for smaller and more affordable units that would need to be designed to have enough space for increased mobility.

At the meeting, you indicated that 650 ft^2 one-bedroom apartments could be designed to accommodate the adaptable features. However, it is not clear how desirable or marketable these units would be if the larger bathrooms and wider halls reduce the size of the living spaces. In addition, our members are building one-bedroom units that are much smaller than 650 ft^2 as well as studios.

Fully adaptable units will have to be larger, which could negatively impact the affordability of these units as the overall square footage of the unit will increase. As unit sizes increase and corridors widen to meet the requirements, this would result in lower numbers of units per project if the same footprint was maintained. Considering the Province's goals of making housing more affordable and supporting the delivery of more housing supply, these issues need to be addressed.

Demand for Accessible Units

Although it is noted in the consultation documents that more adaptable units are needed within the housing continuum, we do not think the need is for 100% of units to be fully adaptable given the small percentage of people requiring accessibility provisions. ***UDI recommends that the BSSB delay the implementation of these changes and use the additional time to conduct more research on the demand for fully adaptable units as well as the impact of the proposed requirements – especially with regard to floor area – and mitigation measures.***

UDI acknowledges and supports that many of the proposed changes for *BCBC 2023* are intended to better harmonize it with the National Building Code of Canada (NBC). However, these proposed changes to accessibility are part of the changes being made too harmonize with the *NBC* and therefore could be given further consideration without impacting the harmonization of the codes.

There is an additional issue. There are currently several communities with no requirements for adaptable units. In the Lower Mainland, many communities require a much lower percentage of fully adaptable units ranging from 5-25%. In all these examples, a jump to require 100% of new units to be fully adaptable would be a substantial change, and it would be critical to phase-in much higher standards.

Earthquake Design

UDI recognizes that in B.C. we are in a seismic zone, and our members want to make sure their buildings are safe in the event of an earthquake. Areas such as the Capital Region, Richmond and Delta experience increased challenges with earthquake preparedness in new buildings, especially in relation to the rest of Canada. These are also some of the areas with the greatest need for new housing in the province.

In our April 26th meeting with the BSSB, it was clear that the Ministry is still understanding what the impacts of new Earthquake Design requirements would be. The timeline for new seismic requirement implementation is short, for both the Ministry and the industry to identify the complete implications of the proposals. Some members have estimated that concrete core sizes will need to increase by 20-30% for high-rise buildings. This directly conflicts with municipal requirements constraining floorplate sizes, resulting in less liveable space in each building. It will take time for local governments to adjust requirements to adapt to larger building cores without compromising housing delivery. ***UDI recommends that the Earthquake Design changes be delayed to allow for further analysis on the impacts as well as potential mitigation measures.***

For Part 9 buildings, the Province is recommending the implementation of the 2025 *NBC* seismic measures, so the timing of the implementation does not need to align with the Harmonization Agreement. UDI also suggests a delay for the Part 3 changes, and there is a precedent that has been established in the treatment of other harmonization changes. It is noted on the Province's website that changes to the *NBC* and *National Fire Code* (*NFC*) requirements for Large Farm Buildings and Home-Type Care Occupancies are being delayed to allow for impact analysis.

In addition, the public consultation information provided by BSSB focused on the changes for Part 9. We are concerned that some of our members who build Part 3 projects will be surprised by what will be substantial changes in some communities compared to the current requirements that will add significant costs to projects as well as reduce the square footage of buildings, and impact the overall affordability of new housing.

Implementation Approach

UDI has significant concerns regarding many of the proposed accessibility and seismic changes. We believe that there is a need to delay the implementation of both of these provisions in their entirety, despite the Province's commitment to the harmonization agreement. There are aspects of both provisions that may have a limited impact on the building sector, however ***we recommend against the adoption of these types of changes in a piecemeal approach.*** This would result in confusion for builders, consultants and municipalities, as well as a duplication of the Province's education efforts in these critical areas. This underscores our recommendation for the BSSB to

remove these provisions from the changes being proposed for 2023 implementation, to allow for additional time to assess impacts, then implement the changes as a package at a later date.

Mitigation Measures to Protect Housing Supply - Offsets

The Provincial government has made clear their intentions to increase the supply of housing across the province. The Ministry of Housing has announced several initiatives including mandated housing targets for municipalities under the *Housing Supply Act*. These initiatives are critical to meet the current shortfall of housing and incoming demand, work towards increased affordability, and ensure that all B.C. residents have more housing options. In order to do this, it will involve the coordination of all provincial initiatives that impact the delivery of housing, including provisions in the new *BCBC*.

As noted above, increasing accessibility and seismic design requirements in the *BCBC* will have an impact on the amount of housing that can be delivered, and the affordability of housing because of the impacts on costs and densities that can be built. These difficulties will apply to all housing types, including much-needed purpose-built rental housing as well as non-profit housing.

Requiring changes to be made by the end of this year could directly impact certain communities that have been selected as part of the first wave of housing targets. For example, Delta, Saanich, Victoria and Oak Bay, which are in areas where the seismic design requirements will have significant impacts, will need to show progress to increasing the supply of housing in their communities by the end of this year.

Mitigation measures need to be in place to avoid negatively impacting the ability of builders and municipalities to deliver the housing the Province and public are demanding. ***We recommend that these measures be offset by changes to the floor area calculations, exempting additional area required to achieve the new standards.*** However, this may also include the need to adjust site coverage, setbacks and heights, so the additional floor area can be used by proponents.

We recognize that this proposal is beyond the purview of the *Building Code,* but it is not beyond the purview of the Ministry of Housing. UDI also recommends that these offsets and zoning adjustments do not solely become the responsibility of local governments to implement. Municipalities are already struggling to find capacity to streamline processing and increase housing delivery, requiring them to develop individual offsets for these changes would likely strain already overburdened departments. A process that is led by the Ministry would ensure there is a more consistent standard across the Province and would likely result in the changes being approved and implemented more efficiently.

In addition, there are provincial measures that could be explored. This includes tax offsets for purpose-built rental housing that would allow the additional costs incurred to meet new accessibility and seismic requirements to be deducted from taxable rental income over time.

In-Stream Protection

To mitigate the impacts of the new accessibility and seismic requirements, better in-stream protection for projects will be necessary. UDI has long advocated for better in-stream protection for projects when there are substantial changes to any requirements or charges because our members purchase land and make financial commitments early in the development process. It is extremely difficult to make adjustments afterward, which can lead to projects being deferred/cancelled or prices and rents needing to be increased – both of which undermine affordability.

There are additional concerns with the proposed short implementation and weak in-stream protection provisions. Our members were notified of the changes in late April, reviewed the finalized proposals in late May, and will need to implement any changes into their projects by the end of the year. As noted above, there has not been clear communication regarding the drastic impacts of the seismic changes for Part 3 buildings.

Many will not have their Building Permit applications in on time to achieve the proposed in-stream protection. For those who do not make it in time, the implications are serious because the new accessibility and seismic requirements are so drastic, major design changes will be required – including to unit layouts.

We are concerned that pre-sales could be put in jeopardy, particularly with the recent changes to the Policy Statements 5, 6 and 13, under the *Real Estate Development and Marketing Act (REDMA),* which allow the early marketing period to commence after the receipt of Third Reading. Under Policy Statement 5 issued by the Superintendent of Real Estate (BCFSA) pursuant to *REDMA,* if as a consequence of the issuance of a building permit a unit that has been pre-sold requires material changes to its layout or size (or if the layout or size of a major common facility, or the general layout of the development, is materially changed) then the developer would need to inform the purchaser and the affected purchaser(s) would have the right to rescind (cancel) their contract. Project financing is typically dependent on securing pre-sales and cancellations could ultimately undermine the agreements with lenders, threatening builders' ability to complete new housing developments. In addition, the higher costs of the changes, which cannot be recovered from pre-sale purchasers, may make projects unviable – again resulting in cancellations.

We would also be concerned if the design changes were so drastic that other municipal approvals would need to be revisited as this would further delay projects – especially given the capacity constraints in local government planning and building departments. The potential impacts of the impacts on pre-sales and municipal approvals is another issue that the Ministry needs to assess before it proceeds with accessibility and seismic changes.

UDI would support changes to the current approach to in-stream protection to allow applications which have submitted with Development Permits on or after the date that these changes are effective to proceed under the current BCBC. Again, it would not be appropriate to rely on local governments to develop their own policies for in-stream protection because it would result in a patchwork of different approaches – changes to the in-stream protection requirements should be made at the provincial-level.

Conclusion

UDI would like to thank you again for meeting with our members to discuss the proposed changes. We are deeply concerned about the changes to the accessibility and seismic design requirements. -The timeline for implementing them is short, with new code changes scheduled to be in effect by the end of 2023. Given the substantial impacts that these changes will have on building designs, we believe that this timeline should be extended, and recommend that the BSSB allocate more time to review them and explore potential solutions to the challenges we have outlined, including having floor area exemptions and improved in-stream protections for projects. UDI would be pleased to work with the Branch and other stakeholders to navigate the best way forward to harmonize the *BCBC* with the *NBC*, while mitigating the impacts on our collective ability to build new homes throughout British Columbia. Please do not hesitate to reach out should you have any questions about our concerns and recommendations.

Sincerely,



Anne McMullin
President and CEO, Urban Development Institute

RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

From:	Jeff Fisher <jfisher@udi.org>
To:	Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc:	Cassandra Smith <csmith@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>, Jenny Scott <jscott@udi.org>, Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent:	June 16, 2023 4:01:53 PM PDT
Attachments:	image002.jpg, image005.jpg, image006.jpg, image004.jpg, image003.jpg, image001.jpg

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We send one out every two weeks on the Tuesday

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, June 16, 2023 4:00 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff – what is the frequency of your newsletter (i.e., after June 27th when is your next one)? I am just finishing up my workday before a week of vacation, but I will have Julie connect with you next week on this.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Manager, Policy and Regulation
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, June 16, 2023 3:47 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Jeff Fisher <jfisher@udi.org>

Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff,

Nicole has more info on this. Nicole, see below.

Hugo

From: Jeff Fisher <jfisher@udi.org>
Sent: Friday, June 16, 2023 3:43 PM
To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>
Subject: FW: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hugo, we have a newsletter going out to members a week Tuesday (June 27th). Is there anything that we can share with our members about this – or should we wait until the process is further along?

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

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Vancouver, BC V6E 3S7

From: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>
Sent: Friday, June 16, 2023 2:13 PM
To: Paul Bogunovic <pbogunovic@abbotsford.ca>; pcaraher@ahma-bc.org; sfralin@ahma-bc.org; jjung@asttbc.org; katy.fairley@bccassn.com; saafrin@bchousing.org; srutherford@bchousing.org; jpatel@bchousing.org; Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; tyler.wightman@boabc.org; Jason.berlin@rdbn.bc.ca; jason.llewellyn@rdbn.bc.ca; jason.watt@burnaby.ca; Trevor.Sweeney@campbellriver.ca; carmina@chbabc.org; cassidy@3rdgenhomes.com; pauline@chbabc.org; jmitchell@coquitlam.ca; Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>; esangster@daustudio.ca; mbarros@daustudio.ca; TSwardh@delta.ca; msangret@delta.ca; sGervais@digitalsupercluster.ca; spaish@digitalsupercluster.ca; afehr@egbc.ca; jmunroe@fninspector.ca; bharasimiuk@rdffg.bc.ca; kjonkman@rdffg.bc.ca; diana@havan.ca; ron@havan.ca; george.hemsley@introba.com; brad.walton@jensenhughes.com; tpollock@kimberley.ca; jkassel@lakecountry.bc.ca; jdelrosario@langleycity.ca; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>; Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; max@naikoon.ca; Abe.lang@nanaimo.ca; Darcy.fox@nanaimo.ca; jeremy.holm@nanaimo.ca; reed.botwright@nanaimo.ca; pthompson@rdn.bc.ca; Iain.Macdonald@nrc-cnrc.gc.ca; amcintyre@nelson.ca; echow@cnv.org; tryce@cnv.org; aboel@oakbay.ca; HStewart@oakbay.ca; rmacleod@portmoody.ca, <rmacleod@portmoody.ca>; Wil.Wedel@princegeorge.ca; tturner@quesnel.ca; ftewfik@richmond.ca; lindsay.chase@saanich.ca; hgoodland@scius.ca; psorfleet@sparwood.ca; bdollevoet@summerland.ca; RDube@surrey.ca; richards@syncraconstruction.com; nbrooks@terrace.ca; sean.mckinnon@tn-bc.ca; p.zadeh@civil.ubc.ca; ssf@civil.ubc.ca; Jeff Fisher <jfisher@udi.org>; 'amy.vilis@vancouver.ca' <amy.vilis@vancouver.ca>; Rebecca.Doel@vancouver.ca; andrew.wroblewski@vancouver.ca; Calvin Gray

<cgray@victoria.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>; Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>; Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>; Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>; Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; King, David J M JEDI:EX <David.King@gov.bc.ca>
Subject: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Greetings everyone,

Thank you for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction. We appreciate the perspectives and insights you shared with us, and we are hard at work analyzing your feedback.

For those who would like to provide additional feedback, please note that the Mural board we used on Monday is now closed. We are still accepting feedback until EOD Wednesday June 21, 2023, via two methods:

1. An after-hours self-serve Mural board (link) that contains both breakout activities
2. Email to the building.safety@gov.bc.ca

We are working to share a summary report of the engagement in the coming weeks.

Have a great day,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

UDI Letter - Phase 2 Consultation on the Draft Policy Framework for Climate Change Mitigation

From:	Lily Shields-Anderson <lshieldsanderson@udi.org>
To:	May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc:	Jeff Fisher <jfisher@udi.org>, Cassandra Smith <csmith@udi.org>
Sent:	June 20, 2023 2:29:47 PM PDT
Attachments:	image001.jpg, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg, 2023-06-15 UDI Letter - CBHCC - Phase 2 Consultation on the Draft Policy Framework for Climate Change Mitigation.pdf

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon Zachary,

For your reference, last week UDI submitted a Letter to the Federal government regarding the Phase 2 Consultation on the *Draft Policy Framework for Climate Change Mitigation*.

Please find the letter attached as a PDF in this email.

If you have any questions please do not hesitate to reach out.

Best regards,
Lily

Lily Shields-Anderson
Policy & Research Coordinator
Direct: (604) 901-1948

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June 15, 2023

Sefton Hyde-Clarke
Secretary, Canadian Board for Harmonized Construction Codes
Manager, Code Development System, Codes Canada
National Research Council Canada
1200 Montreal Rd,
Ottawa, ON K1A 0R6

Re: *Phase 2 Consultation on the Draft Policy Framework for Climate Change Mitigation*

Dear Sefton Hyde-Clarke:

The Urban Development Institute Pacific Region (UDI) is pleased to provide comments on the second phase of the consultation on the *Draft Policy Framework for Climate Change Mitigation*. Our comments will be primarily focused on operational greenhouse gas (GHG) emissions because the documents provided indicated that "… *the focus of policy development at this time is on operational GHG emissions, and policies that pertain exclusively to embodied GHG emissions will be addressed in the future*," and we provided comments on embodied carbon in our response to the first phase of consultations.

As stated in that letter, UDI is pleased that the Canadian Board for Harmonized Construction Codes (CBHCC) proposals align with British Columbia's *Zero Carbon Step Code* (*ZCSC*), and we ask that this approach continue. Any significant changes would result in confusion for the building sector, and undermine the research, education and training that have and will continue to be made throughout the Province.

UDI is not opposed to incorporating the reduction of operating GHGs as an objective in the National Model Codes, as it is already an objective in the *BC Building Code* (*BCBC*) through the introduction of the *ZCSC*. Our concerns are primarily with embodied carbon as we believe that other approaches should be utilized before changes are made to the National Model Codes. As such, we are pleased that the focus of CBHCC at this time is on operating emissions, and that the Board recognizes there is still work to be done before embodied carbon emissions can be addressed.

In addition, we support the flexibility of the tiered framework being proposed that would allow provinces to determine the best path forward to reduce emissions and allow them

to use "… *a variety of policy instruments, including the National Model Codes*," to meet their objectives. This is especially important to British Columbia where BC Hydro grid will soon have zero emissions, and we have extensive Renewable Natural Gas resources.

This flexibility would be enhanced if the provinces could also establish their own emissions factors. In some regions of B.C., the local electricity grid has higher emissions than natural gas. There are also district energy systems and requirements that new buildings be connected to them. They may not be zero emission systems by the time the *2025 National Building Code* is implemented in British Columbia. The issue has been addressed through the *ZCSC* by allowing local governments to establish the emissions factors. We recommend that this option be allowed to continue under the National Model Codes.

UDI strongly supports the work of the CHBCC to address Policy Element 5 – the impact on affordability – and conduct an "… *impact analysis that considers the costs and benefits of the proposed code changes* …". This work needs to include lifecycle analyses and payback periods as well as the initial capital costs of requirements. The latter is important because there may be a split incentive issue as many builders do not retain ownership of their projects after construction and many initial purchasers do not own their units long enough to benefit from the lifecycle savings.

CHBCC also discusses in the updated *Policy Considerations for Developing and Implementing Greenhouse Gas Emissions Provisions in the National Model Codes Paper* that the "*Optimization of energy tiers and GHG tiers within the P/T context should be a consideration in adoption*." This could be another approach to improving the affordability of housing, however payback periods and the split incentive issue needs to be considered.

When the *Energy Step Code* (*ESC*) was developed in B.C., the primary objective of local governments was reducing carbon emissions. However, this could not be directly addressed because the *BCBC*, at the time, only had energy efficiency as an objective – not GHG emission reductions, and fuel sources were viewed as a non-code issue. The *ESC* was used to indirectly reduce emissions by reducing the amount of energy needed to operate buildings.

With the introduction of the *ZCSC* that will directly reduce emissions, it is not clear if it is necessary to go to the highest steps of the *ESC* (i.e., Step 4 for Part 3, and Step 5 for Part 9). This is critical because at the highest steps there are significantly more challenges and costs, and it is not clear what the payback periods would be. If they are long and the split incentive issue is not addressed, this could undermine the delivery of new housing. In addition, projects built to the highest steps look very different from current designs, and it is not clear how much public and market acceptance there will be of buildings with less glazing, larger floor plates, fewer balconies and less articulation.

The costs to maintain the current architectural look of buildings and achieve the highest steps are much more substantial.

Finally, affordability can be improved through Policy Element 8 – "*adoption and implementation considerations including market readiness, training, capacity-building* …". We ask that issues such as split incentives be addressed through this work and that the CHBCC and all governments review the use of incentives and financial mechanisms to help the building sector meet the new requirements.

As part of the Policy Element 8 work, senior governments should also consider industrial policies, so building materials and components needed to meet the requirements, such prefabricated mass timber panels and heat pumps, can be manufactured sourced in Canada. This would support the statement in the *Policy Considerations Paper* that the "*Implementation of new GHG emissions objectives and requirements will result in increased commercial activity in the construction sector, supporting a low-carbon economy while helping to achieve GHG emissions reductions goals*."

Thank you for involving UDI in your consultation process. Again, we would like to reiterate our support for the requirements being developed by the CHBCC being aligned with British Columbia's *ZCSC*, and we would like to continue to be involved in the process as this initiative moves forward. If you have any questions about our comments and recommendations in this letter or our previous correspondence, please do not hesitate to contact us.

Sincerely,



Anne McMullin
President and CEO, Urban Development Institute

FW: High density isn't a magical affordability button. Here's why.

From: Ken Kunka <Ken.Kunka@penticton.ca>
To: Development Services <Development.Services@CITYHALL.CorporationoftheCityofPenticton.com>
Cc: Anthony Haddad <Anthony.Haddad@penticton.ca>, Donny van Dyk <Donny.vanDyk@penticton.ca>, info@chbaso.org, udiokanagan@udi.org, Cheryl Hardisty <Cheryl.Hardisty@penticton.ca>, Shane Mills <Shane.Mills@penticton.ca>, Tyler Wightman <tyler.wightman@boabc.org>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: June 21, 2023 9:31:48 AM PDT
Attachments: image002.jpg, image001.png

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Morning,
I believe Penticton is strongly positioned for infill “missing middle” development.

Watching this industry for almost 30 years and a bit dis-heartened to see any time gains made in one area - it is quickly eaten up in speculation and increased cost in a super-heated market.

Finding that sweet spot of health, safety and long term sustainability with economic feasibility is something needing continuing collaboration.

Sincerely,

Ken Kunka, AScT RBO
Pronouns: He/Him/His [Learn more here]
Building and Permitting Manager
City of Penticton | 171 Main Street | Penticton, BC | V2A 5A9
p: 250.490.2505 | f: 250.490.2502 | e: ken.kunka@penticton.ca
Submit a document by email : permits@penticton.ca



Lean more about Penticton’s Energy Step Code requirments – click here Green Build
Penticton is moving to the cloud! Online Building Permits will be avaible this summer. Click here to learn more - https://cloudpermit.com/en-ca/

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From: Lauren at Strong Towns <lauren@strongtowns.org>
Sent: Wednesday, June 21, 2023 9:11 AM
To: Ken Kunka <Ken.Kunka@penticton.ca>
Subject: High density isn't a magical affordability button. Here's why.

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Page 241 of 304

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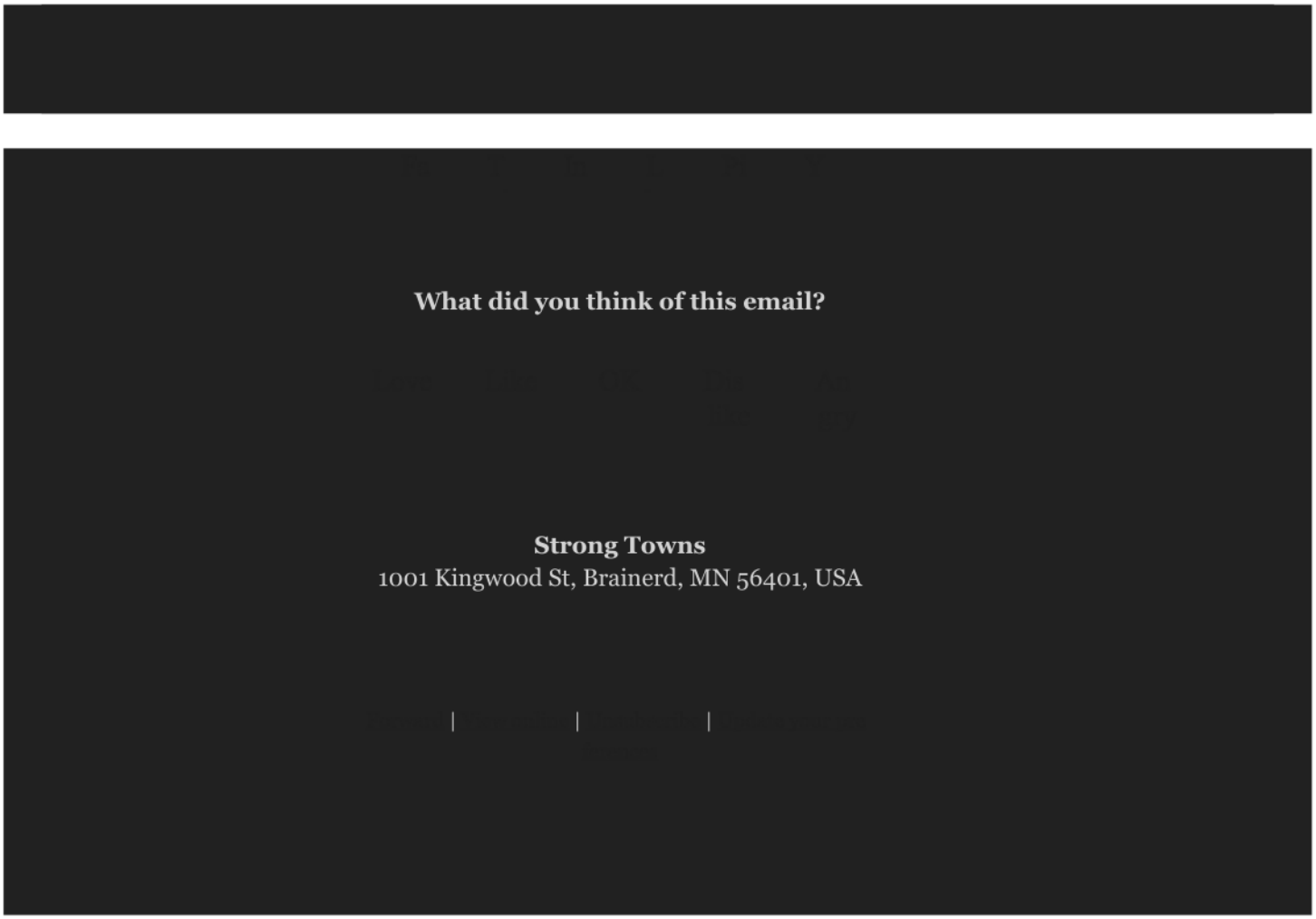

Strong Towns
1001 Kingwood St, Brainerd, MN 56401, USA

Notes: Part 3 subco meeting

From:	Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
To:	bea.bains@fortisbc.com, rbaker@tol.ca, ebaudinaud@communityenergy.bc.ca, luiz.bezerra@passivehousecanada.com, stephen_e_gatz@whirlpool.com, alexandre.bigonesse@canada.ca, Rick.Bortolussi@townline.ca, GCarignan@communityenergy.bc.ca, jim.comtois@canada.ca, NConnolly@richmond.ca, francois.dubrous@canada.ca, warrington_ellacott@whirlpool.com, patrick.enright@vancouver.ca, catherine.ernst@boabc.org, jfisher@udi.org, MGatensby@aibc.ca, ngazo@naimacanada.ca, greg.gerke@townline.ca, nheap@richmond.ca, Alex.Hutton@fraserhealth.ca, tao.jiang@surrey.ca, anna.joynt@canada.ca, kadulski@direct.ca, mkapuscinski@naimacanada.ca, Pete.Koepfgen@fortisbc.com, toby.lau@bchydro.com, wileung@bchousing.org, charling.li@vancouver.ca, susan@focaleng.com, Lisa.Mak@bchydro.com, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, gregory.mccall@vancouver.ca, cmccurry@communityenergy.bc.ca, christopher.mclellan@canada.ca, Mihailo.Mihailovic@nrc-cnrc.gc.ca, Mohareb, Adrian ENV:EX <Adrian.Mohareb@gov.bc.ca>, roberto@zebx.org, hradhakrishnan@egbc.ca, kramlu@tol.ca, grichards@jensenhughes.com, trothery@communityenergy.bc.ca, gerry@3westbec.com, psundberg@frescoltd.com, asurendran@tol.ca, ralph.wells@ubc.ca, Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>, XT:Wimmers, Guido CITZ:IN <guido.wimmers@unbc.ca>
Cc:	victor_h_manrique@whirlpool.com, Greg Gerke <greg.gerke@townline.com>, alberto_r_gomes@whirlpool.com, roberto_boem@whirlpool.com, JordanL@c-8.ca, Curt Hepting <chepting@enersys.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Gaëtane Carignan <GCarignan@communityenergy.ca>, Rick Bortolussi <Rick.Bortolussi@tlhousingsolutions.com>, Scolnick, Timothy ENV:EX <Timothy.Scolnick@gov.bc.ca>, Gill, David I ENV:EX <David.I.Gill@gov.bc.ca>, Elisabeth Baudinaud <ebaudinaud@communityenergy.ca>, rachel@brackenpmconsulting.ca, Rachel Buskie <rbuskie@communityenergy.ca>, Joynt, Anna (she, her | elle, elle) <anna.joynt@NRCan-RNCan.gc.ca>
Sent:	June 22, 2023 2:38:50 PM PDT
Attachments:	notes 2023-06-06 v3.pdf

Hi, all:

Attached are the notes from the June 6, 2023 Part 3 and Part 9 non-residential subcommittee meeting. Please let me know if there are errors or omissions.

Best,
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
Desk line/Skype (preferred): 236-478-1406; Mobile: 250-880-6418
Email: hugo.wong@gov.bc.ca

Energy Step Code Council

Pt 3 & Pt 9 Non-residential Technical Subcommittee Meeting

Date: June 6, 2023, 10-12:30 p.m.

Participants

Elisabeth Baudinaud, Community Energy Association
Luiz Bezerra, Passive House Canada
Norm Connolly, City of Richmond
Patrick Enright, City of Vancouver
Greg Gerke, Townline Construction
Jordan Levine, architect of grocery stores
Maura Gatensby, AIBC
Rachel Buskie, CEA
Rick Bertolussi, TL Housing Solutions (representing UDI)
Stephen Gatz: Whirlpool (ventilation products)
Pete Koepfgen, FortisBC
Nicholas Heap, City of Richmond
Curt Hepting, EnerSys
Pete Koepfgen, Fortis BC
Toby Lau, BC Hydro
Wilma Leung, BC Housing
Charling Li, City of Vancouver
Susan MacDougall, Focal Engineering
Greg McCall, City of Vancouver
Adrian Mohareb, CAS
Roberto Pecora, ZEBx
Kevin Ramlu, Township of Langley
Ajeen Surendran, Township of Langley
Danny Taylor, Focal Engineering
Ralph Wells, UBC
Scott Williams, BSSB

Introductions

News

FortisBC has an incentive for local governments to decarbonize. Contact Pete K for more details.

Presentation: High process loads (Curt Hepting, Principal, EnerSys Analytics)

- Grocery stores are regulated by Step Code, but must meet TEUI of 145-170 in the coldest weather region. Grocery stores do not come close to meeting those targets.
    - E.g.: An all-electric grocery store, top 10% of all your peers, they'd be lucky to get 350 (double the requirement).
- NECB doesn't have regulation on low-temp refrigeration equipment. That'd be a neutral item. A big neutral item like cooking. It'd show a large per cent savings there though we know there are potential for savings there.
- If they were just dry goods that'd be one thing, but the market wants hot meals, so more energy is being consumed to offer that service.

Potential solutions:

Idea 1: Similar to A and B type occupancies, we could pull the grocery store occupancies out for intensity metrics. And just have them follow NECB as an alternate compliance path. Tiers are always an option.

Idea 2: I would suggest rather than trying to pull sub-occupancies out, perhaps excluding process loads from the TEUI? (one thumbs up)

- I concur with Idea 2. Step Code is about efficiency of mechanical systems. We're talking about process loads (production equipment), and presumably that's covered by the Energy Efficiency Act. If they were just exempted as process loads and leave it to the Energy Efficiency Act, we could still have an energy efficiency BUILDING but exempt the production equipment. (one thumbs up)
- An extra benefit is that the waste heat/cold from process loads could be then captured and reused as needed, making achieving targets easier.
- Compliance concern that if appliances like freezer is replaced, does it need to be permitted (if it were part of TEUI compliance)
- Comment: All grocery stores are different and it's not feasible to include in TEUI as it messes with EUI expectations. Targets weren't made to break that all down. I don't think TEUI should include process loads.
- Note: Any business selling things is an E occupancy, including Costco and other 'warehouse' stores. A warehouse is a place where things are stored , but not sold. The classifications can be awkward for our energy purposes, as they are based on fire risk.
- Potential options: either a) figure out unique scenarios and come up with individual limits (lots of work) or b) try to come up with a reasonable way of breaking out "process loads" that might only work 80% of the time... perhaps some of the more nuances could be addressed with a follow up bulletin?
- Reminder: Next BC Building Code slated for late 2023, and this topic doesn't have to go to public review.

Action: Scott to create a working group to discuss grocery stores and potential synergies in process loads.

- Ajeen S and Kevin R wish to be included.

Presentation: Energy Step Code and small commercial occupancies (Ajeen Surendran, Township of Langley)

- Step Code's hard for them, especially TEDI. Township of Langley did an external study of several building archetype shapes. They also included another scenario with demand control ventilation (not typical). Their baseline is a well-designed building in Langley. With all three scenarios, close to 40 kwh/m2, but target is 30. Adding insulation for these small buildings might not be cost effective. How far should we go? These are the questions we have.
- Bigger the building, easier to meet. Even the previous Step Code metrics, with retail building larger than 2600 sq. m, TEDI was easy to meet. We also modelled two storey retail. Not common, but we did internal modelling.
- With all ECMs for two storey, we could meet the Step Code targets, but not single storey.
- Our conclusion: Revised TEUI targets can be met with better mech systems. But TEDI targets are impacted by area and form. Smaller the area = harder to meet. Squarer building, easier to meet.

Area of exposed surfaces, ventilation and infiltration also impact TEDI. Unknown: airtightness targets. Can these buildings meet 0.2. litres per second per meter squared? No solid answer.

- Township of Langley trying to figure out exemptions as an interim measure for buildings. But the May 1 code changes make that harder.

Comment: Your research matches my experience. Added insulation is not worth it in NPV analysis.

Action: This small commercial topic can be included in another work plan item: zero lot line applications for urban infill.

Presentation: Overheating in Part 3 buildings (Scott Williams, BSSB)

- Scott summarized the proposed change for overheating (cooling for Part 3 buildings). Modifying Part 6 will address Part 3 buildings as it's not conceived of as an energy efficiency issue, but rather a safety issue.
- Proposal: Cooling design temperature of 26 C for at least one living space in each dwelling unit, based on historic weather data in the Code.
- Currently, Energy Step Code occupancies reference City of Vancouver Energy Modelling Guidelines which has an ASHRAE 55 requirement for non-mechanically cooled buildings. Still must iron out how to address partially cooled buildings
- Current engagement feedback favours keeping ASHRAE 55 despite some cooling in one room, as it could still drive passive solutions.
- This is a stopgap approach until a more sophisticated one can be developed.
- Comments from group:
    - National code is considering incorporating future weather files. We haven't gotten there in B.C. We want to harmonize where possible. Even with future shifted climate files, they're still average, not peak events. It's an improvement, but doesn't get us all the way.
    - UBC has new requirements for Part 3 residential construction. We require 2050-shifted files for passive design, similar to CoV. We have both for institutional and residential Part 3 construction, introduced future shifted summer day design temp, 3 degrees higher, representing average condition for 2050.
    - We won't see a ton of construction under this particular version.
    - My interpretation of CoV EMG: any LG could specify future-shifted climate file be used for Part 3 as per CoV for the passive overheating requirement.
    - NRC has developed future SIMULATED weather files, which is different from SHIFTED. The SIMULATED files from NRC still get increased HDD for most part, but maintains those outlying cold events. Pete K agrees with this.
    - Note: UBC requires future-shifted files for overheating analysis. Regular (not future-shifted) CWEC files are used for heating design. CWEC uses long-term weather averages, which is good for evaluating energy efficiency, but less good for modelling for extreme hot or cold events.
    - Compliance would purely be through simulation
    - Question to Scott: could a bulletin or some info to LGs that they have some options that they could adopt could be useful. I support what you're proposing here as a first step in

provincial code. If LGs want to go further, can we support them to use future-shifted files for passive design?
    - Scott: LGs have ability within BCBC to set their own climate data. This is maybe something we could take up with the LGPN.

Action: Scott to provide info to members of the subco regarding how they could become involved in the national system with regards to overheating.

Code digitization update (Scott Williams)

- If you recall BeRT, an online format to input any of the Code related items for EE. Now we're doing the whole Code. We want to streamline permitting. In the future, we'll have BIM elements (Singapore being one) where they integrate building code and BIM software. For timelines: the digitally enhanced Code will be available in 12 months. Compliance tool as well in the next 12 months. A pilot project follows with about 15 jurisdictions. Digitization will take years, maybe up to four, but those are the initial milestones. This doesn't necessarily limit to the Code itself, but also to other permitting, like through Ministry of Water, Lands and Resource Stewardship (WLRS), for those other Ministries that handle permits.
- Note: Some Code topics will go first (climate and energy is one, fire/spatial separations are another)
- Work is happening simultaneously nationally and there is collaboration. BC is going first.
- Would be great to avoid duplication with national efforts.

Part 3 Energy Design Checklist (Susan MacDougall, Focal; Mark Bernhardt, Bernhardt Contracting)

- No major changes. Addition of summary page. Renamed from Report to Checklist to avoid confusion with other Energy Model Report submissions. Better aligned with Part 9 checklist for consistency for AHJ reviews and Vancouver Energy and Emissions Design report. More tooltips. Blank area for LGs to put their logo.
- New Section F. Balance request from AHJ to have more info and not asking modeller for too much.
- Some FAQS: Checklist requirement is up to AHJ; GHGI reporting is not required if ZCSC is not required; Step 2 vs Step 2 (NECB) (the latter replaces Step 1 for public sector building.
- Aiming to finalize by end of June.

City of Vancouver Energy Modelling Guidelines

- Issue: If designers account for on-site renewables that generate electricity, CoV lets you modify the emissions factor. That's not compatible with a static emissions factor in the Code.
- City of Vancouver could maintain this approach, but there are some implications for B.C. Option 1: Issue a bulletin? Provide clarity. Option 2: We also reference only certain sections of the CoV EMG as opposed to the whole set of guidelines.
- For non-Step Code occupancies and following NECB, they have some different airtightness assumptions. NECB isn't as strict for the assumed rate as opposed to COV EMG.

- CoV EMG states that for fenestration used in building, U-value in the model should be representative of the building design. This has created confusion within industry regarding approach and methodology. NFRC is typically used to evaluate the U-value of standard assemblies. To standardize this whole approach, they have standardized test sizes so as not to create an onerous process. Discussions ongoing with Fen Canada, CoV, and EGBC.
- CoV EMGs have instructions regarding de-rating of assemblies when the NECB reference building approach is used for mixed used buildings with Step Code occupancies. With the changes to NECB 2020 and its adoption into the BCBC, derating no longer applies.
- Comment: Should we consider requiring gas appliances to be metred per unit, if provided? To prohibit MURBS with strata paying? That's why fireplaces are being used as primary heating by occupants.

Whole Building Energy Modelling Standard (CSA/ANSI Z5020:23)

- Comment: CSA Z5020. This standard relates to all types of modelling. Including the Step Code, but also ASHRAE 90.1 and NECB. As a BCBC reference standard, all modelling for compliance, it wouldn't necessarily just be for Step Code, as CoV EMGs are. It's a North American standard. Great benefit of a CSA standard, CSA standard team kept us on the straight and narrow. It sets clear expectations and written in correct Code language. Others are recommendations, but clearly not requirements.
- Downside of using CoV EMG: Definition difficulties, and references to CoV policies and processes, and lots of great stuff in there that is "design advice", which is nice, but not so nice in the Code ref standard which sets minimum standard. CSA Z5020 is more rigorously written as a standard for a minimum level.
    - Suggestion: some of the design advice in the CoV EMG should move elsewhere. Ref ASHRAE 90.1 and NECB in Step Code don't have code reference standard.

Updated Subcommittee Work Plan

- Updates to the subcommittee workplan were discussed. Key items identified:
    - Occupancies with high process loads
    - Small commercial occupancies/urban infill projects
    - Clarifying air tightness testing requirements for smaller buildings with larger footprints
    - Future shifted climate files
    - Floor area calculation to be standardized
- Co-chairs will formalize the work plan to be presented at the next meeting.

ED updates and action items

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Grass, William HOUS:EX <William.Grass@gov.bc.ca>
Cc: Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>, Hold - 240530 - Gunn, Meghan HOUS:EX <Meghan.Gunn@gov.bc.ca>
Sent: June 22, 2023 4:11:20 PM PDT

Hi All,

Some notes and follow ups from my ED check in. Please find those that apply to you and action as appropriate.

TRAX RFI! ZM will brief ADM tomorrow s.13 s.13 He will check in with the digital team as well.

Access-
s.13
s.13 include in PR briefing if possible? ZM to briefing discuss options with Bindi
PR briefing? Aim for late July. Unless there is new information, proceed as planned with PR items.

CCE briefing? Informed his colleagues PR items are coming, could be some inquiries.

Accessibility legislation and LG 's as designated organizations- possible confusion related to BA and BAGR? LG's have broad discretion on what to put in their plans. One inquiry received so far from nanaimo (SDPR minister's riding). Must be compliant by September this year. May be related to a RHF grant Nanaimo received as well. ZM comfortable with BAGR as is during this LG plan development- aligns with consistency approach.

BCBC
Seismic part 3- **- MRK indicated support for pulling together LG's to encourage them to use tools they have to compensate. Best practice guidance. May consider similar approach with accessibility. Solutions will likely be communication, not technical changes.** Will – I have asked for further support on this so you can pass the baton after the EGBC phase.

UDI expectation of communication of impacts of NBC changes- BC reliance on NBC PR- thoughts? OK to continue to work with national system PR- review post project- did a meeting with step code council to discuss providing feedback to carbon national standard- this could be a model

PR- comments re National code- s.13
s.13 no individual disposition of comments tracked, summary report of feedback provided internally- ok

EGBC SRG- thanks to ZM for speaking to the use of these. How do we keep moving forward? Speaking to RPLC on this. Working to gain support for SRG in municipalities. Action- PM will send a draft bulletin for us to review and discuss with ZM **- ok aligns with AEB strategy of no code yet but endorse best practices. JJ to relay to PM at EGBC (done)**

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

From:	Jenny Scott <jscott@udi.org>
To:	Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc:	Cassandra Smith <csmith@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>, Jeff Fisher <jfisher@udi.org>
Sent:	June 23, 2023 11:57:42 AM PDT
Attachments:	image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, image001.jpg

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Hi Julia,

I can work with you on the newsletter. In July we'll have two newsletters going out – one on July 11 and July 25. The content usually has to be finalized by the Friday before (i.e., July 7 and July 21). Do either of those work for you in terms of timeline?

Best,
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Thursday, June 22, 2023 5:20 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff,

Wondering if there is someone, that we can connect with to work on preparing a submission for your July newsletter?

Kind regrads,
Julie Leggett
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Housing
UC: 250-856-0964 | Email: Julia.leggett@gov.bc.ca

I extend my gratitude to the Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, June 16, 2023 4:06 PM
To: Jeff Fisher <jfisher@udi.org>

Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

We will be in a better position to share information for a July newsletter.

Nicole

From: Jeff Fisher <jfisher@udi.org>
Sent: Friday, June 16, 2023 4:02 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

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We send one out every two weeks on the Tuesday

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, June 16, 2023 4:00 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff – what is the frequency of your newsletter (i.e., after June 27th when is your next one)? I am just finishing up my workday before a week of vacation, but I will have Julie connect with you next week on this.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Manager, Policy and Regulation
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, June 16, 2023 3:47 PM

To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff,

Nicole has more info on this. Nicole, see below.

Hugo

From: Jeff Fisher <jfisher@udi.org>
Sent: Friday, June 16, 2023 3:43 PM
To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>
Subject: FW: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

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Hugo, we have a newsletter going out to members a week Tuesday (June 27th). Is there anything that we can share with our members about this – or should we wait until the process is further along?

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
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URBAN DEVELOPMENT INSTITUTE

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Subject: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Greetings everyone,

Thank you for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction. We appreciate the perspectives and insights you shared with us, and we are hard at work analyzing your feedback.

For those who would like to provide additional feedback, please note that the Mural board we used on Monday is now closed. We are still accepting feedback until EOD Wednesday June 21, 2023, via two methods:

1. An after-hours self-serve Mural board (link) that contains both breakout activities
2. Email to the building.safety@gov.bc.ca

We are working to share a summary report of the engagement in the coming weeks.

Have a great day,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning all,

Please hold the date and time for our next ICAC meeting. I will be reaching out for agenda items as we get closer to the date.

Warm regards,

Milly Luc (she/her)
EA to CEO | EXECUTIVE OFFICE

e: mluc@bchousing.org<mailto:mluc@bchousing.org> | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xmkym (Musqueam), Skwxwú7mesh (Squamish), and slililwta (Tsleil-Waututh) people.

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15

Page 255 of 304

Withheld pursuant to/removed as

s.15

Slides, Part 3/9 subco meeting, June 6, 2023

From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>

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Sent: June 27, 2023 2:15:39 PM PDT

Attachments: TOL Slide deck_P3&Nonres P9 SC_Final.pdf, 230518 Part 3 checklist PPT.pdf

Hi, all:

Slides from the meeting presenters are also attached.

Best
Hugo

Hugo Wong (he/him)
Senior Policy Analyst, Building and Safety Standards Branch
Ministry of Housing
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ESC Targets for Smaller Part 3 Non-Residential Buildings

Presented by Township of Langley

Township of Langley
Est. 1873

Ajeen Surendran – Building Energy Specialist
Kevin Ramlu – Green Buildings Manager

Tuesday, June 6th, 2023

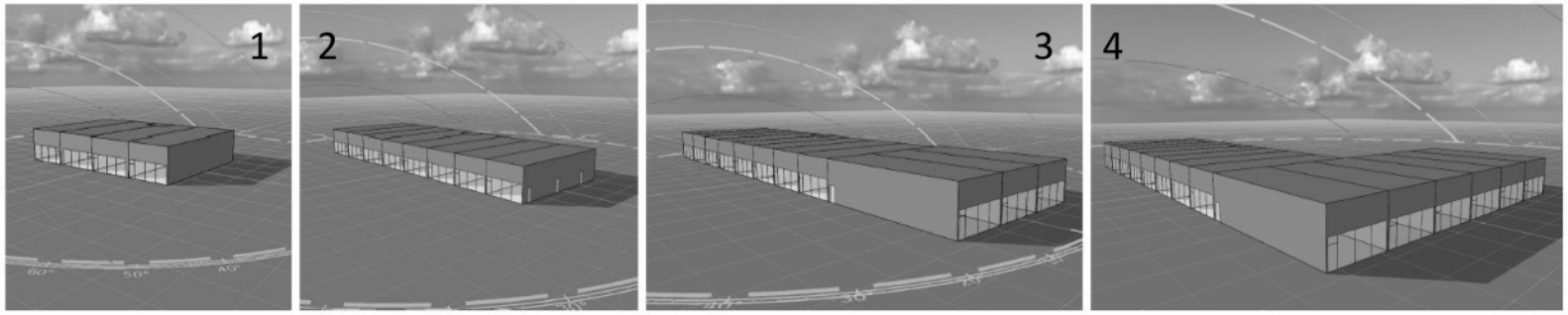
ESC Adoption for Part 3 Non-Residential

- For context, Step Code performance requirements for Non-Residential are provided below

Building Type	Step	TEUI	TEDI
Office	~~1~~	~~Part 8 of NECB~~	
	2	110	30
	3	100	20
Group D Other Business & Personal Service or Mercantile	~~1~~	~~Part 8 of NECB~~	
	2	145	30
	3	120	20

Modeling Study

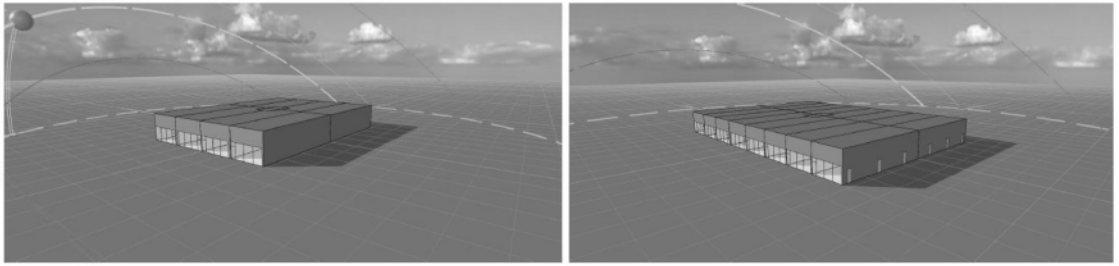
Scenario 1
Varying Area →
2& 3 are commonly seen in the Township



Archetypal CRUs (Scenarios 1, 3: 575 m^2, 1136 m^2, 1557 m^2, 1977 m^2)

- An energy modeling study was conducted by an external consultant
- Three different Scenarios were studied
- **Scenario 3** – Demand Controlled Ventilation (Typically not designed in small retail buildings)

Scenario 2
Varying Geometry↓
Not common


Archetypal CRUs (Scenario 2: 1150 m^2, 2272 m^2)

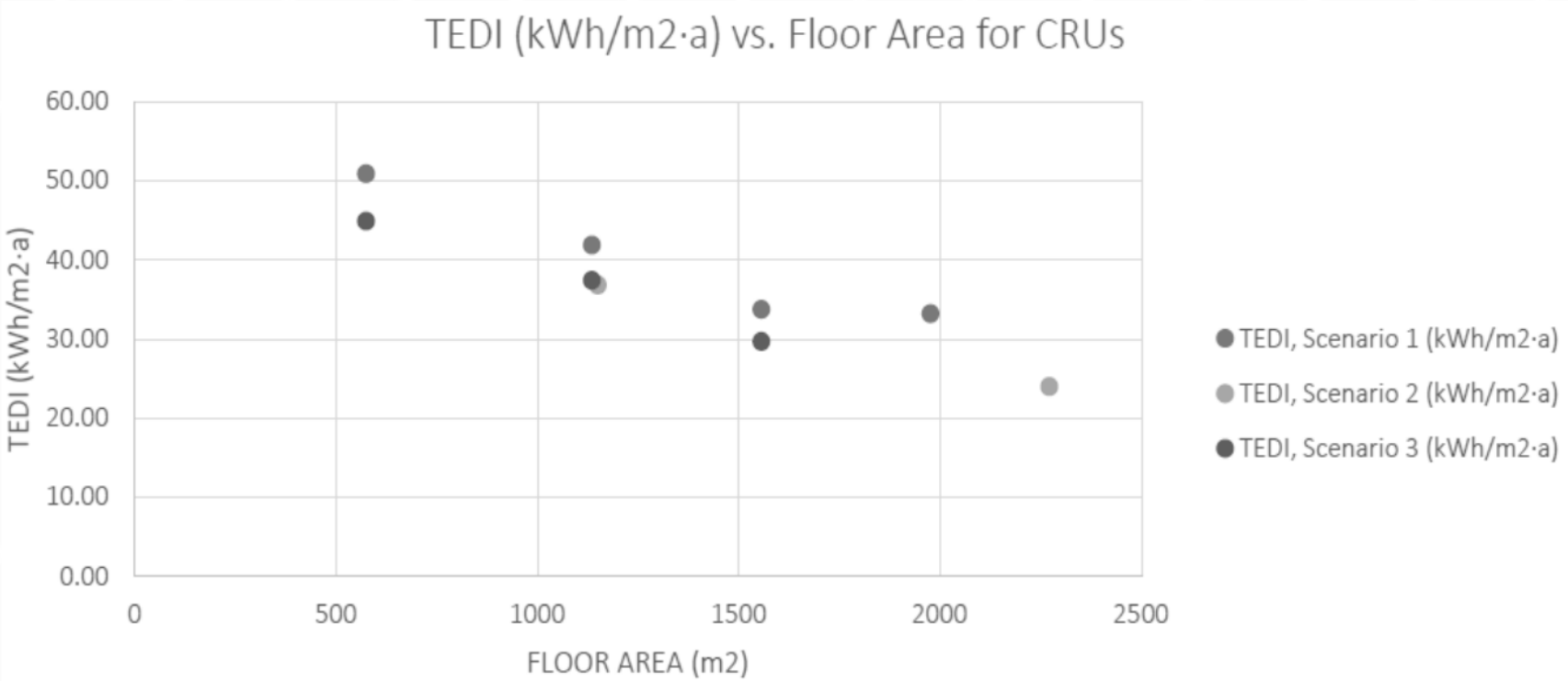
Modeling Study – Inputs

The baseline is a well-designed building, in Langley

Building Component	Performance
Walls	R27; Effective R13
Roof	R40;
Windows	USI1.3 SHGC 0.35
FDWR	20%
Infiltration (Above grade walls only)	0.2 l/s/m2 (CoV Guidelines)
Heating and Cooling	RTU - Gas furnace (80%) and DX Coil (COP3.61)
Ventilation	HRV 70% Effectiveness

*These inputs are constant for all scenarios

Modeling Study - Results



Internal Modeling Study

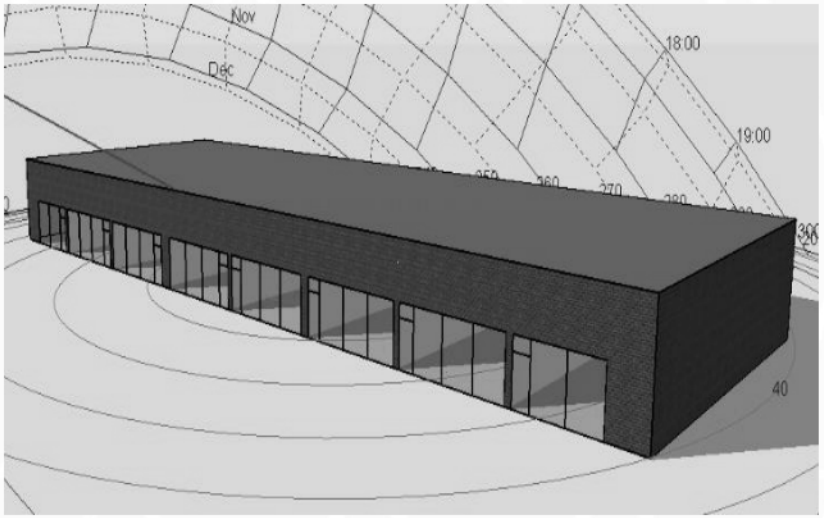


Figure 1: One-Storey Retail

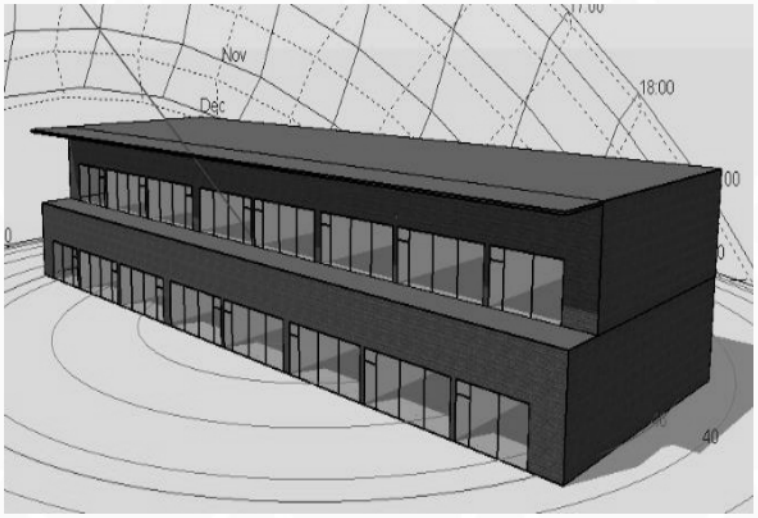


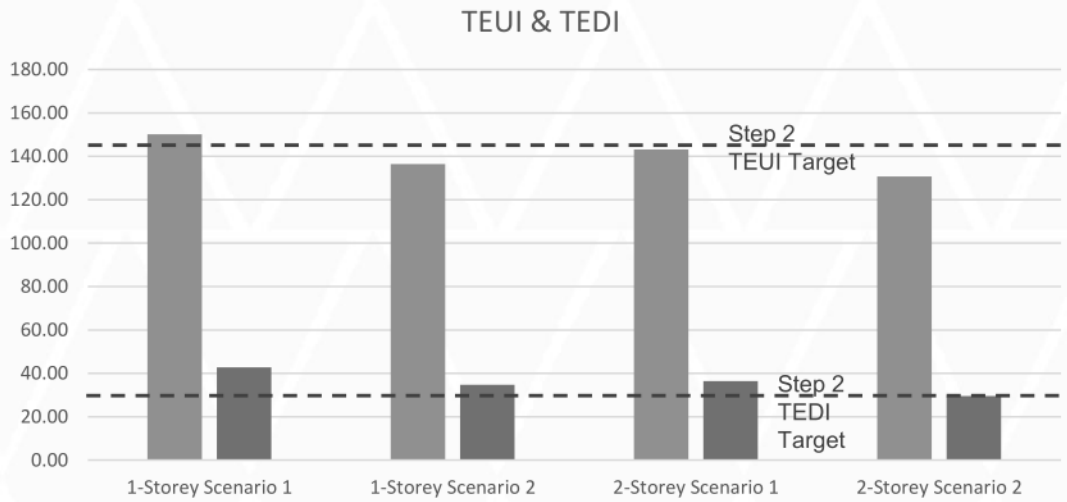
Figure 2: Two-Storey retail

Internal Modeling Study – Inputs

Building Component	1 Storey – Scenario 1	1 Storey – Scenario 2	2 Storey – Scenario 1	2 Storey – Scenario 2
Walls	R27; Effective R13	Effective R15.6 (RSI 2.75)	R27; Effective R13	Effective R15.6 (RSI 2.75)
Roof	R40;	R50 (RSI 8.8)	R40;	R50 (RSI 8.8)
Windows	USI1.3 SHGC 0.35		USI1.3 SHGC 0.35	
FDWR	20%		17%	
Heating and Cooling	RTU - Gas furnace (80%) and DX Coil (COP3.61)		RTU - Gas furnace (80%) and DX Coil (COP3.61)	
Ventilation rates	210 l/s per CRU	140 l/s per CRU (Min required per ASHRAE 62-2001	210 l/s per CRU	140 l/s per CRU (Min required per ASHRAE 62-2001
Ventilation	HRV 70% Effectiveness	HRV 75% Effectiveness	HRV 70% Effectiveness	HRV 75% Effectiveness

Internal Modeling Study – Results

Performance Metrics	Step 2 Target	1-Storey Scenario 1	1-Storey Scenario 2	2-Storey Scenario 1	2-Storey Scenario 2
TEUI (kwh/ m^2 .yr)	145	150.10	136.45	143.20	130.67
TEDI (kwh/ m^2 .yr)	30	42.72	34.73	36.41	29.60
GHGI (kgCO2e/ m^2 .yr)	NA	11.28	9.44	9.87	8.30
Step Code targets met		Failed	Failed	Failed	Passed



Conclusion

- Revised TEUI targets can be met with improved mechanical system efficiencies.
- TEDI targets are impacted by:
  - Area and form – The smaller the area, the harder to meet, the “Squarer” the building, the easier to meet.
  - Area of exposed surfaces.
  - Ventilation and infiltration
- Unknown factor – Airtightness targets – can these buildings meet the 0.2 l/s/m2?

FOCAL ENGINEERING
Building. Performance.

Part 3 Energy Checklist Updates

SUSAN MACDOUGALL, P. ENG., FEC, CPHC

DANNY TAYLOR, CPHC

ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

ZERO CARBON STEPCODE

Beta Tool



Available since end of April

- https://energystepcode.ca/compliance-tools-part3/#Rev5

2018 BC Building Code Rev. 5, effective May 1, 2023 (beta)

- Download the beta version of the new Part 3 Design Checklist (Excel) **(updated May 2023)**
- Read the user tip sheet for the 2023 beta version of this report (PDF)
- **Please send user feedback to the Building and Safety Standards Branch at** building.safety@gov.bc.ca **for consideration in future revisions.**

Part 9 tool available as well

Key Changes

TOOL

No major structure / layout changes

Align with BCBC Revision 5

Addition of a Summary Page

Renamed from **Report** to **Checklist** to avoid confusion with other Energy Model Report submissions

Better aligned with

- Part 9 checklist for consistency for AHJ reviews
- Vancouver Energy and Emissions Design Report

USER GUIDE

Previously Tip Sheet

Updated to document for help with use

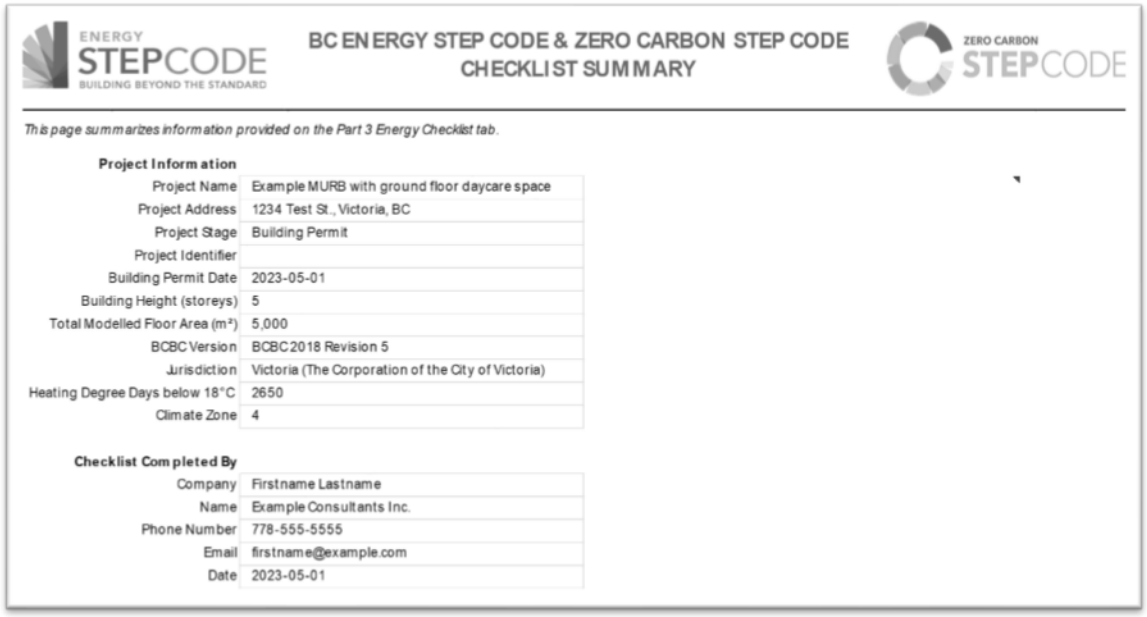


Summary Page

Simple display of building info, requirements, and results only

High level summary for non-technical readers

- Clarifies energy performance requirements versus what projects achieves



ENERGY STEPCODE
BUILDING BEYOND THE STANDARD

BC ENERGY STEP CODE & ZERO CARBON STEP CODE CHECKLIST SUMMARY

ZERO CARBON STEPCODE

This page summarizes information provided on the Part 3 Energy Checklist tab.

Project Information	
Project Name	Example MURB with ground floor daycare space
Project Address	1234 Test St., Victoria, BC
Project Stage	Building Permit
Project Identifier	
Building Permit Date	2023-05-01
Building Height (storeys)	5
Total Modelled Floor Area (m²)	5,000
BCBC Version	BCBC 2018 Revision 5
Jurisdiction	Victoria (The Corporation of the City of Victoria)
Heating Degree Days below 18°C	2650
Climate Zone	4

Checklist Completed By	
Company	Firstname Lastname
Name	Example Consultants Inc.
Phone Number	778-555-5555
Email	firstname@example.com
Date	2023-05-01

Step Code Summary

Occupancy

Group C - Other Residential

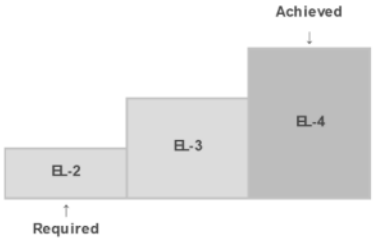
Energy Step Code

Step Required	Step Achieved
Step 3	Step 3

Zero Carbon Step Code

Level Required	Level Achieved
EL-2	EL-4





Summary for Mixed-Use Buildings

Additional detail provided below for projects with more than one occupancy class (i.e. Section B, or multiple Section C occupancies) or zero Step Code occupancies (i.e. Section B only).

	Whole Building Requirements		
	TEUI (kWh/m²/yr)	TEDI (kWh/m²/yr)	GHGI (kg CO₂e/m²/yr)
Blended Requirements	128	31	7.7
Performance Achieved	78	28	2.0
Does Building Comply?	YES	YES	YES

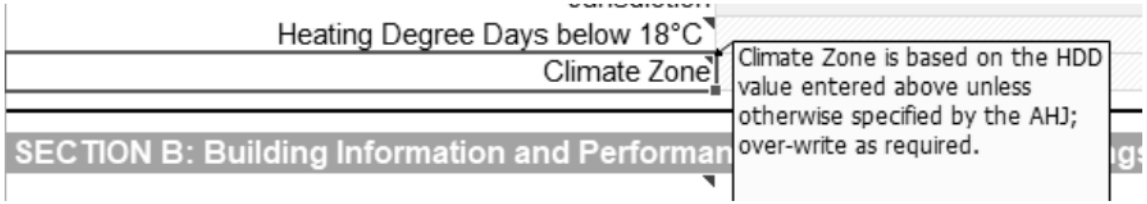
Occupancy	Energy Requirement	Zero Carbon Requirement
Group A2 - Assembly (not	Step 2 (NECB)	-
Group C - Other Residential	Step 3	EL-2

	Step Code Portion Requirements		
TEDI Requirement	-	30	-
TEDI Achieved	-	26	-
Does Building Comply?	-	YES	-

BC Energy Step Code - Part 3 Energy Design Checklist v3.0 BETA

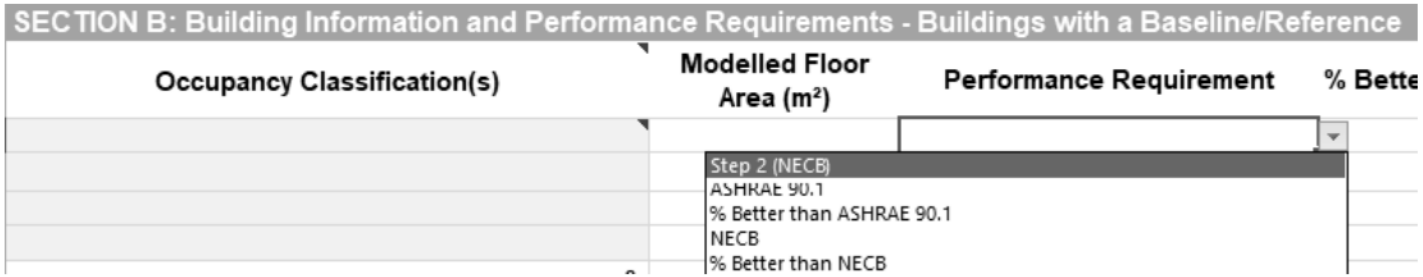
Checklist Tab

More extensive of popup tool tips



Requirements reflect BCBC Revision 5

- Not intended as backwards compatible or for buildings without Step Code occupancies
- No more option for Step 1 compliance for Group C, D, E



Checklist Tab cont'd

GHGI determined by Emissions Level (EL) and occupancy instead of manual input

Occupancy Classification(s)	Modelled Floor Area (m^2)	Step Required	GHG Emissions Level	Ref Rez
Group C - Other Residential	4,000	Step 3	EL-2	
			N/A EL-1 EL-2 EL-3 EL-4	
Total Modelled Floor Area (m^2)	**4,000**			**Area**

Elec/gas emissions factors (EF) from BCBC instead of CoV Guidelines

- Other fuel EF must be determined to the satisfaction of the AHJ, including district energy

Expanded Emissions Factor & Renewable Energy section

Description	Emissions Factor ($kgCO_2e/kWh$)	Reference/ Source
Electricity	0.011	BCBC Division B Subsection 10.3.1.3
Natural Gas	0.180	BCBC Division B Subsection 10.3.1.3
District Energy System		
Other 1		
Other 2		
Other 3		

Tweaks to Overheating and Corridor Pressurization sections

Modelled Inputs Summary

Section F

Intent

- Additional inputs to assist AHJ high-level review (requested)
- Doesn't replace the modeller's detailed energy report
- Balance between asking for too much, and requesting information to inform future code

Key Changes

- References to key documents from other disciplines that the model is based on
- Added inputs for assumed and tested (as-built) modelled infiltration rate
- Room for more specific HVAC description



FAQs (so far)

Where is the Checklist required?	Up to AHJ
Is GHGI reporting required if SCSC is not?	May still be entered, ZCSC adoption voluntary by AHJ
Step 2 vs. Step 2 (NECB)	Step 2 (NECB) replaces Step 1 for Public Sector building types
Where to send feedback?	Building and Safety Standards Branch at building.safety@gov.bc.ca



Thank you!

Digital Innovation in Housing Construction

From:	May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
To:	pbogunovic@abbotsford.ca, pcaraher@ahma-bc.org, sfralin@ahma-bc.org, XT:Irg, Mike Alberni-Clyoquot Regional District EAO:IN <mirg@acrd.bc.ca>, jjung@asttbc.org, katy.fairley@bccassn.com, saafrin@bchousing.org, srutherford@bchousing.org, jpatel@bchousing.org, tyler.wightman@boabc.org, Jason.berlin@rdbn.bc.ca, jason.llewellyn@rdbn.bc.ca, jason.watt@burnaby.ca, Trevor.Sweeney@campbellriver.ca, carmina@chbabc.org, cassidy@3rdgenhomes.com, pauline@chbabc.org, jmitchell@coquitlam.ca, King, David J M JEDI:EX <David.King@gov.bc.ca>, esangster@daustudio.ca, mbarros@daustudio.ca, TSwardh@delta.ca, msangret@delta.ca, sGervais@digitalsupercluster.ca, spaish@digitalsupercluster.ca, afehr@egbc.ca, jmunroe@fninspector.ca, bharasimiuk@rdffg.bc.ca, kjonkman@rdffg.bc.ca, diana@havan.ca, ron@havan.ca, george.hemsley@introba.com, brad.walton@jensenhughes.com, tpollock@kimberley.ca, jkassel@lakecountry.bc.ca, jdelrosario@langleycity.ca, Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>, Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>, max@naikoon.ca, Abe.lang@nanaimo.ca, Darcy.fox@nanaimo.ca, jeremy.holm@nanaimo.ca, reed.botwright@nanaimo.ca, pthompson@rdn.bc.ca, Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>, amcintyre@nelson.ca, echow@cnv.org, tryce@cnv.org, aboel@oakbay.ca, HStewart@oakbay.ca, rmacleod@portmoody.ca, <rmacleod@portmoody.ca>, Wil.Wedel@princegeorge.ca, tturner@quesnel.ca, ftewfik@richmond.ca, lindsay.chase@saanich.ca, hgoodland@scius.ca, psorfleet@sparwood.ca, bdollevoet@summerland.ca, RDube@surrey.ca, richards@syncraconstruction.com, nbrooks@terrace.ca, sean.mckinnon@tn-bc.ca, p.zadeh@civil.ubc.ca, ssf@civil.ubc.ca, jfisher@udi.org, Amy.Vilis@vancouver.ca, andrew.wroblewski@vancouver.ca, Rebecca.Doel@vancouver.ca, cgray@victoria.ca, Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc:	Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>, Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>, Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>, Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>, Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>, Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>, will.grass@gov.bc.ca
Sent:	June 30, 2023 4:19:06 PM PDT
Attachments:	June 12 What We Heard Summary.pdf

Greetings everyone,

Thank you again for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction.

Attached is the *Ministry of Housing – Digital Innovation in Housing Construction, What We Heard Summary*. It also includes the Ministry's key engagement activities planned over the summer as we prepare to move into our product development stage this fall.

We really appreciated your participation and look forward to continuing to collaborate on this important work.

Wishing you all a safe and happy weekend!

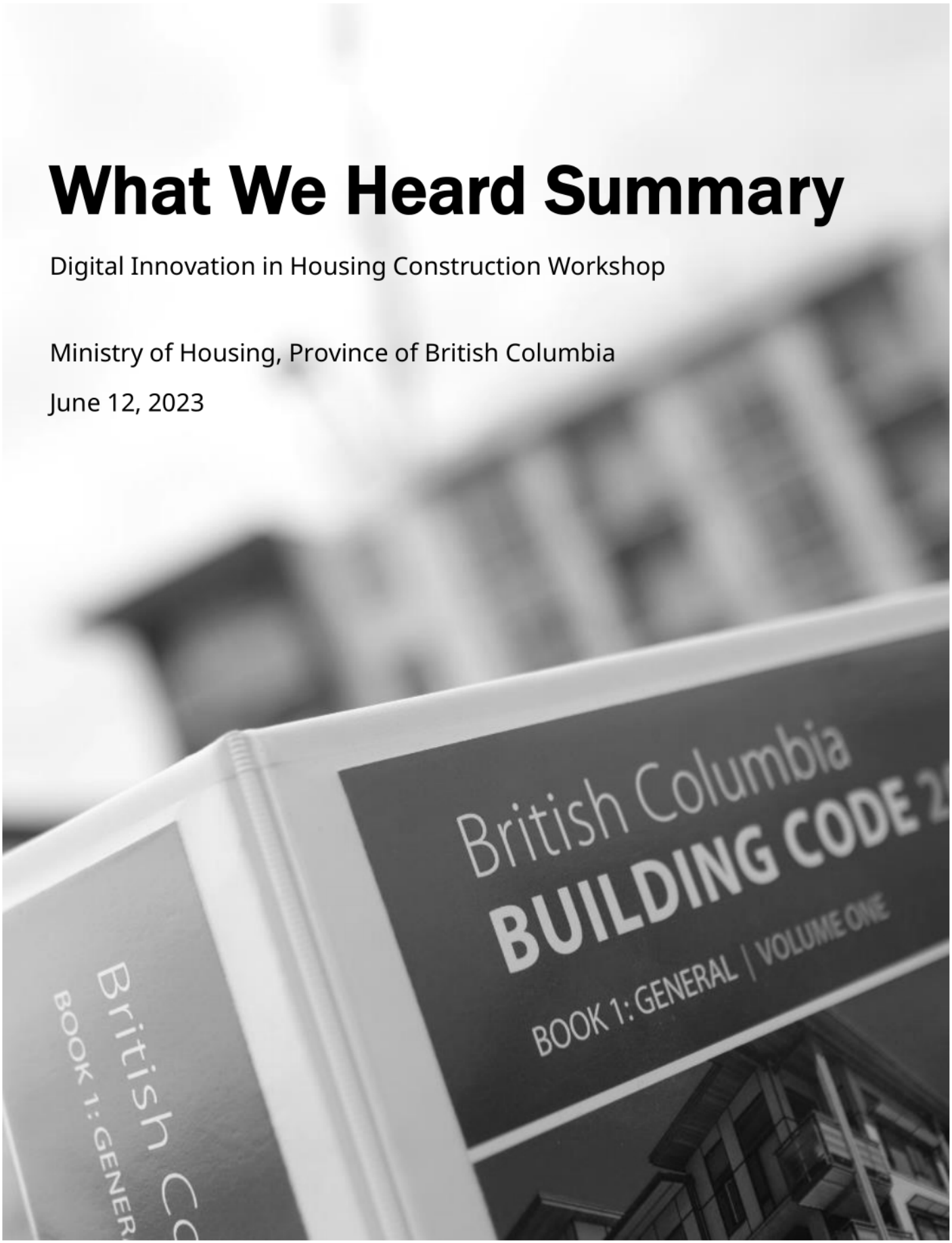
Best,
Zachary D. May, MBA
Executive Director
(he/him/his)
Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

What We Heard Summary

Digital Innovation in Housing Construction Workshop

Ministry of Housing, Province of British Columbia

June 12, 2023



Land Acknowledgement

We acknowledge with respect and gratitude that this report was produced on the territory of the lək̓ ʷəŋən peoples, known as the Songhees and Esquimalt (Xwsepsum) Nations. Our virtual sessions brought together participants from all across the province, and we would like to acknowledge the many First Nations and Métis Charter Communities throughout B.C.

Executive Summary

Through the 2023 Homes for People plan, the Ministry of Housing committed to making B.C. a North American leader in digital permitting and construction. The focus of this work over the next three years is on modernizing housing permitting and approvals by digitizing the BC Building Code, advancing the adoption and integration of digital permitting and construction processes across the housing sector, and supporting industry adoption of new collaboration technologies that enable project teams and regulators to work together.

On June 12th, 68 external partners attended the Ministry of Housing's (HOUS) Digital Permitting Workshop to discuss the challenges users experience in the housing permit process and opportunities for digital tools to support improvements. Workshop participants included local governments, the construction industry, Indigenous communities and organizations, academia, and independent partnering organizations.

Key Engagement Themes

- The issues present in the digital permitting ecosystem have interaction effects that make the issues worse (e.g., lack of staff and confusing processes puts even more pressure on staff).

- Using technology is not the desired outcome of this work; it is the use of technology to effectively address challenges that slow down building permitting processes.

- During this transformative work of building permitting, there is an opportunity to make the system more capable to handle future changes and innovations.

- There is a lack of data around building performance, permitting times, etc. – this is needed for evidence-based decision making in process improvement.

- Local governments are seeking peer learning and collaboration spaces. These spaces should also bring local government and industry together.

'[A] builder's worst enemy is the unknown.'

---- workshop participant ----

Moving Forward

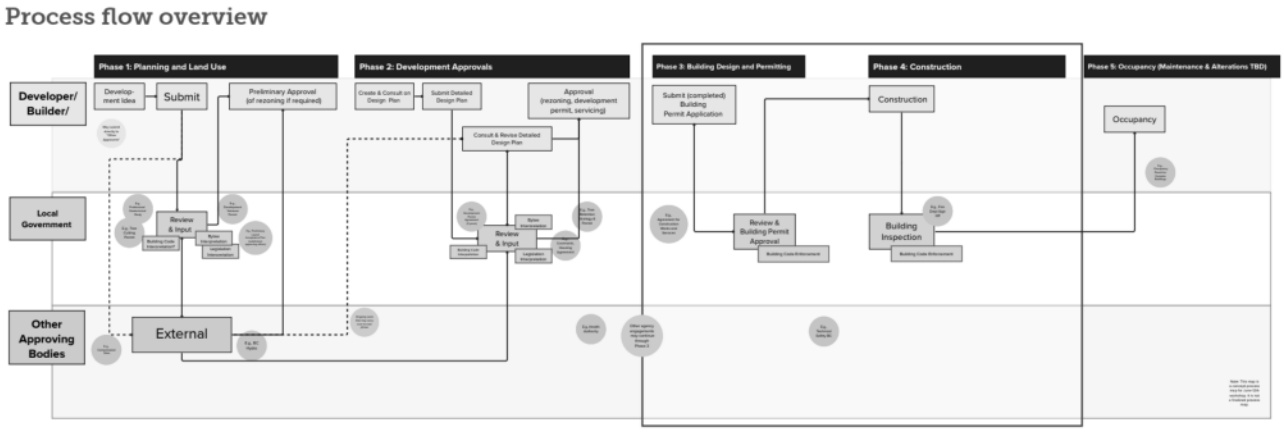
- Create a communication channel for the June 12 workshop participants to share information, lessons learned and to provide ongoing updates.
- Communicate the full governance structure for engagement.
- Identify 15-20 partner jurisdictions for pilot implementation of the digital permitting tools.
- Conduct service design research.

What We Heard

Pain Points and Opportunities

During the first breakout session, participants were asked to identify key pain point and opportunities during the housing development process, with a primary focus on building design and permitting stage and construction phase.

Table 1: Process Flow Overview



Note: This map is a concept process developed for the purposes of generating discussion during the June 12th workshop. It is not a finalized process map.

Phase 1: Planning and Land Use, the main need for improvements identified was for pre-applications and preliminary approvals and improvements to the collaboration and communication of the internal local government departments and external approvals process of other approving bodies (e.g., provincial approvals and technical studies such as geotechnical).

Phase 2: Development Approvals, one of the biggest challenges participants identified was tied to consistency and predictability and the need for transparency on approval timelines and where applications are at in the development process. Participants proposed working toward improvements to the review and input process (e.g., harmonized forms and checklists) and to the communication sequencing by other approving bodies (e.g., linking with prefabrication).

Phase 3: Building Design and Permitting, this phase is often circular rather than linear. Incomplete applications and the requirement for resubmission was the biggest pain point identified for this phase as well as the shortage of building inspectors and a high staff turnover. Suggestions were made to clearly define what information is required in building and development permit applications, and what constitutes a complete or acceptable submission.

Phase 4: Construction was seen as providing opportunities for automation and more reliance on certified professionals. The need for improved coordination of construction and inspection was identified as well as the coordination of professionals. Inconsistent building inspection standards[1] and interpretation were also identified as a pain point.

Phase 5: Occupancy, there appears to be an issue with conditional occupancy and the closing permit and title registration process.

Visioning – Opportunities for Digital Tools

During the second breakout session participants were asked to take a deeper dive into current challenges and priority opportunities for digital tools including visioning their ideal permitting experience, process efficiencies, how and where data may be shared meaningfully and collaboration opportunities to support BC becoming a North American leader in permitting and construction.

Table 2: Opportunities for Digital Tools – Questions and Responses

Question	Response

What outcomes would you expect to see from an improved process?
 	
Describe the ideal permitting experience.
	• A more simplified process with a customer service and user centered focus on user needs (e.g., user journey, concierge service, pre-application, and progress site meetings, etc.) with one single source of information on development guidance, and all necessary partners at the table to resolve issues
	
	• Reduce paper applications, however, in some circumstances paper application or hybrid systems may be required.
	
	• The ideal permitting experience would save costs, time, and reduce duplication by:
	  ○ less complex with fewer steps
	  ○ easier to understand for applicants and elected officials.
	  ○ more consistent (e.g., regional scale) and predictable
	  ○ provide clear expectations on requirements and timelines (e.g., real-time updates, tracking)

What would make the process more efficient? **Identify barriers that need to be**	• The participants focused on the front end of the development process and identified a need for a stronger requirement for pre-screening to ensure only complete application are submitted with an option for an automated intake and pre-submission check. • A more efficient and consistent process would also provide the opportunity for concurrent review of zoning, engineering and plan checking.

[1] allow other than architects to prepare drawings for Part 9 buildings, providing staff training & guidance to be more flexible in accepting of code requirements by distinguishing safety items & non-safety items.

Question	Response
removed to help people build homes.	• Labour shortages (particularly for building inspectors) across all the activities under the housing construction ecosystem. • Participants also identified a need for step-by-step guidance particularly for smaller local governments and builders, providing pre-approved design plans that meet zoning and for renovation projects.
How and where data might be shared meaningfully to improve the process? **What approaches might not work and why?**	• The participants focused on the quality of applications and the need to understanding the workflow based on project types and developing customer specific resources. • Sharing of review software resources, staff training and a problem-solving focus before construction occurs (e.g., insights from the field, process knowledge, common alternative solutions, technology) • Training for technology is needed for all experts across several sectors, participants pointed out that is no longer sufficient to have proficiency at a role without the ability to communicate digitally or use time-saving digital tools. • Specifically related to data, participants discussed the need to determine what data is required (e.g., geo-spatial information) and the usefulness of a provincial data dictionary (e.g., data for evidence-based decisions, data on covenants, floodplain information, improve BC Hydro data sharing).
What work are you doing within your organization that supports BC becoming a North American leader in permitting and construction?	• Needed improvements to inter-municipal communication, collaboration, and partnerships, to local government collaboration with industry, applicants, peers, and educational institutions (e.g., UBCM, contractor database, virtual support). • Support for a stronger focus on a professional expertise reliance model for complex buildings.
Where can the Ministry of Housing support and make meaningful change in the process?	• To make meaningful change in the process was focused on providing education and best practices (e.g., knowledge sharing for building officials, technical sessions), and guidance[2] provincial liability protection, stable innovation funding, and information on legislation (e.g., FAQs on legislative changes).

[2] 'must-do' list for permitting, 'how the city development process works', building requirements, workflow tools, performance measures, updating provincial guidance, definition of terms dictionary, pre-approved software. etc.

Question	Response
	• Strong and ongoing interest from participants in seeing process efficiencies also applied to the provincial approvals processes specifically related to contaminated sites, the Agricultural Land Commission, archaeological sites.

Moving Forward

The workshop generated interest and general support for Provincial action in the digital innovation space. Over the summer, the Ministry will continue to build this momentum by:

- Creating a communication channel for the June 12 workshop participants to share information, lessons learned and to provide ongoing updates.
- Communicating the full governance structure for engagement.
- Identify 15-20 partner jurisdictions for pilot implementation of the digital permitting tools.
- Conduct service design research.

Appendix: Workshop Agenda and Participants

Workshop Agenda

Date: June 12, 2023
Time: 9:00 a.m. to 3:00 p.m.

Time	Activity
9:00 AM – 9:20 AM	Welcome and Indigenous Opening
9:20 AM – 9:30 AM	Warm Up: Share current challenges and opportunities for digital tools
9:30 AM – 10:30 AM	Speakers and Q&A • Helen Goodland – SCIUS Advisory • Tim Ryce – City of North Vancouver • Jim Munroe – First Nations National Building Officers Association • Sue Paish – Digital (formerly the Digital Technology Supercluster) • Jennifer Anthony – Ministry of Water, Land and Resource Stewardship • Zachary May – Ministry of Housing
10:30 AM – 10:45 AM	*Coffee / Screen Break*
10:45 AM – 11:40 AM	Activity 1: Explore current ecosystem map to validate information and identify current pain points
11:40 AM – 12:00 PM	Activity Report Back
12:00 PM – 1:00 PM	*Lunch Break*
1:00 PM – 2:15 PM	Activity 2: Identify opportunities for improvements within the ecosystem
2:15 PM – 2:45 PM	Activity Report Back
2:45 PM – 3:00 PM	Closing and Next Steps

Participants

Local Governments 36 Participants	• Abbotsford, City • Bulkley–Nechako, Regional District (2) • Burnaby, City • Campbell River, City • Coquitlam, City • Delta, City (2) • Fraser-Fort George, Regional District (2) • Kimberley, City • Lake Country, District • Langley, City • Nanaimo, City (4) • Nanaimo, Regional District • Nelson, City	• North Vancouver, City (2) • Oak Bay, District (2) • Port Moody, City • Prince George, City • Quesnel, City • Richmond, City • Saanich, District • Sparwood, District • Summerland, District • Surrey, City • Terrace, City • Vancouver, City (3) • Victoria, City
Indigenous Communities & Organizations 4 Participants	• Aboriginal Housing and Management Association (2) • First Nations National Building Officers Association	• Tla'amin Nation
Engineers, Architects, & Professional Associations 6 Participants	• Building Officials' Association of British Columbia • Engineers & Geoscientists of British Columbia	• Dau Studios (2) • Introba • Jensen Hughes
Industry & Industry Associations 11 Participants	• HAVAN (2) • Naikoon Contracting • SCIUS Advisory • Syncra Construction • Urban Development Institute	• Applied Science Technologists & Technicians of BC • BC Construction Association • Canadian Home Builders' Association of British Columbia (3)
Academia, Housing Providers, & Other 11 Participants	• University of British Columbia (2) • BC Housing (3) • Digital (2) • National Research Council	• Ministry of Jobs, Economic Development and Innovation • Ministry of Water, Land and Resource Stewardship (2)

RE: Digital Innovation in Housing Construction

From: Sue Paish <sPaish@digitalsupercluster.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: July 2, 2023 2:50:59 PM PDT
Attachments: image002.png, image003.png, image004.png, image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

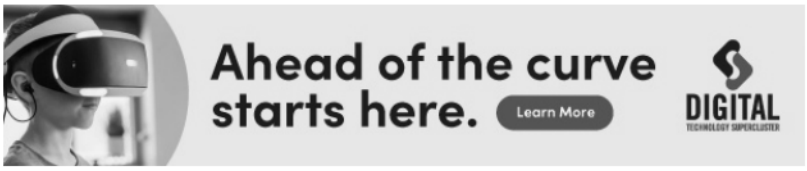
Thank you Zachary:

This is a wonderful summary. We are excited and keen to continue to engage with you and support this drive to digitize our housing construction sector(s) and system(s).

Many thanks again,
Sue

Sue Paish
CEO

Digital
C: 604.230.4602
E: spaish@digitalsupercluster.ca
www.digitalsupercluster.ca



From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, June 30, 2023 4:19 PM
To: 'pbogunovic@abbotsford.ca' <pbogunovic@abbotsford.ca>; 'pcaraher@ahma-bc.org' <pcaraher@ahma-bc.org>; 'sfralin@ahma-bc.org' <sfralin@ahma-bc.org>; XT:Irg, Mike Alberni-Clyoquot Regional District EAO:IN <mirg@acrd.bc.ca>; 'jjung@asttbc.org' <jjung@asttbc.org>; 'katy.fairley@bccassn.com' <katy.fairley@bccassn.com>; 'saafrin@bchousing.org' <saafrin@bchousing.org>; 'srutherford@bchousing.org' <srutherford@bchousing.org>; 'jpatel@bchousing.org' <jpatel@bchousing.org>; 'tyler.wightman@boabc.org' <tyler.wightman@boabc.org>; 'Jason.berlin@rdbn.bc.ca' <Jason.berlin@rdbn.bc.ca>; 'jason.llewellyn@rdbn.bc.ca' <jason.llewellyn@rdbn.bc.ca>; 'jason.watt@burnaby.ca' <jason.watt@burnaby.ca>; 'Trevor.Sweeney@campbellriver.ca' <Trevor.Sweeney@campbellriver.ca>; 'carmina@chbabc.org' <carmina@chbabc.org>; 'cassidy@3rdgenhomes.com' <cassidy@3rdgenhomes.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'jmitchell@coquitlam.ca' <jmitchell@coquitlam.ca>; King, David J M JEDI:EX <David.King@gov.bc.ca>; 'esangster@daustudio.ca' <esangster@daustudio.ca>; 'mbarros@daustudio.ca' <mbarros@daustudio.ca>; 'TSwardh@delta.ca' <TSwardh@delta.ca>; 'msangret@delta.ca' <msangret@delta.ca>; Shawn Gervais <sGervais@digitalsupercluster.ca>; Sue Paish <sPaish@digitalsupercluster.ca>; 'afehr@egbc.ca' <afehr@egbc.ca>; 'jmunroe@fninspector.ca' <jmunroe@fninspector.ca>; 'bharasimiuk@rdffg.bc.ca' <bharasimiuk@rdffg.bc.ca>; 'kjonkman@rdffg.bc.ca' <kjonkman@rdffg.bc.ca>; 'diana@havan.ca' <diana@havan.ca>; 'ron@havan.ca' <ron@havan.ca>; 'george.hemsley@introba.com' <george.hemsley@introba.com>; 'brad.walton@jensenhughes.com'

<brad.walton@jensenhughes.com>; 'tpollock@kimberley.ca' <tpollock@kimberley.ca>; 'jkassel@lakecountry.bc.ca' <jkassel@lakecountry.bc.ca>; 'jdelrosario@langleycity.ca' <jdelrosario@langleycity.ca>; Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>; Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; 'max@naikoon.ca' <max@naikoon.ca>; 'Abe.lang@nanaimo.ca' <Abe.lang@nanaimo.ca>; 'Darcy.fox@nanaimo.ca' <Darcy.fox@nanaimo.ca>; 'jeremy.holm@nanaimo.ca' <jeremy.holm@nanaimo.ca>; 'reed.botwright@nanaimo.ca' <reed.botwright@nanaimo.ca>; 'pthompson@rdn.bc.ca' <pthompson@rdn.bc.ca>; Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>; 'amcintyre@nelson.ca' <amcintyre@nelson.ca>; 'echow@cnv.org' <echow@cnv.org>; 'tryce@cnv.org' <tryce@cnv.org>; 'aboel@oakbay.ca' <aboel@oakbay.ca>; 'HStewart@oakbay.ca' <HStewart@oakbay.ca>; 'rmacleod@portmoody.ca,' <rmacleod@portmoody.ca>; 'Wil.Wedel@princegeorge.ca' <Wil.Wedel@princegeorge.ca>; 'tturner@quesnel.ca' <tturner@quesnel.ca>; 'ftewfik@richmond.ca' <ftewfik@richmond.ca>; 'lindsay.chase@saanich.ca' <lindsay.chase@saanich.ca>; 'hgoodland@scius.ca' <hgoodland@scius.ca>; 'psorfleet@sparwood.ca' <psorfleet@sparwood.ca>; 'bdollevoet@summerland.ca' <bdollevoet@summerland.ca>; 'RDube@surrey.ca' <RDube@surrey.ca>; 'richards@syncraconstruction.com' <richards@syncraconstruction.com>; 'nbrooks@terrace.ca' <nbrooks@terrace.ca>; 'sean.mckinnon@tn-bc.ca' <sean.mckinnon@tn-bc.ca>; 'p.zadeh@civil.ubc.ca' <p.zadeh@civil.ubc.ca>; 'ssf@civil.ubc.ca' <ssf@civil.ubc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'Amy.Vilis@vancouver.ca' <Amy.Vilis@vancouver.ca>; 'andrew.wroblewski@vancouver.ca' <andrew.wroblewski@vancouver.ca>; 'Rebecca.Doel@vancouver.ca' <Rebecca.Doel@vancouver.ca>; 'cgray@victoria.ca' <cgray@victoria.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>; Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>; Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>; Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>; 'will.grass@gov.bc.ca' <will.grass@gov.bc.ca>
Subject: Digital Innovation in Housing Construction

CAUTION: External E-mail.

Greetings everyone,

Thank you again for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction.

Attached is the
Ministry of Housing – Digital Innovation in Housing Construction, What We Heard Summary. It also includes the Ministry's key engagement activities planned over the summer as we prepare to move into our product development stage this fall.

We really appreciated your participation and look forward to continuing to collaborate on this important work.

Wishing you all a safe and happy weekend!

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

FW: Follow up

From:	Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
To:	Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Cc:	Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent:	July 11, 2023 8:02:49 AM PDT
Attachments:	RE: UDI Letter regarding BC Hydro distribution challenges, RE: Deloitte Housing Follow-up, FW: Housing - hydro

Hi Eric,

Please see the request below and attached related to BC Hydro. So far the information coming in has been anecdotal and one off related to issues with BC Hydro capacity and permitting as it relates to getting more housing built.

Could you please put together a list of bulleted examples of communities or regions, and any specific issues or circumstances related to BC Hydro, and the issue Teri has raised. It may be helpful to check in with MUNI/UBCM to see if they have any more specifics… although I don't want the response to this request to drag out so if they don't have it readily at hand move on.

Lori please track.

Thanks - Bindi

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Sent: Tuesday, July 11, 2023 7:53 AM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Cc: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: Follow up

Thanks Sian, we can have Bindi pull something together - it is both examples of delays, but also needing some shifts in the way BCH approaches the work – ie., I understand they don't proactively service new subdivisions until a certain point in the process, which is an overall delay. I'll get a summary for you. t

---

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Tuesday, July 11, 2023 7:50 AM
To: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: FW: Follow up

Morning Teri,

Does your team have any of this info? Would BCH also? I will also ask our MAs and MUNI if they have any examples.

Tx,
Siân

From: Brown, Evan EMLI:EX <Evan.Brown@gov.bc.ca>
Sent: Friday, July 7, 2023 10:42 AM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: FW: Follow up

Hey Sian,

I know I should probably be reaching out to one of your MAs but I figured since you and I go way back I would just email you. Feel free to pass this off to whoever in your MO is best suited.

MJO asked that we reach out to your MO about which communities/regions or examples we could cite about difficulties/delays on BC Hydro connections and connection timelines.

I've highlighted below.

Thanks,

Evan

Evan Brown
Ministerial Advisor to Hon. Josie Osborne
Ministry of Energy, Mines and Low Carbon Innovation

From: Cuddy, Andrew EMLI:EX <Andrew.Cuddy@gov.bc.ca>
Sent: Thursday, July 6, 2023 4:46 PM
To: Meehan, Patrick EMLI:EX <Patrick.Meehan@gov.bc.ca>; Brown, Evan EMLI:EX <Evan.Brown@gov.bc.ca>
Subject: FW: Follow up

Could one of you please take this on and follow-up with Darwin?

It is re: BC Hydro connections for housing developments.

From: Osborne, Josie EMLI:EX <Josie.Osborne@gov.bc.ca>
Sent: Thursday, July 6, 2023 4:44 PM
To: Cuddy, Andrew EMLI:EX <Andrew.Cuddy@gov.bc.ca>
Subject: Re: Follow up

Could we touch base with Ravi's MO to get either specific examples or generalities or both?

Get Outlook for iOS

From: Cuddy, Andrew EMLI:EX <Andrew.Cuddy@gov.bc.ca>
Sent: Thursday, July 6, 2023 10:56:23 AM
To: Osborne, Josie EMLI:EX <Josie.Osborne@gov.bc.ca>
Subject: FW: Follow up

Hi Minister,

Follow-up request from BC Hydro for when you have a moment…

From: Stephenson, Diana <Diana.Stephenson@bchydro.com>
Sent: 2023, July 05 12:06 PM
To: Magre, Leela <Leela.Magre@bchydro.com>
Subject: Follow up

During the Minister chat yesterday, she indicated that she was continuing to hear from communities on connections/connection timelines and we are wondering if you can make some inquiries with her office to better inform our understanding on which communities or regions, and any specific issues or circumstances, they could cite as examples. This would be incredibly helpful as we are looking to ensure we hit the mark on our planning for UBCM and other municipal strategy work underway too. I know we haven't seen too many escalations come our way lately through the office so we just want to see what we can learn.

Could you assist Charlotte and I in getting more info here?

Diana Stephenson (she/her/hers)
Senior Vice President, Customer & Corporate Affairs

BC Hydro
333 Dunsmuir St, 18th floor
Vancouver, BC V6B 5R3

O 604 623 4176
M 604 690 9378
E diana.stephenson@bchydro.com

bchydro.com

Smart about power in all we do.

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RE: UDI Letter regarding BC Hydro distribution challenges

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>, Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>, Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Sent: April 28, 2023 2:12:53 PM PDT
Attachments: image003.jpg, image001.png, image005.jpg, image006.jpg, image004.jpg, image002.jpg

We have been tracking the BC Hydro commitments on this file through the Energy Step Code Council. Happy to share the details if anyone is interested.

As noted in the letter, we are working on the development of a best practices guide for local governments that would advise them to consult with BC Hydro as they plan for voluntary adoption of zero carbon (e.g. all electric) requirements. Victoria and Saanich have recently adopted zero carbon requirements, although I'm not sure what kind of engagement they may have had with BC Hydro.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, April 28, 2023 9:33 AM
To: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: FW: UDI Letter regarding BC Hydro distribution challenges

info

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, April 27, 2023 3:08 PM
To: Minister, HOUS HOUS:EX <HOUS.minister@gov.bc.ca>
Cc: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter regarding BC Hydro distribution challenges

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Minister Kahlon,
In previous discussions we have raised some of our concerns regarding BC Hydro's distribution capacity delaying new housing. Further to those discussions, we've written to Minister Osborne to seek a meeting and outline our concerns. We've attached that letter for your reference.

Regards,
Cassandra

Cassandra Smith
Director, Policy and Research
Direct: 604.661.3032
Email: csmith@udi.org
Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



RE: Follow up

From: May, Zachary HOUS:EX
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>, Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Cc: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Sent: July 11, 2023 10:56:15 AM PDT

Langley has had brownouts. I believe we have a letter from UDI on this issue from November. I'll track that down.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Tuesday, July 11, 2023 10:54 AM
To: Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Cc: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Follow up

End of week pls

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

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From: Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Sent: Tuesday, July 11, 2023 10:38 AM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Follow up

Hi Bindi,

Beyond the Vancouver and other info in the attachments (which originated with us), one of our analysts will comb through our recent consultation records and see if we can name other communities that have raised similar issues. We know it has come up pretty often as a significant impediment to development capacity/sequencing/costs/timelines.

One question – when would you like this back?

Eric

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Tuesday, July 11, 2023 8:03 AM
To: Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Cc: Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Follow up

Hi Eric,

Please see the request below and attached related to BC Hydro. So far the information coming in has been anecdotal and one off related to issues with BC Hydro capacity and permitting as it relates to getting more housing built.

Could you please put together a list of bulleted examples of communities or regions, and any specific issues or circumstances related to BC Hydro, and the issue Teri has raised. It may be helpful to check in with MUNI/UBCM to see if they have any more specifics… although I don't want the response to this request to drag out so if they don't have it readily at hand move on.

Lori please track.

Thanks - Bindi

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

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From: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Sent: Tuesday, July 11, 2023 7:53 AM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Cc: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: Follow up

Thanks Sian, we can have Bindi pull something together - it is both examples of delays, but also needing some shifts in the way BCH approaches the work – ie., I understand they don't proactively service new subdivisions until a certain point in the process, which is an overall delay. I'll get a summary for you. t

---

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Tuesday, July 11, 2023 7:50 AM
To: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Subject: FW: Follow up

Morning Teri,

Does your team have any of this info? Would BCH also? I will also ask our MAs and MUNI if they have any examples.

Tx,
Siân

From: Brown, Evan EMLI:EX <Evan.Brown@gov.bc.ca>
Sent: Friday, July 7, 2023 10:42 AM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: FW: Follow up

Hey Sian,

I know I should probably be reaching out to one of your MAs but I figured since you and I go way back I would just email you. Feel free to pass this off to whoever in your MO is best suited.

MJO asked that we reach out to your MO about which communities/regions or examples we could cite about difficulties/delays on BC Hydro connections and connection timelines.

I've highlighted below.

Thanks,

Evan

Evan Brown

Ministerial Advisor to Hon. Josie Osborne
Ministry of Energy, Mines and Low Carbon Innovation

From: Cuddy, Andrew EMLI:EX <Andrew.Cuddy@gov.bc.ca>
Sent: Thursday, July 6, 2023 4:46 PM
To: Meehan, Patrick EMLI:EX <Patrick.Meehan@gov.bc.ca>; Brown, Evan EMLI:EX <Evan.Brown@gov.bc.ca>
Subject: FW: Follow up

Could one of you please take this on and follow-up with Darwin?

It is re: BC Hydro connections for housing developments.

From: Osborne, Josie EMLI:EX <Josie.Osborne@gov.bc.ca>
Sent: Thursday, July 6, 2023 4:44 PM
To: Cuddy, Andrew EMLI:EX <Andrew.Cuddy@gov.bc.ca>
Subject: Re: Follow up

Could we touch base with Ravi's MO to get either specific examples or generalities or both?

Get Outlook for iOS

From: Cuddy, Andrew EMLI:EX <Andrew.Cuddy@gov.bc.ca>
Sent: Thursday, July 6, 2023 10:56:23 AM
To: Osborne, Josie EMLI:EX <Josie.Osborne@gov.bc.ca>
Subject: FW: Follow up

Hi Minister,

Follow-up request from BC Hydro for when you have a moment…

From: Stephenson, Diana <Diana.Stephenson@bchydro.com>
Sent: 2023, July 05 12:06 PM
To: Magre, Leela <Leela.Magre@bchydro.com>
Subject: Follow up

During the Minister chat yesterday, she indicated that she was continuing to hear from communities on connections/connection timelines and we are wondering if you can make some inquiries with her office to better inform our understanding on which communities or regions, and any specific issues or circumstances, they could cite as examples. This would be incredibly helpful as we are looking to ensure we hit the mark on our planning for UBCM and other municipal strategy work underway too. I know we haven't seen too many escalations come our way lately through the office so we just want to see what we can learn.

Could you assist Charlotte and I in getting more info here?

Diana Stephenson (she/her/hers)
Senior Vice President, Customer & Corporate Affairs

BC Hydro
333 Dunsmuir St, 18th floor
Vancouver, BC V6B 5R3

O 604 623 4176
M 604 690 9378
E diana.stephenson@bchydro.com

bchydro.com

Smart about power in all we do.

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RE: UDI Letter - Energy Efficiency and GHG Proposals

From: Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: July 11, 2023 11:28:52 AM PDT
Thanks on both counts!

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, July 11, 2023 11:08 AM
To: Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Subject: FW: UDI Letter - Energy Efficiency and GHG Proposals

All we have right now is noted on page 2 of this letter from November. Will reach out to UDI for examples and cc you.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, November 14, 2022 10:32 AM
To: May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter - Energy Efficiency and GHG Proposals

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Zach,

Thank you again for presenting with Scott Williams at our UDI webinar last week, our members appreciated the opportunity to learn about the upcoming regulatory changes and ask questions. As discussed with Jeff, please find attached our letter providing comments and recommendations on the upcoming energy efficiency and GHG proposals for the 2018 BC Building Code.

If you have any questions or would like to discuss any of our feedback further, please don't hesitate to reach out.

Thanks and we look forward to continuing to work with you and your team,

Cassandra

Cassandra Smith *(McColman)*
Director, Policy and Public Affairs
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

RE: BC Hydro

From: May, Zachary HOUS:EX
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>
Sent: July 11, 2023 1:51:33 PM PDT
Attachments: image001.jpg, image003.jpg, image005.jpg, image007.jpg, image006.jpg, image004.jpg, image002.jpg

Very helpful. Thanks Jeff.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jeff Fisher <jfisher@udi.org>
Sent: Tuesday, July 11, 2023 1:49 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>
Subject: RE: BC Hydro

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Generally, BC Hydro connection timeframes are lengthy – especially for larger complex projects – and this is primarily due to staffing/internal processes. This is certainly the case in high growth regions like the Lower Mainland, CRD as well as the parts of the Okanagan that they serve. I am not sure of other areas because our membership is generally in these larger regions; maybe talk to CHBA BC about smaller communities.

In terms of capacity, we have also heard about problems in Surrey (residential/commercial/industrial), Delta and Coquitlam. I would also note that Burnaby is building a District Energy system, in part, because they have concerns about Hydro capacity in their municipality. Also, please see the article below.

Although BC Hydro is taking positive steps to adjust their funding approach for local distribution infrastructure, we have noted in their presentations, BC Hydro has a big caveat regarding costs – "*Note: Non-extension costs such as Service Connections, pole relocations and undergrounding of overhead lines are not included above. These dedicated costs can potentially cause a substantial increase to the total cost.*" They also state "*Costs to comply with municipal requirements or the conditions of a development permit, such as undergrounding existing overhead infrastructure along development frontages, can also add to costs. If the overhead infrastructure being converted to underground also serves adjacent customers, costs can escalate quickly because additional system changes may be needed for BC Hydro to continue to serve the existing adjacent customers. As this additional infrastructure is over and above what we require to provide service to the location, the added cost isn't eligible to be offset by BC Hydro's contribution, as provided for in the Electric Tariff*. If you read the section in yellow below, local government approvals also cause delays for BC Hydro upgrades. We may need to work with BC Hydro and your Ministry to address these concerns.

BC Hydro's distribution grid not keeping pace with development

Delayed connections short-circuit plans for public, private projects

By Peter Mitham, Western Investor | July 7, 2023, 7:45am

Page 299 of 304

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Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, July 11, 2023 11:08 AM
To: Jeff Fisher <jfisher@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>
Subject: BC Hydro

Hi Jeff and Cassandra,

There is some internal discussion about which communities have experienced delays or other issues related to BC Hydro connections and capacity. I think you have mentioned Langley in the past as having some acute issues. Are there any other examples you're aware of?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Materials for tomorrow's Implementation Impact Workshop

From: Scott, Cory HOUS:EX <Cory.Scott@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>, Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>, Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>, Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>, Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>, Scowcroft, Lesley HOUS:EX <Lesley.Scowcroft@gov.bc.ca>, Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>, Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>
Sent: July 13, 2023 9:36:52 AM PDT

Thank you!

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, July 13, 2023 9:29 AM
To: Scott, Cory HOUS:EX <Cory.Scott@gov.bc.ca>; Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>; Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>; Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; Scowcroft, Lesley HOUS:EX <Lesley.Scowcroft@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>
Subject: RE: Materials for tomorrow's Implementation Impact Workshop

Hi Cory,

My understanding is that this is a brainstorming session, but we should all be prepared to provide the info outlined in the agenda that Lori shared with me earlier this week (I think this is still draft, but sharing since I don't think everyone has seen this):

Agenda:

1. **IDENTIFY WHAT'S HAPPENING:** List all initiatives and major milestone timelines & status of planning.
    - LGDI - Pre-zoning, SSMUH, TOD, Public Hearings, Dev Finance
    - Peer Learning Network
    - Complete Communities
    - STR
    - Housing Targets
    - Building Code

2. **CLARIFY OUTCOMES:** What are the outcomes we want? By when?

3. **IDENTIFY IMPACTS:** What happens from September 2023 to September 2024? List Key Partners…
    - Inside our Ministry?
    - Across Prov Gov't
    - With Local Gov'ts?
    - Federal Gov'ts?
    - Indigenous Gov'ts?
    - Key Industry Partners? UDI / CHBA / Air BNB / Other?
    - Public

4. **PLANNING**: What do we need to do to make this run smoothly?
    - List it all out
    - What is already underway? Resourced?
    - What is not? And what is needed to get it there?

5. **FOLLOW-ON PHASES:** What happens after the election?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Scott, Cory HOUS:EX <Cory.Scott@gov.bc.ca>
Sent: Thursday, July 13, 2023 9:23 AM
To: Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>; Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>; Nicholls, Eric HOUS:EX <Eric.Nicholls@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; Scowcroft, Lesley HOUS:EX <Lesley.Scowcroft@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>
Subject: Materials for tomorrow's Implementation Impact Workshop

Hi Everyone,

Sorry for the mass email, just checking in on materials for tomorrow's workshop at 800 Johnson as I'm completely in the dark. If there's anything you're expected to provide please email them to me by 4pm today. Or if this is just a brainstorming/planning session and no materials are required, please let me know!

Thank you
Cory

Cory Scott | Documents Coordinator
Assistant Deputy Minister Bindi Sawchuk
Housing & Land Use Policy Division
Ministry of Housing
Ph: 778-405-3465 Email: Cory.Scott@gov.bc.ca

Group	
Planning Institute of B.C.	General concern was noted that infrastructure would be costly for municipalities and developers to implement SSMUH, BC Hydro was viewed as most significant.
Canadian Home Builders Association	Noted in SSMUH consultation that BC Hydro is a physical and financial barrier for this style of development. Note about Pad mounted transformer (PMTs): should either have pole mounted or have PMT on city land, located to service multiple homes without being on their property. This change will free up additional lot space and avoid having to protect it during future renovation/construction.
UDI	Electrical extension fee policy issues: • Results in some developers needing to pay significantly higher extension fees (cost of new electrical service) for larger electrical services which can be difficult to predict. • Tier 2 rate structure which financially penalizes electrified buildings and electric vehicle charging. • Staffing shortages which are delaying the delivery of housing. • Concerns with capacity of local electricity distribution (Fraser Valley). Connection timeframes are lengthy due to staff and internal process, especially in Lower Mainland, CRD and parts of the Okanagan. Heard concerns about capacity in Burnaby, Delta, and Surrey.
Delta	Areas in the municipality are challenged for appropriate electricity connection which impedes development potential, specifically industrial.
Surrey	Areas in the municipality are challenged for appropriate electricity connection which impedes development potential.
City of North Vancouver	Issues with the number of EV chargers being installed in residential developments and BC Hydro able to accommodate the number.
Langley	Has had a history of brownouts (reduced amount of electricity in the system, can be intentional or unintentional)

RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

From:	Jeff Fisher <jfisher@udi.org>
To:	Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Jenny Scott <jscott@udi.org>, Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc:	Cassandra Smith <csmith@udi.org>, Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent:	July 19, 2023 10:51:36 AM PDT
Attachments:	image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, Final_June 12 What We Heard Summary.pdf, image001.jpg, END OF JULY 2023 NEWSLETTER.docx

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Please see attached my summary for the newsletter.

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Tuesday, July 18, 2023 1:08 PM
To: Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Yes, that is no problem.

Nicole Vukosavljevic (she/her)
Director, Building Policy and Legislation
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Jenny Scott <jscott@udi.org>
Sent: Tuesday, July 18, 2023 9:39 AM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Nicole,

Sounds great, I can send over the written content on Friday. Would you be able to let us know if the content is approved for publication by end of day Monday, July 25?

Thanks!
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Tuesday, July 18, 2023 9:30 AM
To: Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jenny – it would be great if we could review the written content.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Director, Building Policy and Legislation
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Jenny Scott <jscott@udi.org>
Sent: Tuesday, July 18, 2023 9:06 AM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks, Julia! I will include this as a link in our newsletter with a short blurb. The newsletter will be sent out on Wednesday, July 26. Did you need to preview the written content regarding the workshop prior to publication?

Best,
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Friday, July 14, 2023 10:20 AM
To: Jenny Scott <jscott@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jenny,
I've attached a copy of the June 12th , *What We Heard Summary*, highlighting our work in this space, key engagement themes that emerged from the workshop and next steps moving forward.

Please let us know if you need additional content for the upcoming July 25th newsletter submission.

Warm regards,
Julie Leggett
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Housing
UC: 250-856-0964 | Email: Julia.leggett@gov.bc.ca

I extend my gratitude to the Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.

From: Jenny Scott <jscott@udi.org>
Sent: Tuesday, June 27, 2023 12:42 PM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks, Julia! I will leave a spot open for the July 25 newsletter.

Best,
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

UDI URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Tuesday, June 27, 2023 8:10 AM
To: Jenny Scott <jscott@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Good morning Jenny,

Let's work towards the July 25 newsletter publication, finalized by July 21 deadline.

We are preparing a summary of the June 12th workshop to be emailed to participants. That information should provide some great content for the newsletter.

I'll touch base once the summary is finalized in the next couple of weeks.

Looking forward to working with you on this Jenny.

Warm regards,
Julie Leggett
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Housing
UC: 250-856-0964| Email: Julia.leggett@gov.bc.ca

*I extend my gratitude to the **Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples** on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.*

From: Jenny Scott <jscott@udi.org>
Sent: Friday, June 23, 2023 11:58 AM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Julia,

I can work with you on the newsletter. In July we'll have two newsletters going out – one on July 11 and July 25. The content usually has to be finalized by the Friday before (i.e., July 7 and July 21). Do either of those work for you in terms of timeline?

Best,
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Thursday, June 22, 2023 5:20 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff,

Wondering if there is someone, that we can connect with to work on preparing a submission for your July newsletter?

Kind regrads,
Julie Leggett
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Housing
UC: 250-856-0964| Email: Julia.leggett@gov.bc.ca

*I extend my gratitude to the **Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples** on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.*

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, June 16, 2023 4:06 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

We will be in a better position to share information for a July newsletter.

Nicole

From: Jeff Fisher <jfisher@udi.org>
Sent: Friday, June 16, 2023 4:02 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

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We send one out every two weeks on the Tuesday

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, June 16, 2023 4:00 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff – what is the frequency of your newsletter (i.e., after June 27th when is your next one)? I am just finishing up my workday before a week of vacation, but I will have Julie connect with you next week on this.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Manager, Policy and Regulation
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, June 16, 2023 3:47 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff,

Nicole has more info on this. Nicole, see below.

Hugo

From: Jeff Fisher <jfisher@udi.org>
Sent: Friday, June 16, 2023 3:43 PM
To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>
Subject: FW: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hugo, we have a newsletter going out to members a week Tuesday (June 27th). Is there anything that we can share with our members about this – or should we wait until the process is further along?

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>
Sent: Friday, June 16, 2023 2:13 PM
To: Paul Bogunovic <pbogunovic@abbotsford.ca>; pcaraher@ahma-bc.org; sfralin@ahma-bc.org; jjung@asttbc.org; katy.fairley@bccassn.com; saafrin@bchousing.org; srutherford@bchousing.org; jpatel@bchousing.org; Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; tyler.wightman@boabc.org; Jason.berlin@rdbn.bc.ca; jason.llewellyn@rdbn.bc.ca; jason.watt@burnaby.ca; Trevor.Sweeney@campbellriver.ca; carmina@chbabc.org; cassidy@3rdgenhomes.com; pauline@chbabc.org; jmitchell@coquitlam.ca; Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>; esangster@daustudio.ca; mbarros@daustudio.ca; TSwardh@delta.ca; msangret@delta.ca; sGervais@digitalsupercluster.ca; spaish@digitalsupercluster.ca; afehr@egbc.ca; jmunroe@fninspector.ca; bharasimiuk@rdffg.bc.ca;

kjonkman@rdffg.bc.ca; diana@havan.ca; ron@havan.ca; george.hemsley@introba.com; brad.walton@jensenhughes.com; tpollock@kimberley.ca; jkassel@lakecountry.bc.ca; jdelrosario@langleycity.ca; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>; Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; max@naikoon.ca; Abe.lang@nanaimo.ca; Darcy.fox@nanaimo.ca; jeremy.holm@nanaimo.ca; reed.botwright@nanaimo.ca; pthompson@rdn.bc.ca; Iain.Macdonald@nrc-cnrc.gc.ca; amcintyre@nelson.ca; echow@cnv.org; tryce@cnv.org; aboel@oakbay.ca; HStewart@oakbay.ca; rmacleod@portmoody.ca, <rmacleod@portmoody.ca>; Wil.Wedel@princegeorge.ca; tturner@quesnel.ca; ftewfik@richmond.ca; lindsay.chase@saanich.ca; hgoodland@scius.ca; psorfleet@sparwood.ca; bdollevoet@summerland.ca; RDube@surrey.ca; richards@syncraconstruction.com; nbrooks@terrace.ca; sean.mckinnon@tn-bc.ca; p.zadeh@civil.ubc.ca; ssf@civil.ubc.ca; Jeff Fisher <jfisher@udi.org>; 'amy.vilis@vancouver.ca' <amy.vilis@vancouver.ca>; Rebecca.Doel@vancouver.ca; andrew.wroblewski@vancouver.ca; Calvin Gray <cgray@victoria.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>; Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>; Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>; Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>; Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; King, David J M JEDI:EX <David.King@gov.bc.ca>
Subject: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Greetings everyone,

Thank you for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction. We appreciate the perspectives and insights you shared with us, and we are hard at work analyzing your feedback.

For those who would like to provide additional feedback, please note that the Mural board we used on Monday is now closed. We are still accepting feedback until EOD Wednesday June 21, 2023, via two methods:

1. An after-hours self-serve Mural board (link) that contains both breakout activities
2. Email to the building.safety@gov.bc.ca

We are working to share a summary report of the engagement in the coming weeks.

Have a great day,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

END OF JULY 2023 NEWSLETTER

PROVINCIAL

Ministry of Housing

Digital Permitting: Under the *2023 Homes for People Plan*, noted in previous newsletters, the Government committed to "*Become a North American leader in digital permitting*," following the examples of Singapore and Finland, which "*… streamlined their permitting processes through digital technology …*".

The Ministry of Housing will initially be digitizing the *B.C. Building Code* (*BCBC*) and other construction codes, but they are also looking at "*… integrating permit systems across the housing sector, and supporting collaboration technologies that help project teams work more effectively with housing development regulators*," as well as "*Using tools like automatic code compliance checks …*".

On June 12th, UDI participated in a Ministry of Housing *Digital Innovation in Housing Construction Workshop* with 68 representatives from "*… local governments, the construction industry, Indigenous communities and organizations, academia, and independent partnering organizations*." The Ministry has now released a *What We Heard Summary Report* (see attached).

Workshop participants first identified several needed changes to the current development review system, including:

- "*… improvements to the collaboration and communication of the internal local government departments and external approvals process of other approving bodies (e.g., provincial approvals and technical studies such as geotechnical)*;"
- More consistency and predictability in development approvals and transparency regarding approval timelines;
- "*… providing opportunities for automation and more reliance on certified professionals …*;" and
- Having more consistent building inspection standards and *BCBC* interpretations.

During the second phase of the Workshop, participants identified "*Opportunities for Digital Tools*" to improve development review processes such as:

- Having a less complex process with fewer steps that is *"easier to understand for applicants and elected officials*," but is also more consistent and predictable;
- Providing clear expectations and requirements for proponents;
- Being more customer focused with clear timelines through real-time updates/tracking;
- Ensuring that software used by regulators can share relevant information and data between partners, which should improve transparency, collaboration to resolve issues and processing times as well as provide data for evidence-based decisions to improve regulatory requirements and processes;

- Having stronger requirements for pre-screening applications to ensure they are complete, including having the option to have "… *an automated intake and pre-submission check*;"
- Allowing for concurrent reviews;
- Having "… *pre-approved designs plans*" that meet municipal *Zoning By-law* requirements to speed up approvals;
- Developing "… *common alternative solutions* …" for the *BCBC*; and
- Supporting the use of certified professionals and other professional expertise reliance models for complex buildings.

Participants also saw a significant role for the Ministry of Housing to provide education, best practices and guidance for building officials, as well as offer "… *provincial liability protection, stable innovation funding and information on legislation* …". They also wanted to ensure that Provincial approvals also improve as a result of this initiative.

As a next step, the Ministry will be identifying "… *15-20 partner jurisdictions for pilot implementation of the digital permitting tools*," that will be developed over the next few years.

RE: UDI Submission: proposed B.C.-specific Building Code changes

From:	Lily Shields-Anderson <lshieldsanderson@udi.org>
To:	Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>, Cassandra Smith <csmith@udi.org>
Cc:	Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent:	July 21, 2023 9:25:39 AM PDT
Attachments:	image006.jpg, image009.jpg, image007.jpg, image008.jpg, image010.jpg, image005.jpg, image003.jpg, image004.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Sounds good. Have a great vacation and I look forward to connecting in a few weeks!

Thanks,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, July 20, 2023 4:49 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Thank you, Lily for the quick response. I will pick this up on my return as I should know a bit more about the topic of discussion in early August.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Thursday, July 20, 2023 2:46 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thank you for reaching out and glad to hear you are enjoying your summer!

We would be pleased to meet to discuss the options you are looking at. Our next Building Codes Committee meeting is scheduled for September 21st, 10am-11am. If it is preferred to meet with the group earlier, or if you require more than 1 hour, this can be adjusted.

Please let us know what your timing looks like to receive feedback on this and we look forward to continuing this discussion.

Best regards,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, July 19, 2023 1:24 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Lily and Cassandra,

I hope you are both finding some time to relax this Summer. I've got some vacation coming up next week :)

When is your UDI building code committee meeting next? I would like to discuss with the group some proposed options for delayed implementation of some code requirements. This is based on the suggestion of tying the new code requirements to development permits.

Thanks,

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, June 16, 2023 1:17 PM
To: HOUS BSSB Public Review HOUS:EX <BSSB.public.review@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon,

On behalf of Anne McMullin, President & CEO of UDI and our members, please find attached our submission on the proposed B.C.-specific Building Code changes. Throughout our letter we recommend that additional time be taken before implementation to analyze the impacts of the proposed changes and develop offsets to mitigate them. We reiterate our appreciation for the work being done by the Building and Safety Standards Branch, and would be pleased to provide support if it is determined that further analysis will be done.

If you would like to discuss any of our recommendations further, please let us know.

Regards,

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

UDI URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
To: Jenny Scott <jscott@udi.org>
Cc: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: July 24, 2023 7:43:31 PM PDT
Attachments: image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, image001.jpg, UDI Newsletter submission_July24.docx

Hi Jenny – attached are our suggested edits.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Jenny Scott <jscott@udi.org>
Sent: Monday, July 24, 2023 4:09 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks, Nicole – the document Jeff sent would have been his article which I trimmed down to fit into the newsletter format so you don't have to review that one. The content for the newsletter is in the email I sent you on Friday.

Best,
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402



From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Monday, July 24, 2023 4:06 PM
To: Jenny Scott <jscott@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jenny – I will get this and the document that Jeff sent to you later this evening.

Nicole

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Jenny Scott <jscott@udi.org>
Sent: Friday, July 21, 2023 11:27 AM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Nicole and Julia,

Please see below a draft of the section for the newsletter. This version will be on our website and an abbreviated version that doesn't list the feedback in bullet points will go on the newsletter.

Ministry of Housing's Digital Innovation in Housing Construction Workshop
Under the *2023 Homes for People Plan* noted in previous newsletters, the Province committed to "*Become a North American leader in digital permitting*". The Ministry of Housing will initially be digitizing the *B.C. Building Code* (*BCBC*) and other construction codes, but they are also looking at integrating permit systems across the housing sector and using tools like automatic code compliance checks.

On June 12, UDI participated in a Ministry of Housing *Digital Innovation in Housing Construction Workshop.* During the workshop, participants identified changes that could improve the current development review system, as well as opportunities to leverage digital tools to further streamline the process, including:

- Improvements to collaboration/communication across government departments and other approving bodies (e.g., provincial approvals and technical studies such as geotechnical);
- Transparency regarding approval timelines through real-time updates/tracking;
- Use of automation (e.g., automated intake and pre-submission check);
- More consistent building inspection standards and *BCBC* interpretations;
- Simplified process with fewer steps and clear expectations/requirements for proponents;
- Sharing of relevant information and data between partners for evidence-based decision-making;
- Stronger requirements for pre-screening applications to ensure they are complete;
- Allowing for concurrent reviews;
- Implementing pre-approved design plans that meet municipal *Zoning By-law* requirements to speed up approvals;
- Developing "… *common alternative solutions* …" for the *BCBC*; and
- Supporting the use of certified professionals and other professional expertise reliance models for complex buildings.

Participants also saw a significant role for the Ministry of Housing to provide education, best practices, and guidance for building officials, as well as offer provincial liability protection, stable innovation funding, information on legislation, and improvements to the Provincial approvals process.

All of the feedback received has been summarized in the Ministry's recently released *What We Heard Summary Report*. As a next step, the Ministry will be identifying 15-20 jurisdictions as a pilot for the digital permitting tools that will be developed over the next few years.

Best,
Jenny

Jenny Scott, M.A.

Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Tuesday, July 18, 2023 1:08 PM
To: Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Yes, that is no problem.

Nicole Vukosavljevic (she/her)
Director, Building Policy and Legislation
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Jenny Scott <jscott@udi.org>
Sent: Tuesday, July 18, 2023 9:39 AM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Nicole,

Sounds great, I can send over the written content on Friday. Would you be able to let us know if the content is approved for publication by end of day Monday, July 25?

Thanks!
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Tuesday, July 18, 2023 9:30 AM
To: Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jenny – it would be great if we could review the written content.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Director, Building Policy and Legislation
Building and Safety Standards Branch | Ministry of Housing

UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Jenny Scott <jscott@udi.org>
Sent: Tuesday, July 18, 2023 9:06 AM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks, Julia! I will include this as a link in our newsletter with a short blurb. The newsletter will be sent out on Wednesday, July 26. Did you need to preview the written content regarding the workshop prior to publication?

Best,
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Friday, July 14, 2023 10:20 AM
To: Jenny Scott <jscott@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jenny,

I've attached a copy of the June 12th , *What We Heard Summary*, highlighting our work in this space, key engagement themes that emerged from the workshop and next steps moving forward.

Please let us know if you need additional content for the upcoming July 25th newsletter submission.

Warm regards,
Julie Leggett

Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Housing
UC: 250-856-0964| Email: Julia.leggett@gov.bc.ca

I extend my gratitude to the Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.

From: Jenny Scott <jscott@udi.org>
Sent: Tuesday, June 27, 2023 12:42 PM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks, Julia! I will leave a spot open for the July 25 newsletter.

Best,
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Tuesday, June 27, 2023 8:10 AM
To: Jenny Scott <jscott@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Good morning Jenny,

Let's work towards the July 25 newsletter publication, finalized by July 21 deadline.

We are preparing a summary of the June 12th workshop to be emailed to participants. That information should provide some great content for the newsletter.

I'll touch base once the summary is finalized in the next couple of weeks.

Looking forward to working with you on this Jenny.

Warm regards,
Julie Leggett
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Housing
UC: 250-856-0964| Email: Julia.leggett@gov.bc.ca

*I extend my gratitude to the **Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples** on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.*

From: Jenny Scott <jscott@udi.org>
Sent: Friday, June 23, 2023 11:58 AM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Julia,

I can work with you on the newsletter. In July we'll have two newsletters going out – one on July 11 and July 25. The content usually has to be finalized by the Friday before (i.e., July 7 and July 21). Do either of those work for you in terms of timeline?

Best,
Jenny

Jenny Scott, M.A.
Direct:(236) 427-5402

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Thursday, June 22, 2023 5:20 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff,

Wondering if there is someone, that we can connect with to work on preparing a submission for your July newsletter?

Kind regrads,
Julie Leggett
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Housing
UC: 250-856-0964 | Email: Julia.leggett@gov.bc.ca

I extend my gratitude to the Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, June 16, 2023 4:06 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

We will be in a better position to share information for a July newsletter.

Nicole

From: Jeff Fisher <jfisher@udi.org>
Sent: Friday, June 16, 2023 4:02 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

We send one out every two weeks on the Tuesday

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, June 16, 2023 4:00 PM
To: Jeff Fisher <jfisher@udi.org>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff – what is the frequency of your newsletter (i.e., after June 27th when is your next one)? I am just finishing up my workday before a week of vacation, but I will have Julie connect with you next week on this.

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Manager, Policy and Regulation
Building and Safety Standards Branch | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Sent: Friday, June 16, 2023 3:47 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Hi Jeff,

Nicole has more info on this. Nicole, see below.

Hugo

From: Jeff Fisher <jfisher@udi.org>
Sent: Friday, June 16, 2023 3:43 PM
To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>; Jenny Scott <jscott@udi.org>
Subject: FW: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hugo, we have a newsletter going out to members a week Tuesday (June 27th). Is there anything that we can share with our members about this – or should we wait until the process is further along?

Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>
Sent: Friday, June 16, 2023 2:13 PM
To: Paul Bogunovic <pbogunovic@abbotsford.ca>; pcaraher@ahma-bc.org; sfralin@ahma-bc.org; jjung@asttbc.org; katy.fairley@bccassn.com; saafrin@bchousing.org; srutherford@bchousing.org; jpatel@bchousing.org; Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; tyler.wightman@boabc.org; Jason.berlin@rdbn.bc.ca; jason.llewellyn@rdbn.bc.ca; jason.watt@burnaby.ca; Trevor.Sweeney@campbellriver.ca; carmina@chbabc.org; cassidy@3rdgenhomes.com; pauline@chbabc.org; jmitchell@coquitlam.ca; Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>; esangster@daustudio.ca; mbarros@daustudio.ca; TSwardh@delta.ca; msangret@delta.ca; sGervais@digitalsupercluster.ca; spaish@digitalsupercluster.ca; afehr@egbc.ca; jmunroe@fninspector.ca; bharasimiuk@rdffg.bc.ca; kjonkman@rdffg.bc.ca; diana@havan.ca; ron@havan.ca; george.hemsley@introba.com; brad.walton@jensenhughes.com; tpollock@kimberley.ca; jkassel@lakecountry.bc.ca; jdelrosario@langleycity.ca; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>; Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; max@naikoon.ca; Abe.lang@nanaimo.ca; Darcy.fox@nanaimo.ca; jeremy.holm@nanaimo.ca; reed.botwright@nanaimo.ca; pthompson@rdn.bc.ca; Iain.Macdonald@nrc-cnrc.gc.ca; amcintyre@nelson.ca; echow@cnv.org; tryce@cnv.org; aboel@oakbay.ca; HStewart@oakbay.ca; rmacleod@portmoody.ca, <rmacleod@portmoody.ca>; Wil.Wedel@princegeorge.ca; tturner@quesnel.ca; ftewfik@richmond.ca; lindsay.chase@saanich.ca; hgoodland@scius.ca; psorfleet@sparwood.ca; bdollevoet@summerland.ca; RDube@surrey.ca; richards@syncraconstruction.com; nbrooks@terrace.ca; sean.mckinnon@tn-bc.ca; p.zadeh@civil.ubc.ca; ssf@civil.ubc.ca; Jeff Fisher <jfisher@udi.org>; 'amy.vilis@vancouver.ca' <amy.vilis@vancouver.ca>; Rebecca.Doel@vancouver.ca; andrew.wroblewski@vancouver.ca; Calvin Gray <cgray@victoria.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>; Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>; Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>; Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>; Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; King, David J M JEDI:EX <David.King@gov.bc.ca>
Subject: Follow-up: June 12th Digital Innovation in Housing Construction Workshop

Greetings everyone,

Thank you for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction. We appreciate the perspectives and insights you shared with us, and we are hard at work analyzing your feedback.

For those who would like to provide additional feedback, please note that the Mural board we used on Monday is now closed. We are still accepting feedback until EOD Wednesday June 21, 2023, via two methods:

1. An after-hours self-serve Mural board (link) that contains both breakout activities
2. Email to the building.safety@gov.bc.ca

We are working to share a summary report of the engagement in the coming weeks.

Have a great day,

Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Page 022 of 356 to/à Page 023 of 356

Withheld pursuant to/removed as

s.13

DENCITI
development corp.

July 25, 2023

Building and Safety Standards Branch (BSSB)
PO Box 9844 Stn Prov Govt
Victoria, BC V8W 9T2

Attention: Mr. Jun'ichi Jensen, Director, Codes and Standards

Re: UDI Letter – B.C. Building Code 2023

Dear Mr. Jensen:

We are writing to express our wholehearted support for the recommendations put forth by the Urban Development Institute Pacific Region (UDI) in their letter of June 16, 2023 regarding the forthcoming changes to the B.C. Building Code (BCBC). After thoroughly reviewing the UDI's concerns and suggestions, we agree with the need for a more comprehensive assessment of the potential impacts of these changes before their implementation.

The UDI has raised valid concerns regarding the substantial impact of the proposed code changes on building designs, unit sizes, floor areas, and project costs. While we appreciate the Province's objectives of increasing accessibility and improving health and safety through seismic design requirements, it is crucial to carefully consider the implications on the housing sector, particularly with respect to housing supply and affordability.

The proposed increase in space requirements for bathrooms and bedrooms, although intended to enhance accessibility, poses significant challenges for the development industry in providing much-needed housing. The potential reduction in living space due to larger bathrooms and wider halls could affect the marketability and desirability of units, especially smaller and more affordable options. Additionally, the increase in unit size to accommodate adaptability features is likely to negatively impact affordability, contrary to the goal of making housing more accessible and affordable.

The UDI's recommendation to delay the adoption and implementation of the accessibility and seismic design requirements is justified. This additional time would allow for a thorough understanding of the impacts on new housing supply and the exploration of effective mitigation measures. Conducting further research on the demand for fully adaptable units and the overall impact on floor area will provide insight into achieving the desired balance between accessibility and housing affordability.

1550 -1185 WEST GEORGIA ST, VANCOUVER BC V6E 4E6 T 604.638.0771 denciti.ca

Further, we support UDI's call for enhanced in-stream protection for projects already in the municipal approvals process. Providing adequate protection to ongoing projects when substantial changes are introduced is crucial for ensuring project viability, avoiding cancellations, and minimizing potential delays. The UDI's proposal to allow applications submitted with Development Permits after the effective date of these changes to proceed under the current BCBC would be a fair approach to mitigate the negative consequences on pre-sales & leasing, project financing, and subsequent municipal approvals.

Considering the pressing need to increase housing supply, UDI's recommendation for mitigation measures and offsets to balance the additional costs incurred by meeting new requirements is necessary. These measures, such as adjusting floor area calculations, site coverage, setbacks, and heights, should be implemented in collaboration with the Ministry of Housing to ensure consistency and efficiency across the Province. Exploring provincial measures, such as tax offsets for purpose-built rental housing, could also contribute to alleviating the financial burden on developers.

Together, we can navigate the path forward and harmonize the BCBC with the National Building Code of Canada while safeguarding the interests of the housing sector and the community at large. By adopting a holistic and measured approach, we can strike a balance between accessibility, seismic safety, and housing affordability, thus ensuring the long-term well-being and prosperity of our communities.

Thank you for your attention to this matter.

Respectfully submitted,
DENCITI DEVELOPMENT CORP.



Copies: Hon. Ravi Kahlon, Minster of Housing
Teri Collins, Deputy Minster of Housing

FW: UDI Letter – B.C. Building Code 2023

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>, Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>
Sent: July 31, 2023 4:35:38 PM PDT
Attachments: 23-07-25_UDI Support Letter.pdf, image001.png

For consideration and filing. I'm not sure yet what happens as this is copied to the MO- I suspect we need to wait for it to be assigned formally prior to responding. That can take some time, so please ensure to follow this up so that it does come to us for response ASAP.

Thanks.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Volodya Gusak <vgusak@denciti.ca>
Sent: Tuesday, July 25, 2023 11:13 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: David Fawley <dfawley@denciti.ca>; Minister, HOUS HOUS:EX <HOUS.minister@gov.bc.ca>; HOUS DMO HOUS:EX <HOUS.DMO@gov.bc.ca>
Subject: Re: UDI Letter – B.C. Building Code 2023

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Dear Mr. Jensen,

Please see our letter attached. Thank you for your attention to this matter.

Regards,

Volodya Gusak
PRESIDENT

DENCITI
development corp.

New Address! We moved one floor down.
1550-1185 WEST GEORGIA ST

VANCOUVER BC V6E 4E6

T 604.767.1612

E vgusak@denciti.ca

denciti.ca

Re: Digital Leadership Council

From: Carmina Tupe <carmina@chbabc.org>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: August 28, 2023 10:23:26 AM PDT
Attachments: ~WRD1805.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zach - thanks for your patience on this. Neil is in! Please feel free to send the invite directly to him at neil@chbabc.org.

Thank you,

Carmina Tupe, MCIP RPP
Director, Policy & Government Relations
Canadian Home Builders' Association British Columbia
E: carmina@chbabc.org | M: 647-326-6181

On Thu, Aug 24, 2023 at 12:55 PM May, Zachary HOUS:EX <Zachary.May@gov.bc.ca> wrote:

> Quarterly meetings, so this should be light touch. I would guess a meeting late Sept. and then another in January and May.
>
> Best,
>
> **Zachary D. May**, MBA
>
> Executive Director, Housing Innovations
>
> Ministry of Housing
>
> (he/him/his)
>
> Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca
>
> ---
>
> **From:** Carmina Tupe <carmina@chbabc.org>
> **Sent:** Thursday, August 24, 2023 12:35 PM
> **To:** May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
> **Subject:** Re: Digital Leadership Council

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Okay, helpful to know. And in terms of frequency of meetings and time commitments, what do you anticipate? I just want to give Neil a full picture of the scope of involvement because as you can imagine, the fall schedules are filling up so so quickly!

Carmina Tupe, MCIP RPP

Director, Policy & Government Relations

Canadian Home Builders' Association British Columbia

E: carmina@chbabc.org | M: 647-326-6181

On Thu, Aug 24, 2023 at 12:24 PM May, Zachary HOUS:EX <Zachary.May@gov.bc.ca> wrote:

> I'm sure an alternate would be fine. We want CHBABC to have a direct line of communication to the Minister on this work so we're open to whoever you think would be the best fit. We are generally inviting the CEOs of key organizations (UDI, EGBC, AIBC, ASTTBC, etc.).
>
> Thanks for the quick response on this!
>
> Best,
>
> **Zachary D. May**, MBA
>
> Executive Director, Housing Innovations
>
> Ministry of Housing
>
> (he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Carmina Tupe <carmina@chbabc.org>
Sent: Thursday, August 24, 2023 11:58 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: Re: Digital Leadership Council

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks for thinking of us Zach. I will pass the note along to Neil, but in the event he is unable to, would we be able to have an alternate?

Carmina Tupe, MCIP RPP

Director, Policy & Government Relations

Canadian Home Builders' Association British Columbia

E: carmina@chbabc.org | M: 647-326-6181

On Thu, Aug 24, 2023 at 11:15 AM May, Zachary HOUS:EX <Zachary.May@gov.bc.ca> wrote:

> Hi Carmina,
>
> Would you be able to find out if Neil would be interested in participating on a Digital Leadership Council we're putting together to advise Minister Kahlon on the Ministry of Housing's mandate to establish BC as a North American leader in digital permitting and construction.

The Leadership Council will be made up of 12-15 leaders from across the housing development system, including regulators, industry, the technology sector, and other organizations. We are currently planning an initial kickoff meeting of the Leadership council in September 2023.

At this time I'm just trying to gauge Neil's interest. Formal invites will come from the Minister's Office in a few weeks.

Let me know if you have any questions and if you think this is something Neil would be interested in.

Best,

Zachary D. May, MBA

Executive Director, Housing Innovations

Ministry of Housing

(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Digital Innovation in Housing Construction

From:	George Hemsley <george.hemsley@introba.com>
To:	May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc:	dgao@rjc.ca
Sent:	August 29, 2023 8:22:04 AM PDT
Attachments:	FW: Ministry of Housing Digital Innovation, image734052.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary,

Daniel reached out to one of our Principals in Victoria after seeing an update on the working committee towards digital innovation and was asking to get involved, is this something you can include Daniel in future meetings/emails?

I'll allow Daniel to introduce himself, but we have worked on a lot of projects between Introba and RJC.

Thanks,
George

George Hemsley
Associate - Digital Practice Manager
Introba
Vancouver, BC, Canada
T +1 604.687.1800 x2069
Introba.com | LinkedIn

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From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, June 30, 2023 4:19 PM
To: 'pbogunovic@abbotsford.ca' <pbogunovic@abbotsford.ca>; 'pcaraher@ahma-bc.org' <pcaraher@ahma-bc.org>; 'sfralin@ahma-bc.org' <sfralin@ahma-bc.org>; XT:Irg, Mike Alberni-Clyoquot Regional District EAO:IN <mirg@acrd.bc.ca>; 'jjung@asttbc.org' <jjung@asttbc.org>; 'katy.fairley@bccassn.com' <katy.fairley@bccassn.com>; 'saafrin@bchousing.org' <saafrin@bchousing.org>; 'srutherford@bchousing.org' <srutherford@bchousing.org>; 'jpatel@bchousing.org' <jpatel@bchousing.org>; 'tyler.wightman@boabc.org' <tyler.wightman@boabc.org>; 'Jason.berlin@rdbn.bc.ca' <Jason.berlin@rdbn.bc.ca>; 'jason.llewellyn@rdbn.bc.ca' <jason.llewellyn@rdbn.bc.ca>; 'jason.watt@burnaby.ca' <jason.watt@burnaby.ca>; 'Trevor.Sweeney@campbellriver.ca' <Trevor.Sweeney@campbellriver.ca>; 'carmina@chbabc.org' <carmina@chbabc.org>; 'cassidy@3rdgenhomes.com' <cassidy@3rdgenhomes.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'jmitchell@coquitlam.ca' <jmitchell@coquitlam.ca>; King, David J M JEDI:EX <David.King@gov.bc.ca>; 'esangster@daustudio.ca' <esangster@daustudio.ca>; 'mbarros@daustudio.ca' <mbarros@daustudio.ca>; 'TSwardh@delta.ca' <TSwardh@delta.ca>; 'msangret@delta.ca' <msangret@delta.ca>; 'sGervais@digitalsupercluster.ca' <sGervais@digitalsupercluster.ca>; 'spaish@digitalsupercluster.ca' <spaish@digitalsupercluster.ca>; 'afehr@egbc.ca' <afehr@egbc.ca>; 'jmunroe@fninspector.ca' <jmunroe@fninspector.ca>; 'bharasimiuk@rdffg.bc.ca' <bharasimiuk@rdffg.bc.ca>; 'kjonkman@rdffg.bc.ca' <kjonkman@rdffg.bc.ca>; 'diana@havan.ca' <diana@havan.ca>; 'ron@havan.ca' <ron@havan.ca>; George Hemsley <george.hemsley@introba.com>; 'brad.walton@jensenhughes.com' <brad.walton@jensenhughes.com>; 'tpollock@kimberley.ca' <tpollock@kimberley.ca>; 'jkassel@lakecountry.bc.ca' <jkassel@lakecountry.bc.ca>; 'jdelrosario@langleycity.ca' <jdelrosario@langleycity.ca>; Anthony, Jennifer WLRS:EX

<Jennifer.Anthony@gov.bc.ca>; Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; 'max@naikoon.ca' <max@naikoon.ca>; 'Abe.lang@nanaimo.ca' <Abe.lang@nanaimo.ca>; 'Darcy.fox@nanaimo.ca' <Darcy.fox@nanaimo.ca>; 'jeremy.holm@nanaimo.ca' <jeremy.holm@nanaimo.ca>; 'reed.botwright@nanaimo.ca' <reed.botwright@nanaimo.ca>; 'pthompson@rdn.bc.ca' <pthompson@rdn.bc.ca>; Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>; 'amcintyre@nelson.ca' <amcintyre@nelson.ca>; 'echow@cnv.org' <echow@cnv.org>; 'tryce@cnv.org' <tryce@cnv.org>; 'aboel@oakbay.ca' <aboel@oakbay.ca>; 'HStewart@oakbay.ca' <HStewart@oakbay.ca>; 'rmacleod@portmoody.ca,' <rmacleod@portmoody.ca>; 'Wil.Wedel@princegeorge.ca' <Wil.Wedel@princegeorge.ca>; 'tturner@quesnel.ca' <tturner@quesnel.ca>; 'ftewfik@richmond.ca' <ftewfik@richmond.ca>; 'lindsay.chase@saanich.ca' <lindsay.chase@saanich.ca>; 'hgoodland@scius.ca' <hgoodland@scius.ca>; 'psorfleet@sparwood.ca' <psorfleet@sparwood.ca>; 'bdollevoet@summerland.ca' <bdollevoet@summerland.ca>; 'RDube@surrey.ca' <RDube@surrey.ca>; 'richards@syncraconstruction.com' <richards@syncraconstruction.com>; 'nbrooks@terrace.ca' <nbrooks@terrace.ca>; 'sean.mckinnon@tn-bc.ca' <sean.mckinnon@tn-bc.ca>; 'p.zadeh@civil.ubc.ca' <p.zadeh@civil.ubc.ca>; 'ssf@civil.ubc.ca' <ssf@civil.ubc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'Amy.Vilis@vancouver.ca' <Amy.Vilis@vancouver.ca>; 'andrew.wroblewski@vancouver.ca' <andrew.wroblewski@vancouver.ca>; 'Rebecca.Doel@vancouver.ca' <Rebecca.Doel@vancouver.ca>; 'cgray@victoria.ca' <cgray@victoria.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>; Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>; Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>; Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>; 'will.grass@gov.bc.ca' <will.grass@gov.bc.ca>
Subject: Digital Innovation in Housing Construction

You don't often get email from zachary.may@gov.bc.ca. Learn why this is important

Greetings everyone,

Thank you again for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction.

Attached is the *Ministry of Housing – Digital Innovation in Housing Construction, What We Heard Summary*. It also includes the Ministry's key engagement activities planned over the summer as we prepare to move into our product development stage this fall.

We really appreciated your participation and look forward to continuing to collaborate on this important work.

Wishing you all a safe and happy weekend!

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

FW: Ministry of Housing Digital Innovation

From: Andy Chong <andy.chong@introba.com>
To: George Hemsley <george.hemsley@introba.com>
Sent: August 26, 2023 11:42:16 PM PDT
Attachments: image002.png, image364003.png, image001.jpg

Hi George – is the initiative below something you are involved in? If not, do you know who is? FYI Dan is a great colleague of ours, we have done a lot of projects together.

Andy Chong P.Eng., LEED AP
Vice President, Institutional - Victoria Office Leader

Introba

Victoria,BC,Canada

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From: Daniel Gao <dgao@rjc.ca>
Sent: Wednesday, August 9, 2023 2:44 PM
To: Andy Chong <andy.chong@introba.com>
Subject: Ministry of Housing Digital Innovation

> You don't often get email from dgao@rjc.ca. Learn why this is important

Hi Andy,

We saw in the recent UDI update that there is a committee working on digital innovation of housing construction with the Ministry of Housing and Introba is listed as one of the participants from the engineer side. Do you know if there is any way that we could get involved in the discussion as well?

Thanks,

Daniel Gao,P.Eng.
Associate

Read Jones Christoffersen Ltd.
Engineers

rjc

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Victoria, B.C. V8W 2G4 Canada
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dgao@rjc.ca | rjc.ca

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RE: Digital Innovation in Housing Construction

From:	Daniel Gao <dgao@rjc.ca>
To:	George Hemsley <george.hemsley@introba.com>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc:	Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>, Grass, William HOUS:EX <William.Grass@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent:	August 31, 2023 8:39:55 AM PDT
Attachments:	image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Everyone and thank you George for the introduction!

Sorry I've been preoccupied for the earlier part of this week with a seminar so I haven't had a chance to catch up on emails.

I'm an Associate with RJC Victoria in the structural engineering practice group. My background has included CAD, BIM/Revit, programming (various environments/languages), process improvement, and structural design. Keen to get involved and help out where I can.

The following times work for me, based on the availability list from George below.

- 6th September, 9-11am
- 12th September, 9-11am & 3-4pm
- 14th September, 11am-3pm

Cheers,

Daniel Gao, P.Eng.
Associate
direct (778) 746-1128 | **mobile** (250) 216-9639 | dgao@rjc.ca | rjc.ca

Read Jones Christoffersen Ltd.
Engineers

From: George Hemsley <george.hemsley@introba.com>
Sent: Thursday, August 31, 2023 7:55 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Daniel Gao <dgao@rjc.ca>
Cc: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Digital Innovation in Housing Construction

Morning Zachary,

Sounds great, below is a range of dates and times I'm available.

- 6th September, 9-11am
- 12th September, 9-11am & 3-4pm
- 13th September, 2-4pm
- 14th September, 11am-4pm

Regards,
George

George Hemsley
Associate - Digital Practice Manager
T +1 604.687.1800 x2069

Introba

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From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, August 30, 2023 1:54 PM
To: George Hemsley <george.hemsley@introba.com>; dgao@rjc.ca
Cc: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Digital Innovation in Housing Construction

Thanks George and Daniel,

We have been doing lots of planning work over the summer and have some committees and technology development happening this fall. I will get Daniel's name added to our contact list.

Is there any chance the two of you would be available for a call in the next couple weeks to help us with some background questions about BIM/machine readable codes?

If you can send some times that work in the first or second week of September we can set something up.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: George Hemsley <george.hemsley@introba.com>
Sent: Tuesday, August 29, 2023 8:22 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: dgao@rjc.ca
Subject: RE: Digital Innovation in Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zachary,

Daniel reached out to one of our Principals in Victoria after seeing an update on the working committee towards digital innovation and was asking to get involved, is this something you can include Daniel in future meetings/emails?

I'll allow Daniel to introduce himself, but we have worked on a lot of projects between Introba and RJC.

Thanks,
George

George Hemsley

Associate - Digital Practice Manager

Introba

Vancouver, BC, Canada

T +1 604.687.1800 x2069

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From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, June 30, 2023 4:19 PM
To: 'pbogunovic@abbotsford.ca' <pbogunovic@abbotsford.ca>; 'pcaraher@ahma-bc.org' <pcaraher@ahma-bc.org>; 'sfralin@ahma-bc.org' <sfralin@ahma-bc.org>; XT:Irg, Mike Alberni-Clyoquot Regional District EAO:IN <mirg@acrd.bc.ca>; 'jjung@asttbc.org' <jjung@asttbc.org>; 'katy.fairley@bccassn.com' <katy.fairley@bccassn.com>; 'saafrin@bchousing.org' <saafrin@bchousing.org>; 'srutherford@bchousing.org' <srutherford@bchousing.org>; 'jpatel@bchousing.org' <jpatel@bchousing.org>; 'tyler.wightman@boabc.org' <tyler.wightman@boabc.org>; 'Jason.berlin@rdbn.bc.ca' <Jason.berlin@rdbn.bc.ca>; 'jason.llewellyn@rdbn.bc.ca' <jason.llewellyn@rdbn.bc.ca>; 'jason.watt@burnaby.ca' <jason.watt@burnaby.ca>; 'Trevor.Sweeney@campbellriver.ca' <Trevor.Sweeney@campbellriver.ca>; 'carmina@chbabc.org' <carmina@chbabc.org>; 'cassidy@3rdgenhomes.com' <cassidy@3rdgenhomes.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'jmitchell@coquitlam.ca' <jmitchell@coquitlam.ca>; King, David J M JEDI:EX <David.King@gov.bc.ca>; 'esangster@daustudio.ca' <esangster@daustudio.ca>; 'mbarros@daustudio.ca' <mbarros@daustudio.ca>; 'TSwardh@delta.ca' <TSwardh@delta.ca>; 'msangret@delta.ca' <msangret@delta.ca>; 'sGervais@digitalsupercluster.ca' <sGervais@digitalsupercluster.ca>; 'spaish@digitalsupercluster.ca' <spaish@digitalsupercluster.ca>; 'afehr@egbc.ca' <afehr@egbc.ca>; 'jmunroe@fninspector.ca' <jmunroe@fninspector.ca>; 'bharasimiuk@rdffg.bc.ca' <bharasimiuk@rdffg.bc.ca>; 'kjonkman@rdffg.bc.ca' <kjonkman@rdffg.bc.ca>; 'diana@havan.ca' <diana@havan.ca>; 'ron@havan.ca' <ron@havan.ca>; George Hemsley <george.hemsley@introba.com>; 'brad.walton@jensenhughes.com' <brad.walton@jensenhughes.com>; 'tpollock@kimberley.ca' <tpollock@kimberley.ca>; 'jkassel@lakecountry.bc.ca' <jkassel@lakecountry.bc.ca>; 'jdelrosario@langleycity.ca' <jdelrosario@langleycity.ca>; Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>; Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; 'max@naikoon.ca' <max@naikoon.ca>; 'Abe.lang@nanaimo.ca' <Abe.lang@nanaimo.ca>; 'Darcy.fox@nanaimo.ca' <Darcy.fox@nanaimo.ca>; 'jeremy.holm@nanaimo.ca' <jeremy.holm@nanaimo.ca>; 'reed.botwright@nanaimo.ca' <reed.botwright@nanaimo.ca>; 'pthompson@rdn.bc.ca' <pthompson@rdn.bc.ca>; Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>; 'amcintyre@nelson.ca' <amcintyre@nelson.ca>; 'echow@cnv.org' <echow@cnv.org>; 'tryce@cnv.org' <tryce@cnv.org>; 'aboel@oakbay.ca' <aboel@oakbay.ca>; 'HStewart@oakbay.ca' <HStewart@oakbay.ca>; 'rmacleod@portmoody.ca,' <rmacleod@portmoody.ca>; 'Wil.Wedel@princegeorge.ca' <Wil.Wedel@princegeorge.ca>; 'tturner@quesnel.ca' <tturner@quesnel.ca>; 'ftewfik@richmond.ca' <ftewfik@richmond.ca>; 'lindsay.chase@saanich.ca' <lindsay.chase@saanich.ca>; 'hgoodland@scius.ca' <hgoodland@scius.ca>; 'psorfleet@sparwood.ca' <psorfleet@sparwood.ca>; 'bdollevoet@summerland.ca' <bdollevoet@summerland.ca>; 'RDube@surrey.ca' <RDube@surrey.ca>; 'richards@syncraconstruction.com' <richards@syncraconstruction.com>; 'nbrooks@terrace.ca' <nbrooks@terrace.ca>; 'sean.mckinnon@tn-bc.ca' <sean.mckinnon@tn-bc.ca>; 'p.zadeh@civil.ubc.ca' <p.zadeh@civil.ubc.ca>; 'ssf@civil.ubc.ca' <ssf@civil.ubc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'Amy.Vilis@vancouver.ca' <Amy.Vilis@vancouver.ca>; 'andrew.wroblewski@vancouver.ca' <andrew.wroblewski@vancouver.ca>; 'Rebecca.Doel@vancouver.ca' <Rebecca.Doel@vancouver.ca>; 'cgray@victoria.ca' <cgray@victoria.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>; Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>; Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>; Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>; 'will.grass@gov.bc.ca' <will.grass@gov.bc.ca>
Subject: Digital Innovation in Housing Construction

> You don't often get email from zachary.may@gov.bc.ca. Learn why this is important

Greetings everyone,

Thank you again for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction.

Attached is the *Ministry of Housing – Digital Innovation in Housing Construction, What We Heard Summary*. It also includes the Ministry's key engagement activities planned over the summer as we prepare to move into our product development stage this fall.

We really appreciated your participation and look forward to continuing to collaborate on this important work.

Wishing you all a safe and happy weekend!

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

UDI Letter - Proposed BCBC Changes 2023

From:	Cassandra Smith <csmith@udi.org>
To:	Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc:	Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Anne McMullin <AMcMullin@udi.org>, Jeff Fisher <jfisher@udi.org>
Sent:	September 7, 2023 2:46:41 PM PDT
Attachments:	image003.jpg, image005.jpg, image007.jpg, image002.jpg, image006.jpg, image004.jpg, Example 3 - Washroom comparison_Plans.pdf, 2023-09-07 UDI Letter - Building and Safety Standards Branch - 2023 BC Building Code Impacts of the Proposed Adaptability Requirements.pdf, Example 2 - ADAPTABLE DWELLING UNIT- BCBC2023 - Updated August 18 2023.pdf

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Hello Jun'ichi,

As I mentioned previously, we have put together some additional examples to illustrate the impacts of the proposed BC Building Code changes on new construction, specifically the adaptability requirements. Please find attached a letter outlining these impacts and our concerns, along with suggested mitigation measures.

If you would like to discuss these further or have questions related to the specific examples, please let us know and we would be happy to schedule a follow-up session.

Thanks,
Cassandra

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

RE: UDI Letter - Proposed BCBC Changes 2023

From: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: September 8, 2023 9:01:02 AM PDT
Attachments: image002.jpg, image004.jpg, image006.jpg, image007.jpg, image005.jpg, image003.jpg, image001.jpg

Good morning Shannon!

For this eApp I just need to know two things: Who the final signature level will be and the approval routing. Let me know

Best,
Brian Ruhland
Office Manager
Building and Safety Standards Branch | Ministry of Housing
Phone: 236 478-0614| Email: Brian.Ruhland@gov.bc.ca
Pronouns: *he/him*

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Friday, September 8, 2023 8:16 AM
To: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi Brian,

Could you please cliff with a reply direct action and assign the eApp to me?

Thank you,
Shannon

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 7, 2023 3:35 PM
To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; Grass, William HOUS:EX <William.Grass@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

FYI and for response

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, September 7, 2023 2:47 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter - Proposed BCBC Changes 2023

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello Jun'ichi,

As I mentioned previously, we have put together some additional examples to illustrate the impacts of the proposed BC Building Code changes on new construction, specifically the adaptability requirements. Please find attached a letter outlining these impacts and our concerns, along with suggested mitigation measures.

If you would like to discuss these further or have questions related to the specific examples, please let us know and we would be happy to schedule a follow-up session.

Thanks,
Cassandra

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

NOTIFICATION - eApprovals Item ID: 81525 - Item Created - Due 2023-09-22

From: JPSS eApprovals <donotreply@sp.gov.bc.ca>
To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Grass, William HOUS:EX <William.Grass@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: September 8, 2023 1:53:20 PM PDT

Ruhland, Brian has created a new eApprovals item and assigned it to Laboucane, Shannon

Comment:

#: 61295

Title: UDI Letter - Proposed BCBC Changes 2023

Full Name: Cassandra Smith

Due Date: 9/22/2023

Category: Correspondence - Reply Direct

Go to item...

PR Feedback Themes

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
To: Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: September 13, 2023 2:56:48 PM PDT
Attachments: PR Status Update 2023 08 17.docx

Hello,

As mentioned at the BC Codes team meeting yesterday, attached is a summary of the public review feedback. Feedback is organized by topic theme, which will help you see the specific items folks were asking for clarification on that may be helpful to include in a bulletin.

Please feel free to forward to Jim once Juni has briefed him on the seismic bulletin.

If you have any questions, please let me know.

Thank you.

Shannon Laboucane | Senior Policy Analyst
Building and Safety Standards Branch
Ministry of Housing
Phone: 778-974-3912 | Email Link: Shannon.Laboucane@gov.bc.ca

2022 **Top Work Unit** Winner

Launched May 19, 2023 – Concluded June 19 (extended from June 16)

- 24 disability partners – 10 opened the email – 1 click
- 1,423 contacts – 596 opens – 153 clicks

227 online survey responses

~251 responses including 26 email submissions = provided to ADM on July 14th (SL updated Aug 17/23)

Accessibility

Summary of comments

- 85 responses received (including 9 thorough and valuable email submissions)
- One comment received suggesting greater design flexibility and identifying possible floor space implications. This comment raised the VBBL as an example of a balanced approach.
- One comment concerned changes will impact floor space which may reduce or eliminate certain features
- Eight commented on perceived impacts to affordability
- One comment is concerned with the in availability of products in the market
- Two comments expressed concern that adaptable dwellings are less desirable for purchase in the market
- One comment is concerned with door availability and existing doors becoming non-compliant particularly for small buildings/homes (Fenestration and Glazing Industry Alliance)
  (Note: recommended action is to consider proposal amendment)
- One comment requesting increase to clarity for entrance door widths (CHBA BC)
- Two commented validating proposals and request they go further
- One commented concern in regard to stair design safety
  (Note: harmonized with National code requirements)
- Six comments recommend requiring less than 100% adaptable (UDI, CHBC BC, Homebuilders Assn. Pioneer Code Consultants, Polygon Homes, Urban Thrive)
- Three commented on concerns to floor space, layout, and materials with the proposal for 100% of larger buildings and the first floor of smaller buildings
  (Note: recommended response is to give design solution examples in handbook with little to no impact on design and material impact)
- One comment in regard to transfer space in washrooms and impacts to rental and sale prices
- One comment in regard to adequate mauverability space for powerchairs
- One comment notes language for reinforcements does limit design and flexibility of grab bars
- One comment is concerned with competency of designers and need for education to support consistency
- One comment recommends the market determine the need
- One comment notes solid backing for grab bar could be expanded to accommodate various configurations
- Three comments recommend allowing in-stream projects to continue without changes by having the development permit application date establish the applicable code edition (CHBA BC, UDI)

- One comment concerned with increase pressure on local govs to adjust zoning requirements in response to ADUS occupying more space
- Two comments suggest tax breaks to manage increased costs
- Two comments recommend floor area exclusions be granted or maintained by local governments
- One comment highlights that current LG voluntary provisions enable them to test other implementation policies
- One comments recommends municipalities retain control of ADU targets
- Four recommend delaying implementation to allow further consultation with industry and local governments (Homebuilders Assn, Polygon, CHBABC, UDI)
- One comment shared concerns that the light requirements in common spaces are excessive
- One comment suggested SAFERHomes training for residential builders
- One comment recommends clarity on landings for ramps that do not lead to a door.
- One comment raises concern that adding 'ramps' to Sentences 3.8.2.4.(1) and (2) may cause unintended consequences as written as it may require additional routes even if the ramp is accessible
- One comment recommends clarity on location and operation of power door openers.
- One comment questions whether Clauses 3.8.2.3.(2)(g)(i) to (iv) should be separated with an 'or' or an 'and'.
- One comment recommends clarity on landings for ramps that do not lead to a door. [BSSB disposition: No action. This is national content which is unchanged from the 2015 edition and which appears in the BCBC 2018. B.C. has not proposed any changes to this provision.]
- One comment recommends clarity on location and operation of power door openers. [BSSB disposition: No action. This content is carried over from the BCBC 2018 and is explained and illustrated in the Building Accessibility Handbook 2020. B.C. has not proposed any changes to this provision.]
- One comment questions whether Clauses 3.8.2.3.(2)(g)(i) to (iv) should be separated with an 'or' or an 'and'. [BSSB disposition: No action. The 'and' is the intended policy (must satisfy all conditions) and is carried over from the 2018 edition.]
- One comment raises concern that adding 'ramps' to Sentences 3.8.2.4.(1) and (2) may cause unintended consequences as written as it may require additional routes even if the ramp is accessible. [BSSB disposition: Action – Code. Delete B.C.'s addition of the term (application to) 'ramps' from Sentences 3.8.2.4.(1) and (2). Keep the scope of application to those stated in the NBC Article title. Further Code development to avoid unintended consequences is required to address ramps and when they must be accessible or when a separate accessible ramp may be required.]
-

Public review themed email comments (full submissions saved here)

Canadian Homes Builders Association
Pauline Rupp, Director, Technical and Building Innovation
pauline@chbabc.org

- Recommend provincial approach to in-stream protection to allow Development Permit applications submitted prior to the effective date of the next edition of the BCBC to comply under the BCBC 2018
- Recommend floor area exclusions be granted or maintained by local governments
- Recommends a phased-in requirements for ADUs in Part 3 residential buildings, and start with minimum of 10 to 15%
- Recommends requirements specifics to increase clarity for entrance doors widths – "shall have a width no less than 914 mm or a clear width of not less than 850 mm when door is in open position"
  Respond with in the code or Notes change.
- Notes language for reinforcements does limit design and flexibility of grab bars

Homebuilders Association
Dianna Dilworth, Director of Government Relations
Diana@havan.ca

- Concerned 100% adaptable will present new housing supply and affordability challenges
- Concerned adaptable policies for larger corridors, bedrooms, bathrooms, will result in larger suites which may affect number of suites in a project and affordability
- Concerned with the loss of floor space exemptions
- Supports Polygon Homes request to delay implementation to allow further research and consultation with industry and local governments

Pioneer Code Consultants
Michael Meszaros, M.Eng, P.Eng
mmeszaros@pioneerconsultants.net

- Concerned 100% ADUs will cause affordability impacts
- Concerns with the lighting requirements for common spaces were excessive
- Recommend changes do not proceed at this time

Polygon Homes
Scott Baldwin, Senior VP Development
sbaldwin@polyhomes.com

- Concern proposed changes impact floor space in a way that may reduce or eliminate certain features
- Concern that adaptable dwellings are less desirable for purchase in the market
- Concerned about impacts to local government density bonuses and floor area exclusions and perceived impacts to housing affordability
- Current voluntary provisions enable local governments to test other implementation policies
- Recommends further research and consultation with local governments and industry to understand impacts to housing affordability

SAFERhome Standards
Colin Doylend, Executive Director
cdoylend@saferhomesociety.com

- Applaud and support efforts to make new buildings more accessible
- Suggested SAFERHomes training for residential builders

Urban Development Institute
Anne McMullin, President & CEO
amcmullin@udi.org

- Recommends delaying adoption and implementation to allow time to understand floor area impacts on new housing supply and mitigation strategies
- Recommends enhancing in-stream protection for projects already in municipal approvals process
- Recommends more research to fully understand demand for fully adaptable units
- Concerned 100% adaptable will impact number of homes and affordability and recommends a phased approach
- Concern with increased pressure on local govs to adjust zoning requirements in response to ADUs occupying more space
- Concerned about marketability of one-bedroom adaptable homes
- Suggests tax breaks to manage increased costs

Lapis Homes
Ryan Jabs, President, Community Builder
Ryanjabs@lapishomes.com

- Concerned adaptable homes will lead to less and more expensive housing
- Preference for ground floor adaptable
- Recommend government guarantee income tested housing for people with a need and then build subsidized accessible housing
- Incentivize accessible housing with grants and provisions that housing be matched
- Perception that population demand is low

Urban Thrive
Julian West, Principal & Owner
julian@urbanthrive.ca

- Recommend gov use the Housing Supply Act rather than the BC Building Code to set local government targets
- Recommend municipalities retain control of ADU targets

Survey

- I believe the changes are appropriate and clear, however the application to design drawings, supplied materials and installation by builders and trades still needs some industry work. Building suppliers are still selling non-compliant grab bars, etc, which gets purchased for

renovation projects and then get failed - holding up occupancy. Is there any work the province can do with the supply chain. Some of the awareness and education should be directed to Planners as it may collide with existing Zoning regulations. Adaptability is definitely a valid topic for aging in place and the challenges of affordable (shared multi generational) housing and I know our Social Development team is watching this. More education with mechanical trades is required to ensure drawings are being read and plumbers are fully aware as there is little extra time available for Building and Plumbing Officials to educate thru plan reviews (adding tons of notes to drawings) and educating by failing. Most communities do have their own guides taking the great information from the larger handbook - what is needed is some provincial wide cheat sheets that can provide consistency.

- 2023-06-19 09:50 a.m.
- We rarely have people requiring accessible units, I believe the market should dictate what is being built and not the code
- 2023-06-16 07:57 a.m.
- FGIA is recommending not adopting the proposed changes to BC Building Code for Adaptable Dwelling Units to include clearance of 850 mm at entry doors for Part 9 buildings. The issue of applying Part 3 accessible code requirements to Part 9 was raised at the National Standing Committee on House and Small Building (SC-HSB) at their face-to-face meeting in Ottawa on May 31 and June1. The SC-HSB recognized that it was premature to apply Part 3 accessible requirements to Part 9 and is sending the proposed changes to Part 9 back for further review. If BC is to adopt possible National code changes that are still being reviewed, this could push the province further away from a harmonized code. Further work is needed to determine the appropriate clear opening for Part 9 entry doors. Taking a Part 3 code requirement to Part 9 without the proper review is not appropriate. Typical 36” (35.75”) entry doors for Part 9 residential applications may not provide an 850 mm clear opening. While the clear opening measurement may be close, fenestration manufacturers need more time to evaluate their full scope of products to determine if such a change would continue to readily allow availability of affordable products in a variety of style options. The door industry would strongly recommend that the adaptability requirement for a clear opening of 850 mm for Part 9 residential buildings be reconsidered and not included in the BC code at this time by not including the change in 3.8.5.1.(2)(a). Submitted by Janice Yglesias, Executive Director Fenestration and Glazing Industry Alliance (FGIA) 2023-06-15 07:26 p.m.
- Test 2023-06-15 03:33 p.m.
- Regarding 3.8.5.7.(1)(a) - having transfer space within a private residence are huge cost and space concerns in a region absolutely gripped with affordability issues. Having enlarged washrooms in units that are very small (driven by the economy and affordability) will increase overall sales and rental prices for the owner/tenant. 2023-06-15 11:44 a.m.
- too restrictive and costly 2023-06-14 11:33 a.m.
- requiring 100% of units to be adaptable will increase cost substantially. Does that means all counter tops and light switches must also be lowered to meet the adaptable requirements? Maybe requiring a minimum number of adaptable unit in 100% of apartments and condo is a better option, instead of the current, IF adapable units are provide. Roughing in for grab bars is all good but what if the std for bars changes again like it did in the 2018 BCBC? 2023-06-14 08:58 a.m.

- **Already captured ---**
- referencing within 3.8.2.1. regarding the need for accessibility for dwelling units is confusing and unclear. 3.8.2.1.(1)(a) clearly exempts certain buildings. Sentence (2) refers all buildings described in Clause (1)(a) to 3.8.5.1.(2) which provides further directions. When reading this and the further references is it the intent that all dwelling units including detached houses and houses with secondary suites be constructed as adaptable dwelling units as this is how it reads to me? The reference in 9.8.1.5.(1) to article 3.3.1.19 is incorrect this article does not relate to tactile warning. added sentence 7. although the language regarding signage for stairs and ramps that continue past the exit level has been in the code for quite a few years, the original requirement for a tactile treatment on the handrails when they extend past this point should be added back into the code it provides additional guidance.
- 6/13/2023 07:45 AM (Reference checked and comment is incorrect. B.C. has harmonized technical requirements for noted features)
- Concerns over affordability and increased cost of new housing. Making 100% of new apartments comply to adaptability standards will drive-up costs as these units require more materials, space and components to build. It will also result in less desirable unit layouts for those unaffected by mobility issues. 50% adaptable units for new construction is a much more appropriate mandate which will help increase the stock of adaptable housing while still helping mitigate growing construction costs, helping keep medium density construction feasible for builders and future buyers.
- 6/12/2023 01:56 PM
- Requiring 100 per cent adaptable features for large multi-unit residential buildings, may eliminate the risk of adaptable units being sold at a premium price point and help to ensure more equity and availability of these units for all people. However, this may cause an overall increase the price point of all units which makes building affordable housing that much more difficult to accomplish. It is important not to add additional cost barriers to building affordable housing.
- 6/12/2023 10:19 AM
- 3.8.3.5.(1)(c) & (d) - Suggest providing clarity if the top and bottom of ramps that do not lead to a door require a level area conforming to clause (c) or (d). CSA B651-18 states that a clear area measuring 1350mm long by the width of the ramp is required at the top and bottom, suggest adding similar wording under a new subclause (d)(iii). In my opinion, the landing area will be a common question due to the interpretation of the wording in (c), where previously ramps and landings/corridors were generally 1500mm wide. 3.8.3.6.(6)(a)(iii) & (iv) - Provide clarity on the location requirements for power/auto door operators (ADOs). (iii) requires ADOs to be placed between 600mm and 1500mm for door swing; however, (iv) which refers to 3.8.3.8.(1)(a)(iii), requires a clear area adjacent to a 1350mm x 800mm space. The addition of the 600mm requirement overlaps with the requirement in 3.8.3.8.(1)(a)(iii), potentially causing confusion about what applies, it is suggested to align the wording more closely with CSA B651-18 to mitigate confusion. The suggested wording for 3.8.3.6.(6)(iii) is: "are located adjacent to a floor space, clear of door swing, measuring 1350mm by 800mm, by either the length or the width, but located no more than 1500mm away." Additionally, subclause 3.8.3.6.(6)(c)(iv) can be removed. 3.8.2.3(2)(g)(iii) - Should this subclause end with "or" rather than "and"? It implies that if the project does not conform to all the subclauses under 3.8.2.3(2)(g), then the floor above/below does not need to be accessible. This also contradicts what is stated in the

comment box discussing (g). 3.8.2.4.(1) & (2) - The addition of the word "ramp" may cause some confusion, as the sentences could be interpreted to mean that any ramp, whether accessible (per 3.8.3.5) or not, will require an alternative accessible path to be provided (e.g., an elevator). Clarify if you specifically mean to state "or other paths of travel not designed to be accessible in accordance with Subsection 3.8.3." (i.e., ramps not designed to meet the requirements of 3.8.3.5.)
6/11/2023 06:45 PM
(B.C. has harmonized with NBC 2020 which resulted in larger landings as referenced by the commentor.)
AC provided analysis – Thursday, July 6, 2023

- added accessibility to all homes increases the construction cost of homes. We need less barrier to housing for all. less costs = more housing = more affordability
- 6/9/2023 09:22 AM
- driving up the cost of construction at a time every dollar counts. the current code more than meets the criteria of the percentage of People who require this .
- 6/9/2023 08:51 AM
- but the proposed changes do not go nearly far enough.
- I feel backing for future grab bars in SFD and secondary suites as well as having the accessible clear space for at least one bathroom, entrance ways and hallways in SFD and secondary suites meet accessible requirements for width. With the entrance way and hallways built to accessible dimensions, it would be possible to adjust the door framing in the future to be compliant with accessible requirements if the SFD or suite needs to be converted to be accessible. This would be close to the changes for the buildings already addressed in the update for new multi-unit residential buildings.6/7/2023 02:28 PM
- I support the fact that the changes proposed embrace the concept of "accessibility", over the more arcane "barrier-free". One major aspect of accessibility is totally missing - that is standards for stairs! The current Codes outline the requirements for stairs for tactile and and high contrast features but ignore the fact that stair design, as currently permitted, is inherently unsafe and dangerous. Most builders, and architects, continue to build the steepest stair possible with the smallest foot plant space, because the code permits it. My firm has been designing shallower stairs with full foot plant space since the 1980's - the penalty, from a planning point of view is six square feet per floor! It is amazing to me that our codes try to mitigate the problems of stairs for visually impaired and mobility challenged people, without addressing the problem itself - the stair design promotes hazard. 6/5/2023 02:23 PM
- The technical version is difficult for the public, but the lay summary is clear.
- 6/5/2023 11:09 AM
- What is the meaning of build able....can it mean possible to build , with out regard for cost..if that is the case then a staircase to the moon is buildable , just not practical..buildable is highly subjective ... not everyone has the bill gates Bank account 6/4/2023 06:41 PM
- all doors ways should be 32" to allow for wheel chairs to get thou 6/3/2023 04:17 PM
- testing
- 6/1/2023 10:20 AM
- Difficult issues arise with adaptability requirements, especially as they now apply to all MURBs. Requirements jump from some accessible residential suites and some adaptable suites as

determined by the AHJ, to 100% adaptable suites with very significant requirements. 1) Sentences 3.8.5.4.(3) and (4) (door swing clearances to bedrooms, bathrooms, living rooms, kitchens) are onerous requirements within residential suites. Sentence (3) would be impractical in most cases. Sentence (4) would most likely be universally employed. The rough-in is costly, and in practice, the location of the controls is difficult. 3.8.3.6.(6) specifies the location of automatic door controls (between 600 and 1500 from the door swing), but only for those required by 3.8.2.7.(1). It would be helpful to explicitly exempt location of the ADO controls required in 3.8.5.4.(3/4) from location requirements, leaving location to the discretion of the architect. In fact, I have never quite understood how ADO control locations would work with the deadbolt and door latch on a suite entry door (as per VBBL2019.) As a closure, a suite entry door requires a closer a latch. Would someone in a wheelchair approach the door and unlock the deadbolt, then somehow unlatch the door and then go back to the ADO control and push the button to operate the door? If used within a suite, presumably the door latch would be removed. 2) 3.8.5.5 requires accessible paths of travel within suites (1000mm). This could be reduced to 900mm because the context is private and residents would be familiar with their environments. 3) The clear space requirements of 1500x1700mm in a bedroom, in front of a closet and in a kitchen are onerous space requirements. In our practice, these would require additional floor area to be required within a suite – with an end cost implication. The impact on kitchens would be particularly significant and severely restrict kitchen design in the typical MURB. 4) The lateral transfer requirement for an adaptable suite (900mm wide by 1500mm long) is also particularly onerous. The result may be tiny vanities to accommodate the transfer space. The general concern is that “adaptability” requirements are essentially becoming “accessibility” requirements. What appears in BCBC2018 as a fair accommodation in a certain number of suites allowing conversion by owners, to a requirement that 100% of residential suites be near-accessible. It might be useful to consider what proportion of suites would actually be used in the way they are intended and to evaluate the cost (particularly the cost of additional floor space) to accommodate these changes. Will these add 5%? to the area (and effectively cost) of all residential suites? Without understanding these implications, it is hard to support these proposed changes. The current VBBL2019 adaptability approach is more balanced – while requiring all suites to be adaptable, the actual requirements are reasonably achievable.

- 5/31/2023 12:36 PM
- Unintended consequences are increase in construction costs, which erodes the affordability of housing.
- 5/31/2023 09:36 AM
- 5/29/2023 01:15 PM
- The increased costs to do the proposed changes are not realistic. We need to make building homes, condos, and apartments more affordable. The unintended consequence is making home ownership or condo ownership unaffordable and increasing the cost of rent with these proposed changes.
- 5/25/2023 10:54 PM
- 3.8.2.3 is unclear and requires additional consideration - this section as is would continue to result in inaccessible housing. 1/20 apartments is too low of a goal for high-density living, given the increasing need. The Section as-is will be an improvement, but not meet the need that is expressed by people living with mobility barriers as expressed via the Accessibility Feedback Tool, and those who have been and are trying to use the Right Fit Pilot Project - the RFPP has been cutting edge and failed many individuals in locating housing given the restricted options.
- 5/24/2023 08:03 PM

- I think the proposal is clear but in flood-prone areas or areas with rocky mountain terrain there may be challenges baking single family dwellings with an accessible clearance on smaller parcels as there may not be adequate space on the property to build the required ramping. I've worked as a planner in rural (regional district) mountainous areas where there is barely enough room to have a parking space on a property, even with significant blasting work.
- 5/23/2023 09:16 AM

Combustible penetrations

Summary of Comments

- 23 responses
- The majority indicate proposal is clear and buildable
- 1 comment request guidance be provided through diagrams

Survey

- Yes the wording of the change is clear - just wanted to recommend some good diagrams int the Appendix to show this for consistency. 6/19/2023 09:53 AM
- This change seem to clarify and correct the existing language. 6/18/2023 08:50 AM
- Test 6/15/2023 03:34 PM
- this reads as no penetrations are permitted through a fire separation or fire rated assembly 6/9/2023 08:58 AM (B.C. harmonizing with NBC 2020 for penetrations of fire rated assemblies)
- What is the definition of buildable. It may always be buildable if expense is not a factor ...most people affected by these changes are modest income earners... the richest income earners have implemented these and beyond 6/4/2023 08:00 PM
- Need clear examples of how this changes construction methods and detailing 6/2/2023 03:40 PM
- Updated data is required and regional differences considered Cost to taxpayers must be mitigated. 6/2/2023 07:25 AM

Public review themed email comments

Pioneer Code Consultants Ltd.
Michael Meszaros, M.Eng., P.Eng., CP
mmeszaros@pioneerconsultants.net

- Note: Comment received is on national and not BC related. The comment will not be included.

Earthquake design

Summary of Comments

- 38 responses
- 1 comment suggests the code require a higher performing wall assembly across the board
- 4 comments suggest the proposed solution is complicated
- 1 comment raised concern on availability of qualified designers
- 7 comments flagged that higher seismic values result in more time and material costs
- 1 commented on disparity of new buildings and what old buildings were allowed to be built to.
- 1 comment identifies that changes to values will impact instream projects and limit their potential
- One comment states that registered professionals are already required in locations with high seismic values and costs for designers are expected to increase and not decrease
- One comment raises that energy requirements can result in exceeding the weight category for construction (analysis done on normal weight category and not heavy weight category) [BSSB note: example – heavy glazing for energy performance]
- One comments states that engineers are required to apply more stringent requirements than Part 9 (Part 4 – CWC)
- One comment has concerns about the analysis of assumption of increased wall length which is not practical for many projects. A more realistic approach would be increased wall strength which has implications for foundations and connections
- One comment states that analysis is unclear and questioned if cost analysis considered connections
- One commented on substantial cost impacts (e.g., 20-30% concrete core sizes increase) recommend further impact analysis for B.C. locations
- One comment questioned justification of adopting seismic hazard values in the NBC 2020
- One comment recommended delay in adoption until further analysis is completed
- One comment suggests removing suitably qualified and experienced language from note A-9.4.5.5(2)
- One comment recommends updates to guidance and materials such as BC Housing's Illustrated Guide – Seismic Bracing Requirements (2019 Edition)
- One comment recommends additional consultations and analysis before implementing Adaptable and Earthquake Design policies
- One comment recommends additional consultations and analysis prior to implementation (commenter noted delays in Farm and B4s and considers issues are similarly complex)
- One commented on substantial cost impacts (e.g., 20-30% concrete core sizes increase) recommend further impact analysis for B.C. locations
- One comment raises concern of less livable space due to increased structural elements
- One comment raises significant cost increases impacting livable space and affordability
- One comment recommends changes to floor area calculations to help offset impacts on space
- One comment recommends the Ministry to prescribe density bonus
- One comment recommends tax offset for purpose built rentals for access and seismic requirements

- One commented on impacts to in-stream projects (land and financial commitments made early in the project development process) with timeline too short for building permit applications
- One commented on timeline likely to affect pre-sales of development threatening cancellations and/or cost increase that may result in fewer built units
- One comment suggests code applications linked to development permit application date

Survey

- The costs associated with increased seismic codes are significant. I don't understand why we are continually changing the seismic and gravity code to make it more expensive. It seems that this is a continuous cycle; why is it being changed so often? 6/16/2023 07:59 AM (BSSB to explore code application to development permit application rather than building permit)
  [BSSB Note: which could result in delays and loss of building potential and housing supply]
- Test 6/15/2023 03:35 PM
- There needs to be more clarity about the increased prescriptive seismic requirements for our region. This will lead to different interpretations by municipal inspectors. Also what are we building to? What would it be on the Richter scale? If Earthquakes Canada did not provide this measure after seismic events, the public would be concerned. The same applies to changing the seismic design. The changes in the code are not readily transferable. Considering this is a prescriptive option, there needs to be a lay-person's interpretive document. 6/15/2023 01:52 PM
- Already captured ------
- Concerned with how the revised seismic and structural code requirements will impact design and building costs that will directly result in worsening affordability in BC and Canada. Low density projects will not be feasible for development. Neighborhoods with low density zoning will be left with vacant lots. There is an affordability and feasibility threshold that needs to be considered before implementing changes like this that will immediately increase costs by 15-20%.
  6/12/2023 02:13 PM
- The "unintended" consequences of enacting this seismic/structural change to the BCBC are: 1) a significant increase in costs to builders for additional building materials and redesign costs given the lack of a grandfathering period; 2) a decrease in residential unit sizes through a 10%-20% increase to concrete core depths in tower construction; and 3) limiting former 6-storey woodframe building sites to a new 4 storey maximum, which in turn decreases land values, puts new projects in jeopardy with land that was acquired before this change, and ultimately limits the total volume of new housing in the province. This change in legislation is shortsighted; at a time when non-profit housing developers, builders, and other government agencies are calling for greater flexibility and a lessening of government intervention in order to increase the desperately-needed supply of housing in this province, this seismic/structural change to the BCBC only further impedes residential construction. Why not focus this money and effort into upgrading the huge supply of ageing, 4-storey wood frame apartment buildings across our province that were built in the 60's and 70's? They pose a much greater risk to the public in the event of an earthquake than a new building ever could.
  6/9/2023 11:15 AM

- This code update will add unbearable costs to new housing. whether it is non-market affordable housing, new rental homes or condos this will add a magnitude of cost that will make construction of new home unfeasible for the majority of land in BC. Structural engineers have calculated that this code change could at 15-20% in construction costs of a building. Capital for new homes will dry up as soon as this gets implemented. I am glad that I own my home because this will only drive up the costs of any new construction going forward.
  6/9/2023 09:25 AM
- building designs are more than adequate for todays living spaces, there is no Rational or reasons to increase the designs, causing significant cost to an industry trying to provide affordable housing.
  6/9/2023 08:58 AM
- The cost implications caused by this change in code will increase construction costs on multi-family residential projects by 10-20% depending on the location of the project. This will significantly impact the feasibility of projects, which will in turn drive up the costs of rental rates and purchase prices for the public, which only adds to the affordability crisis. Perhaps the government can provide a rebate to developers to offset this construction cost increase?
  6/9/2023 08:52 AM
- This should be based upon areas of earthquakes level not right across the board
- ☑
- The increase in required seismic forces is untenable
- 6/7/2023 10:10 AM
- What is a buildable definition. These changes will affect modest income earners significantly more than high income earners ...additionally , most high income earners already surpass these provisions so that makes the new proposals redundant to the , petty in fact
- 6/4/2023 08:03 PM
- The cost implications of the code update (~10-15% increase in hard costs tor typical wood frame apartment building) totally contradict affordable housing objectives and it is making the best buildings better (from a seismic perspective) versus dealing with the 99% of inventory built under past codes which are far more vulnerable in a seismic event. Also, the site classification approach for Victoria, BC needs clarification (based on rock at surface versus rock at excavation depth). This has massive implications and the structural and geotech engineering community is very confused. Site class should be based on condition at excavated depth.
- 6/1/2023 02:36 PM
- 5/30/2023 09:05 PM
- I'm curious why the code continues to allow for drywall braced wall panels? Most builders in our area use wood anyway and furr out the remaining wall. It's difficult for us to explain why drywall is an acceptable material for braced wall panel when it's such a fragile material. In reality, increasing the minimum width to 1.2m and adding a bunch of extra screws won't be sufficient. Why not just delete that option and stick with wood or engineering?
- 5/25/2023 08:57 AM
- There are no specifics noted. I am working on a tower project that is dramatically affected by this code but the details are not outlined adequately.
- 5/25/2023 08:12 AM

- We are getting to the point where this is getting so complicated that framing is almost a specialty trade within carpentry and building inspections. There is no way that this is going to go well. You would need a PhD in order to do the code review an onsite inspection with any sort of competency. For the trades and the designers this is going to be a nightmare. At a certain point this just needs to be an engineered design.
- as
- 5/23/2023 01:48 PM
- Lack of registered professionals in certain areas of the province may impact building timelines.
- 5/23/2023 07:39 AM
- Does the review intend to consider the use of storage container as building materials? Other jurisdictions are doing so effectively, while addressing structural concerns at the same time.
- 5/19/2023 02:57 PM

Public review themed email comments

Canadian Home Builders' Association of BC
Pauline Rupp, Director, Technical & Building Innovation
pauline@chbabc.org

- One comment states that registered professionals are already required in locations with high seismic values and costs for designers are expected to increase and not decrease
- One comment raises that energy requirements can result in exceeding the weight category for construction (analysis done on normal weight category and not heavy weight category) [BSSB note: example – heavy glazing for energy performance]
- One comments states that engineers are required to apply more stringent requirements than Part 9 (Part 4 – CWC)
- One comment has concerns about the analysis of assumption of increased wall length which is not practical for many projects. A more realistic approach would be increased wall strength which has implications for foundations and connections
- One comment states that analysis is unclear and questioned if cost analysis considered connections
- Two commented on substantial cost impacts (e.g., 20-30% concrete core sizes increase) recommend further impact analysis for B.C. locations
- One comment questioned justification of adopting seismic hazard values in the NBC 2020
- Three comment recommended delay in adoption until further analysis is completed
- One comment suggests removing suitably qualified and experienced language from note A-9.4.5.5(2)
- One comment recommends updates to guidance and materials such as BC Housing's Illustrated Guide – Seismic Bracing Requirements (2019 Edition)

Homebuilders Association Vancouver (HAVAN)
Diana Dilworth, Director of Government Relations
diana@havan.ca

- One comment recommends additional consultations and analysis before implementing Adaptable and Earthquake Design policies

~~IQ Engineering~~
~~Rob Quiring, Principal~~
~~rob@iqengineering.ca~~

- ~~Not related to PR~~

Urban Development Institute
Cassandra Smith, Director
csmith@udi.org

- One comment recommends additional consultations and analysis prior to implementation (commenter noted delays in Farm and B4s and considers issues are similarly complex)
- One commented on substantial cost impacts (e.g., 20-30% concrete core sizes increase) recommend further impact analysis for B.C. locations
- One comment raises concern of less livable space due to increased structural elements
- One comment raises significant cost increases impacting livable space and affordability
- One comment recommends changes to floor area calculations to help offset impacts on space
- One comment recommends the Ministry to prescribe density bonus
- One comment recommends tax offset for purpose built rentals for access and seismic requirements
- One commented on impacts to in-stream projects (land and financial commitments made early in the project development process) with timeline too short for building permit applications
- One commented on timeline likely to affect pre-sales of development threatening cancellations and/or cost increase that may result in fewer built units
- One comment suggests code applications linked to development permit application date

Overheating

Summary of Comments

- 64 responses
- 7 comments noted increases to construction costs for cooling equipment
- 3 comments support passive cooling measures
- 1 comment recommends clear, acceptable passive cooling design measures that will allow for a living space to be exempted from mechanical cooling
- 4 comments suggested the proposed solution may not be adequate for other extreme events, more could be done to increase buildings' resiliency to minimize fatalities
- 8 comments suggested we consider future climate projections.
- 2 comment on the risks of using historical climate data
- 1 commented on concern for confusion for cooling facility term (confusion between cooling system and appliance)
- 1 comment suggest using operative temperature instead of dry bulb temperature.
- 3 comment recommended that cooling should be voluntary
- 2 comments raised the potential tension between operating cooling systems and energy efficiency measures
- 1 comment suggested that a different structure of code provisions (e.g., earlier in the code) be used
- 1 comment indicated that the code should not include cooling provisions
- 1 comments suggests we expand cooling requirements to seniors and long term care facilities
- 1 comment raised the value of enforcement
- 2 comment raised the suggestion of plug-in portable equipment as an option
- 3 comment recommends providing education and guidance examples
- 1 comment raised challenges for modelling in Part 9
- 1 comment is concerned with design choice limitations
- 1 comment recommends prescriptive parameters to determine when cooling is/isn't required
- 3 comments recognize the need for next steps and a holistic approach to overheating

- 2 comment recommends more specific language and guidance on a living space as shelter e.g., where occupants can sleep and live comfortably over many days.
- 1 comment recommends an entire living space or normal bedrooms of the dwelling unit cooled to 26 degrees.
- 1 comment suggested considering filtration for air quality in coordination with cooling for a place to shelter [note: this comment also copied in the ventilation feedback]
- [Note: support acknowledged but not reproduced on this list]
- 1 comment recommending for more consultations
- 1 comment raises the concern of existing buildings
- 1 comment asking for clarity for occupants to determine designated cooled space
- 1 comment raises concerns with the "show it to be unnecessary" language that it is vague and difficult to enforce (note: difficult for builder to prove "unnecessary")
- 1 commented on applying requirements on locations based on cooling degree days [note: this comment = no action as proposal already provides climate specific application]

- One comment asks for more clarity for good engineering practice and guidance on loads and temperatures.
- One comment raises that the F280 standard is for equipment sizing of the whole building and requests guidance on working in a single room.
- One comment supports passive design measures
- One comment raises concern that comfort is not addressed (recommends ASHRAI-55)
- One comment asks for clarity for when designers go above and beyond and also when good engineering practices shows cooling to be unnecessary for Part 9 [BSSB note: bulletin]
- One comment recommended stricter requirements for thermal comfort
- One comment notes alignment with City of Vancouver
- One comment raises concerns on historical climate data and suggests future shifted climate files
- One comment asks for clarity on what is considered as living space
- One comment asks to extend the requirement to two living spaces
- One comment recommends requirement for protection from overheating
- One comment validates proposed changes
- One comment recommends requirements for air filtration [MERV 13] as opening windows may go against recommendations during wild fire season [BSSB note: bulletin to elaborate on which passive measures to use e.g., shading, lessen reliance on opening windows as it can present risk for poor air quality]
- One comment notes that requiring Step 3 Energy Step Code promotes the use of heat pumps which coordinate with protection from overheating
- One comment recommends extending the requirement to all bedrooms
- One comment recommends extending cooling throughout the whole building
- One comment raises concern with historical climate data
- One comment recommends the design state of the upper and lower temperature limits of equipment
- One comment recommends system verification and commissioning be required (Part 6)
- One comment raised concern on high solar heat gain windows and suggests eliminating energy rating metric for windows

Survey

- The preamble says most deaths "occurred in homes without adequate cooling such as air conditioners or fans." Therefore fans prevented deaths. The requirement for mini-split air conditioning will add $10,000 to $12,000 to the cost of a home. a couple of fans will add a few hundred dollars. Builders of very energy efficient homes report an attic fan in particular will do a very good job cooling a home. A ceiling fan combined with an attic fan should be effective and affordable. 6/18/2023 01:34 PM [Equipment out of scope from code perspective]
- Section 6.2 needs more details on how to design cooling system Section use of future weather file is critical. Part 9 HOT2000 currently does not have a capacity to perform an adaquete overheating analysis both update on the software and training to Certified Energy Advisor is critical. 6/15/2023 10:05 PM [
- The overheating provision in the code is not clear. It does not attempt to reference future climate files . There is no indication that the existing appendix that references historical local climate conditions from 1981 to 2006 will be updated. The stated motivation for the policy

change is the heat dome and the fatalities that occurred as a result. The severity of that Heat Dome can not be contemplated with the existing local climate parameters used in the code. Established cooling requirement ostensibly solves the issue of overheating in new builds, but in reality it will not affect a change. This amounts to a large gap between the intended policy goals and practice. Authorities Having Jurisdiction (AHJs) are able to specify other parameters via bylaw, but AHJs are without guidance as to how they might identify those parameters. This leaves out smaller communities without the resources to identify an alternative. There are several data sets and methodologies available to estimate future climate conditions. This will create confusion in larger communities with the available resources to identify alternatives to what is specified in the code. Two adjacent communities could establish two different standards, which would create enforcement issues. At minimum the building and safety standard branch should provide a technical bulletin that accompanies the updated code with guidance on the resources available to communities to establish different future climate parameters and the provincially preferred future climate data set.
6/15/2023 03:08 PM
[BSSB Note; this comment raises the complexity of dealing with overheating more holistically. This is a first step. HOUS working with NRC for a more holistic approach]

- Using the July 2.5% dry values as the design temperature may not adequately ensure that these living spaces are safe for residents during heat waves or extreme heat events. If a suite can be passively cooled to meet the July 2.5% dry values, this may be an unsafe area in an extreme heat event as there is no available additional cooling if outdoor temperatures exceed the July 2.5% dry value, which is increasingly likely with current observed trends of climate change. Analysis should be done to investigate the effectiveness of this design temperature in extreme heat, and the design temperature in the proposed code change should be raised if it is found to be insufficient for the safety of occupants. 6/15/2023 02:53 PM
- Your proposed code change says "most (deaths) occurred in homes without adequate cooling such as air conditioners or fans." The change does not provide reasonable, affordable options. A mini-split a/c for a suite will be an $10,000 to $12,000 added cost to a home. There are more affordable, and very effective options including a ceiling fan for a couple hundred dollars, the lack of which contributed to casualties. In addition, providing a long list of reference documents “Heating, ventilating and air-conditioning systems, including mechanical refrigeration equipment, shall be designed, constructed and installed in conformance with good engineering practice such as that described in, but not limited to” etc enables municipal inspectors to choose their favourite option rather than create a focused, uniform solution. 6/15/2023 02:00 PM
- [BSSB Note: Good engineering practice is given to designers to have options, not something enforcement officials dictate. Education/clarification opportunity about how to practically interpret and apply the code.]
- The proposed changes are clear and buildable (and urgently needed to address the risk of overheating in new buildings), however the changes do not go far enough because the default climate parameters in Appendix C reference climate variables based on past climate, and do not reflect temperature increases that are experienced in the present, and in the future. Without these updates, it is still possible to design code compliant buildings without active cooling, that will overheat in the future, putting residents at risk. The methods to incorporate future climate shifted parameters exist and are straightforward, and this change should be incorporated into this code update. 6/15/2023 09:51 AM
- 9.33.2.1 (2) uses language that is very vague with “or good engineering practice according to Article 6.2.1.1. can show it to be unnecessary” Does good engineering practice imply that an

Engineer would need to be doing an analysis to demonstrate that cooling isn't needed according to some standard? Maybe the article can refer to the same requirements for Part 3 to demonstrate a maximum number of hours above a certain temperature. Otherwise, it could list specific standards that have been developed by other organizations for this purpose instead of the general list provided in 6.2.1.1. 6/15/2023 09:24 AM

- The Canadian Association of Consulting Energy Advisors recognizes and commends the government on recognizing the safety issue of overheating. We want it recognized, that while in a step in the right direction, it does not address the need for the house to perform better and be more comfortable for the occupant. We are generally in favour of the addition of cooling to the building code and agree in principle to the proposed changes. However, there will be challenges related to executing and measuring this requirement in a consistent and reliable manner. As the association representing energy advisors who perform modelling for code compliance, we would like to assist the government in designing a commonly used methodology along with any supportive tools. You can reach me, Cindy Gareau CACEA's executive director at manager@cacea.ca or 1-888-315-2774. 6/15/2023 09:14 AM
- Too costly to mandate. let market decide 6/14/2023 11:39 AM
- going to be hard to enforce. Requiring all homes to have air conditioning at time of construction will add additional cost to the home buyer again. If the window is big enough to accept a in window unit, does that meet the requirements of the code? Does a plug-in meet those requirements? 6/14/2023 09:04 AM [Plug-in portable equipment out of scope from code perspective]
- Already captured ----
  Again the proposed changes are clear and buildable. However, the biggest concerns are just related to the overall affordability costs. Any changes to code forcing additional air-conditioning systems bring up the overall cost/unit. Our North American ideals of need for cooling on demand is certainly a luxury. Many of the overheating issues can be solved with a more passive design changes and/or education of tenants with best practices to prevent overheating. Current code designed spaces shouldn't overheat if proper best practices are utilized to prevent heat gain are utilized. Design conditions do not necessarily mean actual temperatures are met when people do not follow best practices.
  6/12/2023 10:33 AM
- Senior facilities are in desperate need of air conditioning in the higher temperature months. I've worked in several facilities and by far, longterm care facilities lose residents from heat exhaustion, I've seen it.
  6/9/2023 04:49 PM
- The main impediment to successful implementation will be ins'ection and enforcement. we rely too much on the trades to evaluate their own work. City inspectors need to be more thorough in their inspections.
  6/9/2023 09:35 AM
- It should be up to the market to decided if cooling is required for new homes. As a realestate developer we, in certain markets, include mechanical cooling. the market will advise what is required and what is not. this should not be regulated by any level of government.
  6/9/2023 09:26 AM
- you are demanding that all areas or municipalities to be created equal which again causes an increase in Building Cost and who can afford the extra cost of living.
  6/9/2023 09:03 AM (individual building design and location determines application)

- There are many alternative methods to provide cooling other than A/C. A/C only adds costs to housing, in an already challenging environment for affordability. Communities all around the world are able to make it work without A/C, I am not sure why this is necessary for BC.
- 6/8/2023 08:17 AM
- Out of scope – not part of a proposed change. The intent of 6.2.1.1 1) is obvious and good, but there is too much room for interpretation. Has anyone proven that the external guidelines listed in a-j contain zero conflicts with any of the other guidelines listed? Would someone review the entire list again for conflicts as those external guidelines are updated? Suggestion #1; This language be adjusted to specifically allow installations described in ANY of the guidelines, provided of course that it conforms to all code requirements. Remove the ability for a random municipal inspector to take issue with an install conflicting with one particular guideline, despite it being allowable or even recommended in another on the same list. Suggestion #2: Remove "but not limited to" language from 6.2.1.1 1) as this opens the door to an inspector bringing any old random book to site and demanding changes found therein. Pathways to rejection of installed work must have bounds.
- Proposing that air conditioning be integrated in the code is stupid to say the least, there have been thousands of death related to covid and no proposals to fix that ...ant the the very least , code should not mandate personal comfort ...what could be next ...mattress testing and certifications? 6/4/2023 08:09 PM

☑

- Costs to taxpayers is too high.6/2/2023 07:26 AM
- The unintended consequences is the increase in construction costs, which erodes the affordability of housing. Cooling has, traditionally, been associated with higher price point homes, and is easy to retrofit if needed later. 5/31/2023 09:38 AM
- We should be mandating heat pumps and not old school ac 5/26/2023 09:25 PM
- Mandating mechanical cooling will increase the building and operating costs, which will be transferred to the occupant/home owner. Given the rising costs of living and that wages have not risen with inflation, it is imperative to also insure that passive or natural cooling solutions are explored and implemented. Use of mechanical ventilation will also increase the burden on the energy grid and should be only solution given the chance of mechanical failure, brown-outs, natural disasters, etc. Protection of life is of utmost importance and ensuring that people are safe and able to stay cool is important for the future of BC.
- Outdoor shade structures are a simple solution to heat events. Shade Sails are the most cost-effective.5/24/2023 05:52 PM
- The reports quoted that describe desired systems for cooling are based upon a period when unnecessary lockdowns, isolation mandates and social/physical connections were restricted which led to the increased loss of life to residents. Far more elderly and health impaired people die during cold winters not that this should deter the installation of cooling systems but this new proposal totally avoids the actual cause of the deaths that it proposes to avoid in future. I certainly would not comply with these proposals and or upgrade my home to this proposal. 5/24/2023 03:33 PM
- The code language is clear but cooling requirements should be based on future projected climate data, not historical 5/24/2023 07:44 AM

- I feel strongly that a requirement to include mandatory cooling systems should not be implemented through Building Codes. With all of the scrutiny around energy efficiency and lowering our footprints, a requirement like this seems to be going in the opposite direction. If a homebuilder or someone purchasing a new home would like to add cooling, that is a convenience. Further, many homeowners have never had air conditioning in their homes for their whole lives, to force someone to spend an addition $5-10,000 to put in an un-wanted cooling system seems very excessive. 5/23/2023 12:01 PM

Public review themed email comments

Association of Consulting Engineering Companies British Columbia
Caroline Andrewes, P.Eng., CPA, CMA
President & CEO
caroline@acec-bc.ca

- Commented on a preference for forward looking climate data. They suggest using operative temperature instead of dry bulb temperature.
- Comment suggested a different structure of code provisions e.g., earlier in the code.
- Note: plumbing comment not part of public review.

BC Lung Foundation
Noah Quastel LLB LLM PhD
Director, Law and Policy, Healthy Indoor Environments
nquastel@bclung.ca

- Recommending more specific language and guidance on a living space as shelter e.g., where occupants can sleep and live comfortably over many days.
- Ideally, then, the entire living space or normal bedrooms of the dwelling unit would be cooled to 26 degrees.
- Comment suggested considering filtration for air quality in coordination with cooling for a place to shelter

Ministry of Environment and Climate Change Strategy
Clean Government Team, Climate Action Secretariat
Adrian Mohareb, M.Eng., P.Eng., LEED® AP, Senior Policy Analyst
adrian.mohareb@gov.bc.ca

- One comment recommended expanding the living space to include all potential occupants.
- One general support for overheating

Canadian Home Builders' Association of BC
Pauline Rupp, Director, Technical & Building Innovation
pauline@chbabc.org

- 1 comment recommending for more consultations
- 1 comment raises the concern of existing buildings

- 1 comment raises concerns with the "show it to be unnecessary" language that it is vague and difficult to enforce (note: difficult for builder to prove “unnecessary”)
- 1 comment recommends clear, acceptable passive cooling design measures that will allow for a living space to be exempted from mechanical cooling.
- 1 commented on applying requirements on locations based on cooling degree days [note: this comment = no action as proposal already provides climate specific application]
- 1 comment raised the potential tension between operating cooling systems and energy efficiency measures

Efficiency Canada
Kevin Lockhart, Research Manager
kevin.lockhart@efficiencycanada.org

- 1 comment on future shifted climate files

Engineers and Geoscientists British Columbia
Harshan Radhakrishnan, P.Eng., SCR®, M.A.Sc., Manager, Climate Change and Sustainability Initiatives
hradhakrishnan@egbc.ca

- 1 comment on future data inclusion
- 1 comment on the risks of using historical climate data

Fraser Health
Dr. Emily Newhouse, Medical Health Officer
Emily.Newhouse@fraserhealth.ca

- 1 raised concern for using historical climate data
- 1 raised use of future shifted climate data e.g., cooling facility term (confusion between cooling system and appliance)
- 1 comment asking for clarity for occupants to determine designated cooled space

Heating, Refrigeration and Air Conditioning Institute of Canada
Sajjid Lakhani, Manager of Government Relations and Strategy
sajjid@impactcanada.com

(John Harris also submitted comments via PR portal)

John Harris
DSG Building Diagnostics
on behalf of HRAI
jharris@dsgi.on.ca

- One comment asks for more clarity for good engineering practice and guidance on loads and temperatures.
- One comment raises that the F280 standard is for equipment sizing of the whole building and requests guidance on working in a single room.

Introba
Thomas Bamber, MEng, CEng, MCIBSE, Associate Passive Design
thomas.bamber@introba.com

- One comment supports passive design measures
- One comment raises concern that comfort is not addressed (recommends ASHRAI-55)
- One comment asks for clarity for when designers go above and beyond and also when good engineering practices shows cooling to be unnecessary for Part 9 [BSSB note: bulletin]
- One comment recommended stricter requirements for thermal comfort

BC Hydro
Katherine King, MA, ACC, Policy Specialist
katherine.king@bchydro.com

- One comment notes that requiring Step 3 Energy Step Code promotes the use of heat pumps which coordinate with protection from overheating
- One comment recommends extending the requirement to all bedrooms
- One comment recommends extending cooling throughout the whole building
- One comment raises concern with historical climate data
- One comment recommends the design state of the upper and lower temperature limits of equipment
- One comment recommends system verification and commissioning be required (Part 6)
- One comment raised concern on high solar heat gain windows and suggests eliminating energy rating metric for windows

VanCity
Molly Henry, Senior Policy Analyst
Molly_Henry@vancity.com

- One comment notes alignment with City of Vancouver
- One comment raises concerns on historical climate data and suggests future shifted climate files
- One comment asks for clarity on what is considered as living space
- One comment asks to extend the requirement to two living spaces
- One comment recommends requirement for protection from overheating

Vancouver Coastal Health
Ryan Chan, Administrative Assistant/Analyst to Dr. Michael Schwandt, Medical Health Officer
ryan.chan@vch.ca

- One comment validates proposed changes
- One comment recommends requirements for air filtration [MERV 13] as opening windows may go against recommendations during wild fire season [BSSB note: bulletin to elaborate on which passive measures to use e.g., shading, lessen reliance on opening windows as it can present risk for poor air quality]

Radon

Summary of Comments

- 23 responses
- The majority of respondents indicate the proposal is clear and buildable. The following comments were received:
    - One comment raises concerns with existing buildings and recommends fulltime radon monitoring of all homes
    - One comment suggests testing of radon pipe installation and for the pipe to include a clean out
    - One comment about installation after construction not being an option
    - One comment requesting stronger wording on sealing of air barrier, be raised with TG-R
    - One comment about possible confusion about low pressure drop screen terminology
    - One comment about "compactable fill" not being likely in Notes
    - One comment recommends diagrams on particularly air barrier ceiling details
- One comment suggests improvements for rough-ins effectiveness and usability (BSSB note: supports BC Lung submission)
- One comment recommends expanding the radon requirements to non-residential buildings
- One comment raises concerns with referencing the CGSB 149.11 standard as it contains best practice language that may not be clear or enforceable. [BSSB disposition: Action – Bulletin. Provide clarity on what is required versus what is recommended and await further development/decisions by SC-HSB on how best to reference the standard.]
- One comment questions the justification for the pipe material which comes with a cost premium. Recommends allowing the same pipe permitted in the Plumbing Code for above-ground drainage as a cheaper alternative material. [BSSB disposition: Action – Other. Proceed with drafting as presented, but raise material discussion with national Task Group.]
- One comment raises concerns that the proposed language is unclear on whether side wall venting is permitted and recommends it be permitted. [BSSB disposition: Action. Commenter raises a valid point that the reference to 7.2.4.6. of CBSG 149.11 discusses only through-roof venting. Policy has been to allow side-wall venting. Revise proposed Clause 9.13.4.3.(3)(b) to read: "Clause (2)(f) where it terminates outside the building, not less than 1.8 m from a property line, and located in accordance with either 7.2.4.6 or 7.3.4 of CAN/CGSB-149.11, "Radon control options for new construction in low-rise residential buildings," with the opening of the pipe fitted with a low pressure drop screen conforming to Sentence 6.3.2.9.(4)." Discuss in bulletin the options for termination location. *Note also there are proposed changes as a result of PR comments with regards to the screen language.*]
- One comment raises concern about using 'conditioned space' language which scopes-out unconditioned crawlspaces (and commenter discusses radon risks of unconditioned crawlspaces). [BSSB disposition: No Action. Proposal follows BC and NBC application which is specific to assemblies separating conditioned space from ground. Comment can be considered by national Task Group.]
- One comment raises concern with "Unless the space between the air barrier system and the ground is designed to be accessible for the future installation…" language stating it is too subjective. [BSSB disposition: Action – Bulletin. Discuss example such as crawlspace where a future installation is easily possible and practical.]

- One comment recommends additional requirements to achieve better potential outcomes. Recommends requiring an extension of perforated pipe below the slab, a straight vertical rise, rise through conditioned space, insulation where rise not through conditioned space, room for a fan, and an electrical rough-in. [BSSB disposition: Action – Bulletin. Discuss these matters as best practice in a bulletin to help inform reasons for rough-in (builders more likely to build appropriate rough-ins if they are given the big picture as to what the purpose and performance is meant to be.]
- One comment *[now two comments I believe]* raises confusion with language used in Clause 9.13.4.3.(2)(d). [BSSB disposition: Action. Revise language for clarity (e.g. pipe not allowed to be half-buried in insulation…).]
- One comment recommends further explanation of what does not constitute a hazard in Clause 9.13.4.3.(2)(f). [BSSB disposition: Action – Bulletin. Discuss hazards in bulletin and provide examples of terminations in safe locations.]
- One comment raises concerns that requirements for labelling the radon vent pipe could cause occupants to believe the pipe is functional and that they are protected. [BSSB disposition: Action – Bulletin. Discuss appropriate labelling in bulletin. Language proposed is consistent with BC and NBC language. Work with BC Lung and others to encourage appropriate messaging on labels.]
- One comment recommends better coordination with other Code provisions such as ventilation and air barrier detailing. [BSSB disposition: Action – Bulletin. Draw attention to importance of ventilation and aid barrier system detailing (energy efficiency) as contributors to protection from radon.]
- One comment recommends shift in focus from lowering high levels to getting (all) levels as low as reasonably achievable. Commenter provides references of exposure at low doses causing negative health effects and death. [BSSB disposition: Action – Bulletin. Explain risk at all levels in bulletin and encourage testing and actions according to Health Canada guidelines. Direct 'ALARA' principle to the national code development system.]

Survey

- Happy to see this implemented across the province! Highly recommend some good diagrams on the proper way to install the air barrier membrane (how to seal to fdn, dealing with penetrations like tub/shower traps). The actual site implementation is critical to provide better consistency. Labeling the pipe should be a little more robust (where would someone accidently tie plumbing into a radon pipe) and confirming the pipe thickness and should the under-slab be perforated as studies are showing an end of solid pipe are getting blocked up. Also, a better understanding of carrying the piping thru the building efficiently.
  [BSSB note: Opportunity to highlight BCH Guides and others CGSB Standard] 6/19/2023 10:06 AM
- Please see attached document 6/17/2023 05:03 PM
- Ccc 6/16/2023 02:01 PM
- Test 6/15/2023 03:38 PM
- Sentence 9.13.4.3.(2) states 'The radon vent pipe required...' which does not make mention of fittings. Although pipe and fittings are stated in Clause (e), I feel it is still clearer to change Sentence 9.13.4.3.(2) to read, 'The radon vent piping system required...'. Also, Clause 9.13.4.3.(2)(d) reads awkwardly, possibly because it is missing a word. I would suggest specific changes, but unfortunately I do not understand what requirement it is trying to make regarding conditioned spaces. For this reason, a revision of the Sentence should be considered. Clause 9.13.4.3.(3)(b) and its requirement for a screen may prevent the use of the RadonX rain cap (see pg.18 of RadonX Technical Manual: https://ipexna.com/wp-content/uploads/2022/08/manual-

caen-ipex-radonx.pdf). The RadonX rain cap was developed and testing with the NRC specifically for use on radon venting systems and its air flow performance was confirmed through testing to exceed that of a standard mesh type roof termination. In the 2023 edition of the CGSB 149.11, which I have been told is close to being issued, Article 7.2.4.7. has a change request from the public review to read, "In all discharge types, the end of the discharge pipe for the passive vertical radon stack shall be protected by a low pressure drop stainless steel mesh with 10mm to 12.5mm openings, or by a product providing equivalent performance. When using a product other than metal mesh it shall have equivalent airflow performance." Since the edition of CGSB 149.11 that the 2023 BCBC will reference does not contain the allowance for non-mesh terminations, please consider using the verbiage from the 2023 edition of CGSB 149.11 in Clause 9.13.4.3.(3)(b). The purpose for this is so that installers in BC are permitted to use the code compliant, esthetically pleasing and better functioning option of an NRC tested radon venting rain cap that doesn't contain metal mesh. 6/15/2023 09:53 AM

- Already captured -----
- Sentence 9.13.4.2.(1) references Subsection 9.25.3. although Article 9.25.3.6. relates specifically to air barrier systems in floors on ground the wording in Sentence 9.25.3.6.(6) is not sufficient for maintaining a complete seal of the air barrier. The wording implies that only a seal of floor drain penetrations is required. This wording should be revised to be more direct, similar to the wording in Sentence 9.18.6.2.(4) “All penetrations of the ground cover required in Sentence (1) shall be sealed against air leakage." thereby removing any ambiguity around what is expected. Sentence 9.13.4.2.(2) has anyone seen or used a system that would allow for the installation between the air barrier and the ground after construction? If a method does not currently exist, then this language provides a false option which can lead to confusion and potential conflict. if we are revising this area then this part of the sentence should not exist and it should just simply read "(2) Buildings shall" as part of the impact analysis is cost for installation after the fact and installing a rough-in system during the construction process is going to more cost effective than something that may exist to install under the air barrier at a later date. Sentence 9.13.4.3.(3) references Sentence 6.3.2.9.(4) for "low pressure drop screen" not sure what this is supposed to look like, but the referenced sentence talks about a mesh screen of a given size which is similar to Sentence 9.32.3.9.(1). Is the part 6 sentence being revised to add some additional language and if not, why would we not just reference the requirement that is already contained in part 9. Leave the use of the information within part 6 to those that choose to use Clause 9.13.4.2.(2)(b). in the notes second paragraph "In some cases, subfloor....." talks about where compactable fill is installed. I am unclear how this can occur based on the requirements in sentence 9.13.4.3.(1) for the material that is required to be installed under the air barrier system.
  6/13/2023 09:08 AM
- Requesting stronger wording on sealing of air barrier – Recommend no change for 2023 but to raise air barrier sealing details with TG-R
- Comment about installation after construction not being an option appears to have forgotten about crawlspaces where this construction can occur after initial construction…
- Raised possible confusion about ‘low pressure drop screen’ terminology – this terminology was borrowed from a national PCF 1713 [I raised this with the TG citing it will cause confusion and offered the same alternative…] Recommended action of either adapting language from CGSB-149.11 or adapting language from 9.32.3.13.(15), or both. E.g. “corrosion-resistant screen or grill with a mesh size of…”. Note; align BC 9.32. language with NBC 9.32. language. (Doing this should address the Part 6 comment that suggests staying within Part 9 for references.)

- Comment about 'compactable fill' not being likely in Notes – recommend no action; the Note is NBC content and alerts designers that if sub-slab communication is not possible/realistic, then other solutions (apart from depressurization) would be better
- It does not make sense to require radon protection where radon doesn't exist. 6/12/2023 07:26 AM (Data does not support this comment)
- Not a practical solution - This issue is completely solvable by opening windows 6/4/2023 08:12 PM
- While I can understand your proposed changes, and they are clear, they are missing a critical part: Ongoing radon monitors in EXISTING homes and buildings must be installed, similar to CO2 and SMOKE/FIRE alarms. What we have found in construction in the Okanagan is that radon gas is released into nearby existing homes during adjacent construction of new homes - this must therefor be monitored before, during, after construction given Radon gas health impacts. A provision needs to be made that all new homes have a radon gas monitor installed in living areas. Moreover, all existing homes should have one retrofitted given the serious health impacts of radon gas. 5/31/2023 01:21 PM
- As the first radon tech in canada from 2005 and a RBO I would recommend that some consideration be given to the testing of the radon pipe for leaks. I have encountered numerous radon piping installations where the fittings are not glued. The risk to health and safety from a leaky radon pipe is the same and potentially greater than a leak on a DWV vent pipe. A cleanout should be provided at the base of the stack so that testing of the portion of pipe above the air barrier system can occur. 5/23/2023 12:16 PM

Public review themed email comments

BC Lung Foundation
Noah Quastel LLB LLM PhD
Director, Law and Policy, Healthy Indoor Environments
nquastel@bclung.ca

- One comment with the opinion that the organization and language used in the Code is not clear or accessible to lay people. [BSSB disposition: No action. B.C. adopts the organization and language conventions from the national model codes as part of the Construction Codes Reconciliation Agreement.]
- One comment recommends we use clear language to convey that passive systems are required. [BSSB disposition: No action. B.C.'s proposal is to continue the concept of 'rough-in' and wait on national code development on passive systems to complete before amending and describing the requirements that way. (B.C.'s proposal still allows sidewall venting so the proposed 'allowable' rough-ins are not necessarily 'passive' systems. This allows design flexibility and is consistent with the intent of preparing a home for a subfloor depressurization system but not- at this point- forcing or requiring mitigation.)]
- One comment raises concerns of ambiguity of language used to describe rough-ins, extended rough-ins, and passive stacks. [BSSB disposition: Bulletin. A supplementary bulletin is recommended to aid the roll out of the new changes. Bulletin should elaborate on B.C.'s 'extended rough-in' which is more than a capped 'T' but not necessarily a passive stack (the way CGSB 149.11 would describe it). Some mild confusion is expected as a result of B.C.'s radon changes and we can clarify that the changes are to make the 'extended rough-in' better and more likely to function and save costs in the future to support an active system.]

- One comment that functional passive systems should be required at the construction stage. [BSSB disposition: No action. Allow national development on passive systems to complete.]
- One comment that we should clarify that a passive system is required versus an extended rough-in. [BSSB disposition: Bulletin. A passive system is not what is proposed, rather an extended rough-in. Bulletin to make clear what the requirements are and what they prepare for.]
- One comment that builder should be responsible for building homes below Health Canada action levels. [BSSB disposition: No action. Allow national code development to continue before assigning responsibilities for actual performance- which would likely be coordinated with new home warranties and BC Housing.]
- One comment states that labelling is done poorly and recommends stronger language in the requirement. [BSSB disposition: Bulletin. Make clear what labelling requirements are and why they are important.]
- One comment raises concern that ventilation requirements may be insufficient in the part they play for managing indoor radon levels. Recommends strengthening ventilation requirements. [BSSB disposition: No action. Allow proposed change for ventilation to receive due process. Indoor air quality, including radon, is a shared concern in HVAC design.]
- One comment raises concerns that industry is not aware and/or not following Code requirements regarding radon. Recommends guidance and education. [BSSB disposition: Bulletin. Explain what is required and why.]
- One comment recommends adding additional resources to Notes of the Code. [BSSB disposition: Bulletin. Consider adding recommended references to bulletin.]

Canadian Home Builders' Association of BC
Pauline Rupp, Director, Technical & Building Innovation
pauline@chbabc.org

- One comment raises concerns with referencing the CGSB 149.11 standard as it contains best practice language that may not be clear or enforceable. [BSSB disposition: Action – Bulletin. Provide clarity on what is required versus what is recommended and await further development/decisions by SC-HSB on how best to reference the standard.]
- One comment questions the justification for the pipe material which comes with a cost premium. Recommends allowing the same pipe permitted in the Plumbing Code for above-ground drainage as a cheaper alternative material. [BSSB disposition: Action – Other. Proceed with drafting as presented, but raise material discussion with national Task Group.]
- One comment raises concerns that the proposed language is unclear on whether side wall venting is permitted and recommends it be permitted. [BSSB disposition: Action. Commenter raises a valid point that the reference to 7.2.4.6. of CBSG 149.11 discusses only through-roof venting. Policy has been to allow side-wall venting. Revise proposed Clause 9.13.4.3.(3)(b) to read: “Clause (2)(f) where it terminates outside the building, not less than 1.8 m from a property line, and located in accordance with either 7.2.4.6 or 7.3.4 of CAN/CGSB-149.11, “Radon control options for new construction in low-rise residential buildings,” with the opening of the pipe fitted with a low pressure drop screen conforming to Sentence 6.3.2.9.(4).” Discuss in bulletin the options for termination location. *Note also there are proposed changes as a result of PR comments with regards to the screen language.*]

Falcon Engineering
Chantal Wilson, P.Eng, CEM, C-NRPP Radon Measurement and Mitigation Professional

Energy Modeller
Chantal.Wilson@falcon.ca

- One comment suggests improvements for rough-ins effectiveness and usability (BSSB note: supports BC Lung submission)

Fraser Health Authority
Dr. Emily Newhouse, Medical Health Officer
Emily.Newhouse@fraserhealth.ca

- One comment recommends expanding the radon requirements to non-residential buildings

Interior Health
Greg Baytalan, B.Sc., CPHI(C), Specialist Environmental Health Officer
Greg.Baytalan@interiorhealth.ca

- One comment raises concern about using 'conditioned space' language which scopes-out unconditioned crawlspaces (and commenter discusses radon risks of unconditioned crawlspaces). [BSSB disposition: No Action. Proposal follows BC and NBC application which is specific to assemblies separating conditioned space from ground. Comment can be considered by national Task Group.]
- One comment raises concern with "Unless the space between the air barrier system and the ground is designed to be accessible for the future installation…" language stating it is too subjective. [BSSB disposition: Action – Bulletin. Discuss example such as crawlspace where a future installation is easily possible and practical.]
- One comment recommends additional requirements to achieve better potential outcomes. Recommends requiring an extension of perforated pipe below the slab, a straight vertical rise, rise through conditioned space, insulation where rise not through conditioned space, room for a fan, and an electrical rough-in. [BSSB disposition: Action – Bulletin. Discuss these matters as best practice in a bulletin to help inform reasons for rough-in (builders more likely to build appropriate rough-ins if they are given the big picture as to what the purpose and performance is meant to be.]
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- One comment recommends further explanation of what does not constitute a hazard in Clause 9.13.4.3.(2)(f). [BSSB disposition: Action – Bulletin. Discuss hazards in bulletin and provide examples of terminations in safe locations.]
- One comment raises concerns that requirements for labelling the radon vent pipe could cause occupants to believe the pipe is functional and that they are protected. [BSSB disposition: Action – Bulletin. Discuss appropriate labelling in bulletin. Language proposed is consistent with BC and NBC language. Work with BC Lung and others to encourage appropriate messaging on labels.]
- One comment recommends better coordination with other Code provisions such as ventilation and air barrier detailing. [BSSB disposition: Action – Bulletin. Draw attention to importance of ventilation and aid barrier system detailing (energy efficiency) as contributors to protection from radon.]
- One comment recommends shift in focus from lowering high levels to getting (all) levels as low as reasonably achievable. Commenter provides references of exposure at low doses causing

negative health effects and death. [BSSB disposition: Action – Bulletin. Explain risk at all levels in bulletin and encourage testing and actions according to Health Canada guidelines. Direct 'ALARA' principle to the national code development system.]

Steel storage racking

Summary of Comments

- 8 responses indicate it is clear and buildable
- 1 comment raised the concern of inconsistent enforcement on steel pallet storage racking

Survey

- Good to see this increased wording as for some time there was not a lot of guidance for local governments on our Authority (info bulletin No.B07-06). There is definitely a discrepancy from the Lower Mainland and the remainder of the province in this area as seismic is typically not top of mind - so what about the rest province - are there other structural triggers that are involved. Loading by forklift or not? It's a bit over the map on racking permits - Local government permit requirements https://www.google.com/search?q=racking+permits&rlz=1C1GCEB_enCA960CA960&oq=rac&aqs=chrome.0.69i59j69i57j46i131i433i512l2j0i131i433i512j69i60l3.1345j0j7&sourceid=chrome&ie=UTF-8 Industry outline https://www.arpac.ca/product-support/permit-application-process Is there any direction between racking and floor stacking (Palletized) storage. Seems like it's a trend in warehouse to reduce racking costs and allow for more flexibility on floor layouts as products change. Note WorkSafe BC also has commentary on racking systems due to the number of failures over the years. https://www.worksafebc.com/en/health-safety/tools-machinery-equipment/storage-racks
  6/19/2023 11:02 AM
- Test 6/15/2023 03:38 PM

Public review of themed email comments

- None received

Ventilation

Summary of Comments

- 39 responses
- One comment expressed concerns with the effectiveness of the passive ventilation option for secondary suites
- One person indicated preference for substantial increase to ventilation rates
- Three comments stated why would we change requirements when B.C. has working requirements
- One comment concerned with protection from insects and rodents when using passive inlets
- One commenter raised potential for conflicts between referenced best practice documents.
- 2 comment concerns over lack of requirements for filtration that allows bad air quality and recommends filtration requirements (MERV 13, HEPA) [BC lung and Vancouver Health).
- One comment points out that passive inlets are not allowed for Step Code buildings and therefore not an actual option [BSSB note: technical change already happened and would require messaging e.g., ventilation bulletin should be clear on Step Code 3 changes and impact]
- One comment suggests to not allow passive ventilation solution for homes built to the zero carbon Step Code
- One comment with a concern of allowing noisier equipment (e.g., 2.0-2.5 sones from 1 sones) recommends limiting all exhaust fans to 1 sones.
- One comment validates the CO detector requirements for non-residential buildings
- One comment raises performance concerns with passive ventilation. Comment states that passive ventilation is uncontrolled and conflicts with requirement for tempering outdoor air (9.32.3.5.(8)) and air tightness. [BSSB disposition: No action. Policy decision to continue to allow passive ventilation as low cost solution.]
  One comment raises overlap and potential confusion with Clause 9.32.3.8.(1)(c) being a stand-alone clause. Recommends revising Clauses (a) and (b) as such: "a) dwelling units that contain a vented appliance that is subject to back drafting (see Note A-9.32.3.8.(1)(c)) ~~a fuel-fired space-heating appliance or fuel-fired water-heating appliance of other than direct-vented or mechanically vented types,~~

  b) ancillary spaces that contain an exhaust device, where the space is not within a dwelling unit in a house with a secondary suite and where the house with a secondary suite contains a vented appliance that is subject to back drafting (see Note A-9.32.3.8.(1)(c)) ~~a fuel-fired space-heating appliance or fuel-fired water-heating appliance of other than direct-vented or mechanically vented types~~". [BSSB disposition: Action – Code. As a result of adopting the content and organization of NBC's 9.32., B.C.'s provisions for NAFFVA appear in a new structure and may be seen as overlapping. Recommend providing clarity in associated Note. E.g. "NAFFVA, typically appliances with draft hoods, are subject to back drafting when a negative pressure condition occurs in the dwelling. Although Clauses 9.32.3.8.(1)(a) and (b) may capture NAFFVA, Clause 9.32.3.8.(1)(c) reinforces the application of Article 9.32.3.8. in all instances where a vented appliance is subject to back drafting regardless of where they may be located. The following tables describe the conditions under which Clause 9.32.3.8.(1)(c) applies:…" FOR DISCUSSION WITH TECHNICAL TEAM.]

- One comment questions the provisions for CO alarms within Section 9.32. as CO alarms do not impact ventilation system design. Recommends requirements for CO alarms be located in a separate Section as they are often dealt with by different trades than those involved with the ventilation system. Commenter also points out that B.C.'s provisions for CO alarms in non-residential occupancies is a further challenge to 'fit' within the scope of 9.32. [BSSB disposition: Action – Other. Leave content as presented, however flag issue of 'scope' for further development of CO requirements nationally. Track in BC Variations Database that scope of 9.32. is not an ideal fit for CO alarm requirements.]

Survey

- Already captured ----
- 9.32.1.1.(3) refers to 4 motor vehicles which is not identified as a change as the current code refers to more than 5 vehicles which is in keeping with the language in Article 9.10.9.16 so not sure if these need to be synced. significant change from the current BCBC which will require some very comprehensive training to ensure all clearly understand how this section is to be implemented. Article 9.32.3.11. has no language regarding equivalent duct length due to the exhaust hood and changes in direction. Is this no longer relevant to duct sizing? Sentence 9.32.3.11.(5) although not changes refers to duct intakes within 3m horizontally of a cooktop, should there not be a vertical or a radius dimension also or instead of?
  6/13/2023 10:03 AM
  (B.C. has harmonized with the NBC provisions and scope and application)
- Are we no longer to accept having the duct-type smoke detector installed in the ducting of shared heating and ventilation equipment between a primary dwelling and secondary suite?
  6/13/2023 09:26 AM (B.C. has harmonized with the NBC provisions)
- passisve ventilation of a secondary suite usually means a couple of holes in the walls, on opposite sides of the suite. Tje homes are dressed up with plastic trim and an adjustable cover which is screwed in or out to adjust airflow. It is a perfect opening for bugs ane even mice to enter the suite. There needs to be a provision for preventing prsts from entering.
  6/9/2023 09:43 AM
- I agree with the dedectors in all forms, but the Ventallation Changes are all uncalled for, thier again driving up the cost of all construction in a time we need to build affordable units
  6/9/2023 09:08 AM
- 9.32.3.2. 1) falls afoul of the same issues I provided for 6.2.1.1 1). Multiple "best practices" external guideline sources are listed - I doubt anyone has reviewed these in intense detail to determine there are zero conflicts found between them. Suggestion: Place these external guidelines in an order of precedence so that any conflicts in current or future versions can be resolved cleanly. 6/6/2023 12:44 PM
- [Note: There is little empirical evidence to indicate a need for changes] ...few or no serious reports related to ventilation other than the consequence of sequestered off gassing due to chineses building products . This toxic off gas is trapped in homes due to previous vapor barrier and interior caulking.nice engineering ...cause a problem then suggest the cure
- 6/4/2023 08:21 PM
- [Note: Have been considered] - Again...building costs and regional data differences must be considered. 6/2/2023 07:26 AM
- Passive ventilation is not controllable and even in secondary suites will lead to over ventilation and comfort complaints. 6/1/2023 07:21 AM

- ~~We should be requiring all indoor spaces to be ventilated similar to outside to decrease spread of viruses. 5/26/2023 09:26 PM~~
- I dont believe the use of passive air inlets should be available to the cold climate indicated. The design data should limited the January design limit temperature to -5C max
- 5/25/2023 02:48 PM
- I find this read very convoluted. Heating Season vs Non heating season, room sizes and implication of some opening (window?) that may or may not be open but must be of a certain size. Surly this could be reduced to a requirement for X amount of air turnover per cubic meter of space with provision for special appliances like dryers and stoves
- with the increased air tightness and less air exchanges the following air pollutants need to be monitored for a healthy home especially for the safety and health of our children being the most vulnerable - Radon monitor - co2 monitor - voc monitor - particulate matter (PM) - humidity - temp - air pressure. 5/24/2023 12:36 PM
- Unintended consequence of changes to the language from 2018 BCBC. The proposed language change for 9.32.3.5.(15) from the previous 2018 BCBC 9.32.3.4.(6) unintentionally reverses the desire to keep passive air vents as a low cost option for secondary suites with baseboard heat. By changing "dwelling unit" from 2018 9.32.3.4.(6).(a) to "secondary suite" in (2023) 9.32.3.5.(15).(a) combined with removing "except for a secondary suite," from (2023) 9.32.3.5.(15).(iv), the language now reads that passive airvents are not permitted in a secondary suite when the building is designed to 9.36.6 (Step Code). Since every building applied for on or after May 1, 2023 is required to meet Step Code, this means by the proposed language that a secondary suite may not propose passive air vents and must have a mechanical system.
- N/a 5/24/2023 10:04 AM
- Please consider requiring HVAC installers to have a trade certification as sheet metal installers and to F280 for heat/ loss, with the same requirements for plumbers, having to provide a trades qualification for doing HVAC work. 5/23/2023 12:18 PM

Public review of themed email comments

BC Lung Foundation
Noah Quastel, Director
nquastel@bclung.ca

- Comment suggested considering filtration for air quality in coordination with cooling for a place to shelter
- One comment suggests that ventilation rates are too low and that coupled with lack of filtration can lead to unhealthy indoor quality and recommends filtration for the entire home.
- One comment has concerns that natural ventilation may not work as intended due to the lack of prescriptive requirements to promote adequate air circulation
- One comment points out that ventilation rates are decreased (concern) and recommends increasing the rates

Abbotsford
Sean Harris, Building Official III
sharris@abbotsford.ca

- One comment points out that passive inlets are not allowed for Step Code buildings and therefore not an actual option [BSSB note: technical change already happened and would require messaging e.g., ventilation bulletin should be clear on Step Code 3 changes and impact]

Ministry of Environment and Climate Change Strategy
Adrian Mohareb, Senior Policy Analyst
adrian.mohareb@gov.bc.ca

- One comment suggests to not allow passive ventilation solution for homes built to the zero carbon Step Code
- One comment with a concern allowing noisier equipment (e.g., 2.0-2.5 sones from 1 sones) recommends limiting all exhaust fans to 1 sones.

Fraser Health Authority
Dr. Emily Newhouse, Medical Health Officer
Emily.Newhouse@fraserhealth.ca

- One comment validates the CO detector requirements for non-residential buildings

Heating, Refrigeration, and Air Conditioning Institute of Canada (HRAI)
John Harris
DSG Building Diagnostics
jharris@dsgi.on.ca

- One comment raises performance concerns with passive ventilation. Comment states that passive ventilation is uncontrolled and conflicts with requirement for tempering outdoor air (9.32.3.5.(8)) and air tightness. [BSSB disposition: No action. Policy decision to continue to allow passive ventilation as low cost solution.]
  One comment raises overlap and potential confusion with Clause 9.32.3.8.(1)(c) being a stand-alone clause. Recommends revising Clauses (a) and (b) as such: "a) dwelling units that contain a vented appliance that is subject to back drafting (see Note A-9.32.3.8.(1)(c)) ~~a fuel-fired space-heating appliance or fuel-fired water-heating appliance of other than direct-vented or mechanically vented types,~~

  b) ancillary spaces that contain an exhaust device, where the space is not within a dwelling unit in a house with a secondary suite and where the house with a secondary suite contains a vented appliance that is subject to back drafting (see Note A-9.32.3.8.(1)(c)) ~~a fuel-fired space-heating appliance or fuel-fired water-heating appliance of other than direct-vented or mechanically vented types~~". [BSSB disposition: Action – Code. As a result of adopting the content and organization of NBC's 9.32., B.C.'s provisions for NAFFVA appear in a new structure and may be seen as overlapping. Recommend providing clarity in associated Note. E.g. "NAFFVA, typically appliances with draft hoods, are subject to back drafting when a negative pressure condition occurs in the dwelling. Although Clauses 9.32.3.8.(1)(a) and (b) may capture NAFFVA, Clause 9.32.3.8.(1)(c) reinforces the application of Article 9.32.3.8. in all instances where a vented appliance is subject to back drafting regardless of where they may be located. The following tables describe the conditions under which Clause 9.32.3.8.(1)(c) applies:…" FOR DISCUSSION WITH TECHNICAL TEAM.]

- One comment questions the provisions for CO alarms within Section 9.32. as CO alarms do not impact ventilation system design. Recommends requirements for CO alarms be located in a separate Section as they are often dealt with by different trades than those involved with the ventilation system. Commenter also points out that B.C.'s provisions for CO alarms in non-residential occupancies is a further challenge to 'fit' within the scope of 9.32. [BSSB disposition: Action – Other. Leave content as presented, however flag issue of 'scope' for further development of CO requirements nationally. Track in BC Variations Database that scope of 9.32. is not an ideal fit for CO alarm requirements.]

Vancouver Coastal Health
Ryan Chan, Administrative Assistant/Analyst to Dr. Michael Schwandt, Medical Health Officer
ryan.chan@vch.ca

- One comment concerns over lack of requirements for filtration that allows bad air quality and recommends filtration requirements (MERV 13, HEPA).

Windows, doors, and skylights

Summary of comments

- 39 responses indicate change is clear and buildable
- One comment questions why B.C. would allow loads prescribed in part 5, when following NAFS and the Canadian supplement
- Six comments raised the concern of bird window collisions (the same comment was submitted six times)
- One comment on the value of enforcement
- One comment suggested the market determine requirements
- Two comments received flagged that there could be increased costs with the increased requirements
- One comment indicates we should require windows with greater efficiency
- One comment recommended changes to proposed language that they felt would limit misunderstandings and inform flexibility between testing and engineering analysis.
- One comment recommends the ability to use engineering analysis to qualify size and configuration modifications for composite and combination assemblies through use of AAMA 450-20 without needing to test every configuration. Commenter proposed to adopt Sentence 5.9.2.3.(1) from the NBC- deleting the amended Sentence (1) BC had proposed- and also to add the following subclauses to Clause 5.9.2.3.(1)(b): *"(i) mulled assemblies and composite assemblies are permitted to use AAMA 450-20 when complying with the standards listed in Sentence 5.9.2.2.(1). (ii) AAMA 2502 and WDMA I.S.11 are referenced within the standards listed in Sentence 5.9.2.2.(1) and provide engineering analysis guidance based on testing."* Commenter also proposed a new Sentence 5.9.2.3.(2) as follows: *"Where windows, doors, and skylights and their components are designed and constructed in accordance with Sentence 5.9.2.3 (1)(b), the aspects of the design that may not be addressed by the standards listed in Sentence 5.9.2.2 (1) shall be designed in accordance with Sentence 5.9.2.3 (1)(a). (See Note A-5.9.2.2.)"* The commenter also proposed deleting the first paragraph of Note A-5.9.2.2.(1) which is a NBC Note that BC had proposed amendments to and recommended adding an additional paragraph to Note A-5.9.1.1.(1) as follows: *"Rating Limitations. A rated window, door or skylight assembly may not meet all the applicable requirements stated in Part 5 or other applicable areas of the building code. The standards listed in 5.9.2.2 may not provide ratings, produce specifications or provide professional design and field review for areas of performance that may be applicable such as deflection of assembly components, anchorage of the assembly to the building, resistance of components to guard loads, additional resistance due to project-specific structural loads, and resistance to seismic loads."* [BSSB disposition: Action – Other. B.C.'s proposed changes to NBC's Part 5 already expand compliance options and allow consideration of Part 5 loads when following NAFS. This request asks for more flexibility and reliance on engineering analysis. This change proposed by the commenter may have impacts on testing programs and manufacturers. As such, considering the commenter's proposed changes goes beyond the scope of B.C.'s proposal. B.C. has demonstrated interest in design flexibility and engineering solutions but the commenter's suggestions go beyond and would introduce further change for industry. Commenter should be directed to the national code development system. It is recommended that B.C. support that the changes, if proposed to the NRC by the commenter, be further developed.]

- One comment recommends the ability to use engineering analysis provisions built into NAFS (i.e., AAMA 2502 and WDMA I.S.11) to be efficient with required testing and calculate performance based on actual test reports for size and configuration modifications. [BSSB disposition: Action – Other. B.C. has demonstrated interest in design flexibility and engineering solutions but the commenter's suggestions go beyond and would introduce further change for industry. Commenter should be directed to the national code development system. It is recommended that B.C. support that the changes, if proposed to the NRC by the commenter, be further developed.]
- One comment recommends clarification that there are other building design considerations that must be addressed even when NAFS compliance has been achieved. [BSSB disposition. Action – Bulletin. It is recommended that BSSB produce a bulletin to guide industry through the changes which can include alerting designers to provisions (in new organization of content) that apply in addition to NAFS. It may be possible that the commenter's organization could collaborate on a bulletin to ensure maximum value to their membership.]

Survey

- It is extremely disappointing and almost embarrassing that the persons in charge of the BC building code do not take windows, doors and glazing efficiency more seriously. With so much emphasis today on Step Code, efficiency, carbon reduction, building green, YOU HAVE ABSOLUTLY MISSED THE MARK ON WINDOWS, EXTERIOR DOORS AND GLAZING. Why are builders allowed to use windows, exterior doors and glazing today for Part 9 single family buildings that were standard building code 13 plus years ago with a 1.8 metric or 1.6 metric u-value in 2023-2024 ? This is insane and should have been adjusted long ago. Every window company has had the ability to supply windows and doors with much better performance than a 1.6 metric u-value for over a decade. I regularly walk through new construction (South Okanagan) that is Step Code 3 or even 4 and the windows, exterior doors and glazing are absolutely brutally inefficient at a 1.6 metric u-value or even higher (This is only an R Value of 3.5 - terrible and unacceptable today in 2023). The BC Building Code and the industry is pushing hard to build better and smarter all the time however, builders are allowed to use absolutely garbage efficiency windows and doors. An R value of 3.5 on your windows and doors should never be allowed anymore. Who allows this to keep happening ? I have been a builder for 13 years and cannot believe you have dismissed such a great opportunity with Code updates and Step Code to make all windows, exterior doors and glass much more efficient province wide so as to fall within the message that is being currently pushed to tighten up the envelope and go green. Whomever is in charge of this please change this by 2024 so that windows, exterior doors and glazing for single family part 9 buildings must have a minimum u-value of 1.25 metric or lower and add more rebates to the step code to get lazy and stubborn builders to upgrade. Many homes have 20% or more of their envelope in glass. There are so many rules to follow with new construction yet you have missed such a large, important and key part of the building code with allowing such terribly inefficient glazing to be still currently be used. It costs a little more for higher glazing efficiency however, if you are still allowing builders of single family homes to install 1.6 or higher metric u-value windows (from code 13 years ago) and doors in new construction, then I am formally asking you to change the code as fast as you can and force all builders including myself to use much more efficient windows and doors. Why are you allowing such incompetency in a place that is trying to lead North America with building practices ? Make triple glazing minimum code as fast as you can in windows and doors province

wide. No more waiting just get it done and stop being so lazy. You have the power to change this quickly and you absolutely should have done this 5 plus years ago. Thank you and Sincerely,

- 6/16/2023 04:33 PM [BSSB note:
- "We request that the CSA A460:19 Bird-friendly building design standard be incorporated into the Building Code to avoid unintended environmental consequences associated with new building construction. Bird-window collisions are a leading direct source of bird mortality in Canada, resulting in as many as 25 million preventable bird deaths each year. Bird populations in Canada are rapidly declining due to human factors. The Canadian government has committed to advance a wide-ranging domestic strategy and action plan to halt and reverse nature loss in Canada. Bird-friendly building design significantly reduces risks for birds at minimum additional cost and with little impacts to overall building aesthetics. Incorporating the standard into the Code is necessary to ensure it is applied in building designs that otherwise do not fall under municipal authority. The CSA A460:19 is being considered for addition to the National Building Code and the Ontario Building Code."
- 6/14/2023 07:16 PM (Technical Specialists Lower Mainland/Southwest)
- We request that the CSA A460:19 Bird-friendly building design standard be incorporated into the Building Code to avoid unintended environmental consequences associated with new building construction. Bird-window collisions are a leading direct source of bird mortality in Canada, resulting in as many as 25 million preventable bird deaths each year. Bird populations in Canada are rapidly declining due to human factors. The Canadian government has committed to advance a wide-ranging domestic strategy and action plan to halt and reverse nature loss in Canada. Bird-friendly building design significantly reduces risks for birds at minimum additional cost and with little impacts to overall building aesthetics. Incorporating the standard into the Code is necessary to ensure it is applied in building designs that otherwise do not fall under municipal authority. The CSA A460:19 is being considered for addition to the National Building Code and the Ontario Building Code.
- 6/14/2023 01:49 PM (Planner Lower Mainland/Southwest) s.15
- We request that the CSA A460:19 Bird-friendly building design standard be incorporated into the Building Code to avoid unintended environmental consequences associated with new building construction. Bird-window collisions are a leading direct source of bird mortality in Canada, resulting in as many as 25 million preventable bird deaths each year. Bird populations in Canada are rapidly declining due to human factors. The Canadian government has committed to advance a wide-ranging domestic strategy and action plan to halt and reverse nature loss in Canada. Bird-friendly building design significantly reduces risks for birds at minimum additional cost and with little impacts to overall building aesthetics. Incorporating the standard into the Code is necessary to ensure it is applied in building designs that otherwise do not fall under municipal authority. The CSA A460:19 is being considered for addition to the National Building Code and the Ontario Building Code.
- 6/14/2023 08:31 AM (Biologist Lower Mainland/Southwest) s.15
- We request that the CSA A460:19 Bird-friendly building design standard be incorporated into the Building Code to avoid unintended environmental consequences associated with new building construction. Bird-window collisions are a leading direct source of bird mortality in Canada, resulting in as many as 25 million preventable bird deaths each year. Bird populations in Canada are rapidly declining due to human factors. The Canadian government has committed to

advance a wide-ranging domestic strategy and action plan to halt and reverse nature loss in Canada. Bird-friendly building design significantly reduces risks for birds at minimum additional cost and with little impacts to overall building aesthetics. Incorporating the standard into the Code is necessary to ensure it is applied in building designs that otherwise do not fall under municipal authority. The CSA A460:19 is being considered for addition to the National Building Code and the Ontario Building Code.

- 6/13/2023 09:21 PM (homeowner Lower Mainland/Southwest) s.15
- Already captured ---
- Please incorporate the CSA A460:19 Bird-friendly building design standard into the Building Code to avoid unintended environmental consequences associated with new building construction. Bird-window collisions are a leading direct source of bird mortality in Canada, resulting in as many as 25 million preventable bird deaths each year. Bird populations in Canada are rapidly declining due to human factors. The Canadian government has committed to advance a wide-ranging domestic strategy and action plan to halt and reverse nature loss in Canada. 6/13/2023 11:48 AM (Note: Not within current BCBC objectives)
- "We request that the CSA A460:19 Bird-friendly building design standard be incorporated into the Building Code to avoid unintended environmental consequences associated with new building construction. Bird-window collisions are a leading direct source of bird mortality in Canada, resulting in as many as 25 million preventable bird deaths each year. Bird populations in Canada are rapidly declining due to human factors. The Canadian government has committed to advance a wide-ranging domestic strategy and action plan to halt and reverse nature loss in Canada. Bird-friendly building design significantly reduces risks for birds at minimum additional cost and with little impacts to overall building aesthetics. Incorporating the standard into the Code is necessary to ensure it is applied in building designs that otherwise do not fall under municipal authority. The CSA A460:19 is being considered for addition to the National Building Code and the Ontario Building Code."
  6/12/2023 05:53 AM (Note: Not withing current BCBC objectives)
- Substandard contractor work…a friend bought a brand new condo and needed all the 2nd floor patio doors replaced as they were totally foggy. Also, window frames were not fitted tight. On a condo building just built up island, the painters were told to fill in the window gaps with caulking then paint over it.
  6/9/2023 05:12 PM (Note: Quality of work is not within scope)
- Enforcement of code requirenents is critical here, as the homeowner has no reasonable ability to evaluate. 6/9/2023 09:47 AM
- market will advise what is required and what is not. 6/9/2023 09:27 AM
- another design overlaod not required, this code alone will increas the cost of windows by 50 %, in a time when we need to supply affordable housing units. 6/9/2023 09:10 AM
- this will be too expensive and increase thecost of housing even further. Modern windows in BC are already very well performing. 6/9/2023 08:58 AM
- The proposed sentence BCBC 5.9.2.2.(1) requires compliance with NAFS unless exempted under BCBC 5.9.2.3.(1). BCBC 5.9.2.3.(1) states that windows, doors, and skylights that do not conform to 5.9.2.2 shall be designed and constructed according to other provisions within Division B, Part 5. These two requirements create a circular argument that cannot be satisfied. You cannot have a Code sentence that requires compliance with a Standard, but exempts the product from doing so if the product does not conform to the Standard. If a Code requirement is to allow an exemption from compliance, then the exemption must be provided as a measurable characteristic of the product. The way the BCBC Code language is provided in the proposed

change does not provide a measurable characteristic of the window, door, or skylight under BCBC 5.9.2.3.(1) that would clearly then distinguish the product and remove the requirements under BCBC 5.9.2.2.(1). What the proposed wording appears to do is allow a product that does not comply with a Standard to not comply with the Standard. A recursive paradox. The 2020 NBC articles are more clear as the measurable characteristic of the door, window, or skylight in NBC 5.9.2.3.(1)(a) that allows exemption from complying with NBC 5.9.2.2 is when the window, door, or skylight does not fall under the scope of NAFS. The intent of NBC 5.9.2.3.(1)(a) is to provide minimum requirements for windows, doors, and skylights that do not fall under the scope of NAFS. The intent of NBC 5.9.2.3.(1)(b) is to ensure that windows, doors, and skylights that do fall under the scope of NAFS are required to meet the requirements in NAFS. 6/2/2023 12:52 PM

Public review themed of email comments

Fenestration and Glazing Industry Alliance (FGIA)
Janice Yglesias, Executive Director
jyglesias@fgiaonline.org

- One comment recommended changes to proposed language that they felt would limit misunderstandings and inform flexibility between testing and engineering analysis.
- One comment recommends the ability to use engineering analysis to qualify size and configuration modifications for composite and combination assemblies through use of AAMA 450-20 without needing to test every configuration. Commenter proposed to adopt Sentence 5.9.2.3.(1) from the NBC- deleting the amended Sentence (1) BC had proposed- and also to add the following subclauses to Clause 5.9.2.3.(1)(b): *"(i) mulled assemblies and composite assemblies are permitted to use AAMA 450-20 when complying with the standards listed in Sentence 5.9.2.2.(1). (ii) AAMA 2502 and WDMA I.S.11 are referenced within the standards listed in Sentence 5.9.2.2.(1) and provide engineering analysis guidance based on testing."* Commenter also proposed a new Sentence 5.9.2.3.(2) as follows: *"Where windows, doors, and skylights and their components are designed and constructed in accordance with Sentence 5.9.2.3 (1)(b), the aspects of the design that may not be addressed by the standards listed in Sentence 5.9.2.2 (1) shall be designed in accordance with Sentence 5.9.2.3 (1)(a). (See Note A-5.9.2.2.)"* The commenter also proposed deleting the first paragraph of Note A-5.9.2.2.(1) which is a NBC Note that BC had proposed amendments to and recommended adding an additional paragraph to Note A-5.9.1.1.(1) as follows: *"Rating Limitations. A rated window, door or skylight assembly may not meet all the applicable requirements stated in Part 5 or other applicable areas of the building code. The standards listed in 5.9.2.2 may not provide ratings, produce specifications or provide professional design and field review for areas of performance that may be applicable such as deflection of assembly components, anchorage of the assembly to the building, resistance of components to guard loads, additional resistance due to project-specific structural loads, and resistance to seismic loads."* [BSSB disposition: Action – Other. B.C.'s proposed changes to NBC's Part 5 already expand compliance options and allow consideration of Part 5 loads when following NAFS. This request asks for more flexibility and reliance on engineering analysis. This change proposed by the commenter may have impacts on testing programs and manufacturers. As such, considering the commenter's proposed changes goes beyond the scope of B.C.'s proposal. B.C. has demonstrated interest in design flexibility and engineering solutions

but the commenter's suggestions go beyond and would introduce further change for industry. Commenter should be directed to the national code development system. It is recommended that B.C. support that the changes, if proposed to the NRC by the commenter, be further developed.]

- One comment recommends the ability to use engineering analysis provisions built into NAFS (i.e., AAMA 2502 and WDMA I.S.11) to be efficient with required testing and calculate performance based on actual test reports for size and configuration modifications. [BSSB disposition: Action – Other. B.C. has demonstrated interest in design flexibility and engineering solutions but the commenter's suggestions go beyond and would introduce further change for industry. Commenter should be directed to the national code development system. It is recommended that B.C. support that the changes, if proposed to the NRC by the commenter, be further developed.]
- One comment recommends clarification that there are other building design considerations that must be addressed even when NAFS compliance has been achieved. [BSSB disposition. Action – Bulletin. It is recommended that BSSB produce a bulletin to guide industry through the changes which can include alerting designers to provisions (in new organization of content) that apply in addition to NAFS. It may be possible that the commenter's organization could collaborate on a bulletin to ensure maximum value to their membership.]

Demographics (SL has updated)

For whom are you completing this survey?

- 118 respondents
- 80% completed survey as themselves
- 20% as their organization

What is your role(s)?

- 3% Accessibility consultant
- 6% Architect
- 12% Building Official
- 6% Building owner/manager
- 3% Care provider
- 13% Contractor
- 6% Designer
- 13% Developer
- 12% Engineer
- 3% Fire Official
- 28% Homeowner or occupant
- 2% Indigenous person
- 5% Licensed residential builder
- 3% Owner builder
- 10% Parent or family member of a person with a disability
- 6% Person with a disability
- 8% Planner
- 1% Student
- 2% Supplier or manufacturer
- 2% Technician
- 34% Technologist
- 6% Technical specialist
- 15% Other

Region

- Cariboo
- 7% Kootenay (8 responses)
- 45% Lower Mainland/Southwest (54 responses)
- 5% North Coast and Nechako (6 responses)
- 1% Northeast (1 response)
- 7% Thompson-Okanagan (8 responses)
- 29% Vancouver Island Coast (35 responses)
- 7% Outside B.C. (8 responses)

RE: UDI Submission: proposed B.C.-specific Building Code changes

From:	Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Cassandra Smith <csmith@udi.org>
Cc:	Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent:	September 13, 2023 4:34:14 PM PDT
Attachments:	image004.jpg, image006.jpg, image008.jpg, image010.jpg, image009.jpg, image007.jpg, image005.jpg, image002.jpg, image003.jpg, image001.jpg

Accepted, thank you.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Wednesday, September 13, 2023 4:32 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I have sent an invite for 2 pm on October 18th.

Thank you,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, September 13, 2023 10:02 AM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Lily,

I can make it work any time in that window.

Jun'ichi Jensen

Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Tuesday, September 12, 2023 10:45 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thank you for the update.

If you think the timing would work to have more information later in the fall, we would be happy to move our Building Codes Committee meeting. Are you available in the afternoon on October 18th? Any time between 1pm – 4 pm works on our end.

Thank you,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 7, 2023 4:52 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

Thank you, I did receive your other email and will respond soon after we've had time to review and discuss.

On this note, I don't have a set day yet, but we do expect to know a bit more in late September or early October. I can definitely attend a meeting shortly after, but I'm sorry that I don't have a specific date I can give you.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>

Sent: Thursday, August 31, 2023 2:44 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi

Thanks for following up on this. If the Sept. 21 timing no longer aligns, we can shift our meeting date to accommodate your schedule. This will avoid us needing to have two meetings in short succession, as the Building Code changes remain a major topic of discussion. Please let us know what timing would work better.

As well, we have gathered additional information from our members estimating the changes required to comply with the proposed accessibility requirements and we be able to share that next week. Hopefully this information is helpful and can still be considered as part of the process.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 28, 2023 5:44 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

It sounds like there will be some further clarity on this just after your meeting- closer to the end of September. That means I won't have anything to share on September 21. Please feel free to let folks know we are expecting to know more shortly after the meeting. If helpful, I could attend the subsequent meeting to answer questions. For now, please do not hold a space for me on Sept 21. Thank you so much for working with me on this and for accommodating the changes as they've happened.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Wednesday, August 16, 2023 4:06 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thanks for the update. We will plan to have you provide a virtual update at the September 21st meeting. There may also be topics that our members want to discuss with you related to the BCBC changes as well.

I'd also flag that going into the fall our members will be looking for confirmation of the implementation timeline for the Building Code changes, as they were slated to come into effect by the end of the year. They're already reaching out to us looking for information to help direct their design processes, since these proposed changes will have a large impact. If you have any updates on when they will be effective that would be of interest to our members in September, or whenever information is available.

Feel free to reach out to myself or Jeff if there's any way we can be of assistance.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 16, 2023 1:47 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

I think meeting with the group on Sept 21 will be fine for me. I may or may not have any news to share at that time, but we can touch base closer to the date to confirm.

Thanks again,

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, August 14, 2023 1:57 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thanks for the quick reply. Keep me posted on the next steps and whether follow-up discussion is needed.

Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 14, 2023 1:52 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

Thanks for following up. I hope to know this week if we will need to speak with the group again.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, August 14, 2023 1:48 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I hope you had a great vacation and got some R&R! I'm just picking up this thread from last month to confirm the timing of a follow-up meeting with UDI and our Building Codes Committee. We still have our next Committee meeting booked for Sept. 21, but could convene the group earlier if needed.

Let me know what the timing looks like for the next steps and we can set up a meeting with our Committee.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Lily Shields-Anderson <lshieldsanderson@udi.org>

Sent: July 21, 2023 9:26 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Jun'ichi,

Sounds good. Have a great vacation and I look forward to connecting in a few weeks!

Thanks,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, July 20, 2023 4:49 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Thank you, Lily for the quick response. I will pick this up on my return as I should know a bit more about the topic of discussion in early August.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Thursday, July 20, 2023 2:46 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thank you for reaching out and glad to hear you are enjoying your summer!

We would be pleased to meet to discuss the options you are looking at. Our next Building Codes Committee meeting is scheduled for September 21st, 10am-11am. If it is preferred to meet with the group earlier, or if you require more than 1 hour, this can be adjusted.

Please let us know what your timing looks like to receive feedback on this and we look forward to continuing this discussion.

Best regards,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, July 19, 2023 1:24 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Lily and Cassandra,

I hope you are both finding some time to relax this Summer. I've got some vacation coming up next week :)

When is your UDI building code committee meeting next? I would like to discuss with the group some proposed options for delayed implementation of some code requirements. This is based on the suggestion of tying the new code requirements to development permits.

Thanks,

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, June 16, 2023 1:17 PM
To: HOUS BSSB Public Review HOUS:EX <BSSB.public.review@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good afternoon,

On behalf of Anne McMullin, President & CEO of UDI and our members, please find attached our submission on the proposed B.C.-specific Building Code changes. Throughout our letter we recommend that additional time be taken before implementation to analyze the impacts of the proposed changes and develop offsets to mitigate them. We reiterate our appreciation for the work being done by the Building and Safety Standards Branch, and would be pleased to provide support if it is determined that further analysis will be done.

If you would like to discuss any of our recommendations further, please let us know.

Page 094 of 356

Withheld pursuant to/removed as

s.13

RE: UDI Letter - Proposed BCBC Changes 2023

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Beninger, Dave HOUS:EX <Dave.Beninger@gov.bc.ca>, Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: September 14, 2023 12:34:10 PM PDT
Attachments: image001.jpg, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg

Yes I figured. I appreciate you folks doing that!

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Thursday, September 14, 2023 12:22 PM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Beninger, Dave HOUS:EX <Dave.Beninger@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: RE: UDI Letter - Proposed BCBC Changes 2023

Thanks Sian – this is regular course of feedback for building code changes.
I will have the team pull together a short overview response.

B

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Thursday, September 14, 2023 12:20 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Beninger, Dave HOUS:EX <Dave.Beninger@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi folks,

I don't have any technical expertise on the pieces UDI is raising but I'd like to get BSSBs take on what they've raised and whether we either have/intend to addressed their concerns or are factoring in a response to their concerns for when we announce the code. It's not a huge rush as I know folks are very busy but if you can let us know by next week, prior to the announcement that would be great.

Tx,
Siân

From: Cassandra Smith
Sent: September 7, 2023 2:50 PM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi Mark and Siân,

Here is a copy of the note we sent to the BSSB regarding the proposed BC Building Code changes. If you have any questions or want more information about the specific examples, let me know and I can connect you with the developers.

Thanks,

Cassandra

Cassandra Smith
Direct: (604) 661-3032

From: Cassandra Smith
Sent: September 7, 2023 2:47 PM
To: 'Jensen, Jun'ichi HOUS:EX' <Junichi.Jensen@gov.bc.ca>
Cc: 'Sawchuk, Bindi AEST:EX' <Bindi.Sawchuk@gov.bc.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter - Proposed BCBC Changes 2023

Hello Jun'ichi,

As I mentioned previously, we have put together some additional examples to illustrate the impacts of the proposed BC Building Code changes on new construction, specifically the adaptability requirements. Please find attached a letter outlining these impacts and our concerns, along with suggested mitigation measures.

If you would like to discuss these further or have questions related to the specific examples, please let us know and we would be happy to schedule a follow-up session.

Thanks,
Cassandra

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

FW: UDI Letter - Proposed BCBC Changes 2023

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: September 14, 2023 1:01:56 PM PDT
Attachments: Example 3 - Washroom comparison_Plans.pdf, image004.jpg, image006.jpg, image007.jpg, image005.jpg, image002.jpg, image003.jpg, 2023-09-07 UDI Letter - Building and Safety Standards Branch - 2023 BC Building Code Impacts of the Proposed Adaptability Requirements.pdf, Example 2 - ADAPTABLE DWELLING UNIT- BCBC2023 - Updated August 18 2023.pdf

We have a response letter, right? Shannon, do you have time to put together a few bullets on each concern and how we are addressing?

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Thursday, September 14, 2023 12:24 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi Juni,

Can you please pull together a short response summary to the UDI letter on 2023 Building Code impacts for next week?

Thanks - B

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Thursday, September 14, 2023 12:20 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Beninger, Dave HOUS:EX <Dave.Beninger@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi folks,

I don't have any technical expertise on the pieces UDI is raising but I'd like to get BSSBs take on what they've raised and whether we either have/intend to addressed their concerns or are factoring in a response to their concerns for when we announce the code. It's not a huge rush as I know folks are very busy but if you can let us know by next week, prior to the announcement that would be great.

Tx,
Siân

From: Cassandra Smith

Sent: September 7, 2023 2:50 PM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi Mark and Siân,

Here is a copy of the note we sent to the BSSB regarding the proposed BC Building Code changes. If you have any questions or want more information about the specific examples, let me know and I can connect you with the developers.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Cassandra Smith
Sent: September 7, 2023 2:47 PM
To: 'Jensen, Jun'ichi HOUS:EX' <Junichi.Jensen@gov.bc.ca>
Cc: 'Sawchuk, Bindi AEST:EX' <Bindi.Sawchuk@gov.bc.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter - Proposed BCBC Changes 2023

Hello Jun'ichi,

As I mentioned previously, we have put together some additional examples to illustrate the impacts of the proposed BC Building Code changes on new construction, specifically the adaptability requirements. Please find attached a letter outlining these impacts and our concerns, along with suggested mitigation measures.

If you would like to discuss these further or have questions related to the specific examples, please let us know and we would be happy to schedule a follow-up session.

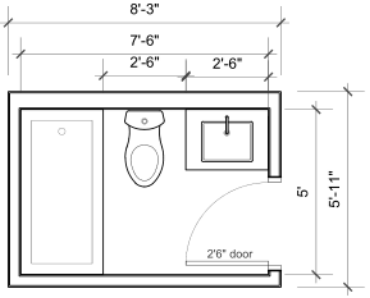
Thanks,
Cassandra

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

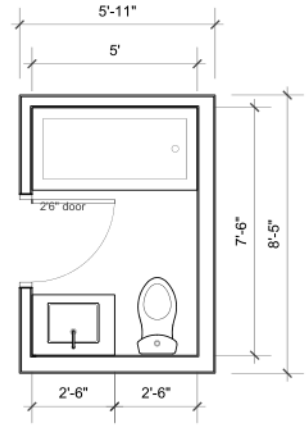
URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

Typical Residential Washrooms

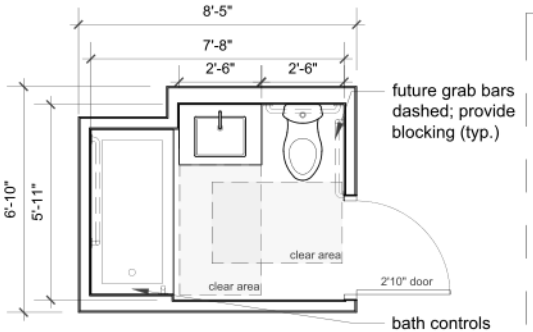


37.5 SQ. FT. inside clear area

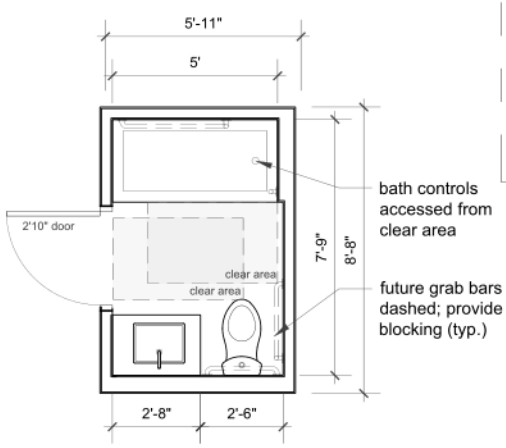


37.5 SQ. FT. inside clear area

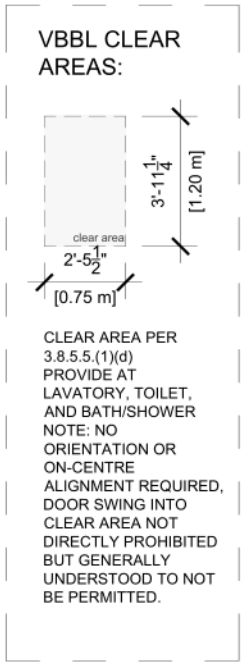
VBBL Adaptable Residential Washrooms



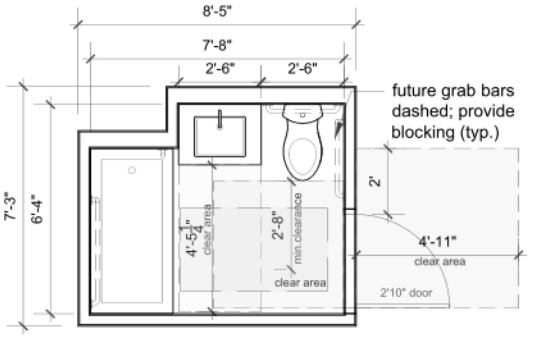
42.9 SQ. FT. inside clear area



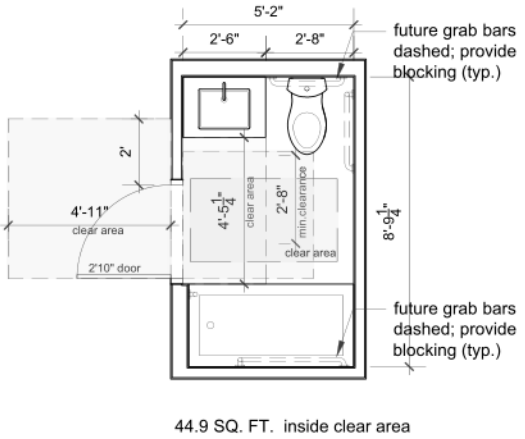
39.6 SQ. FT. inside clear area



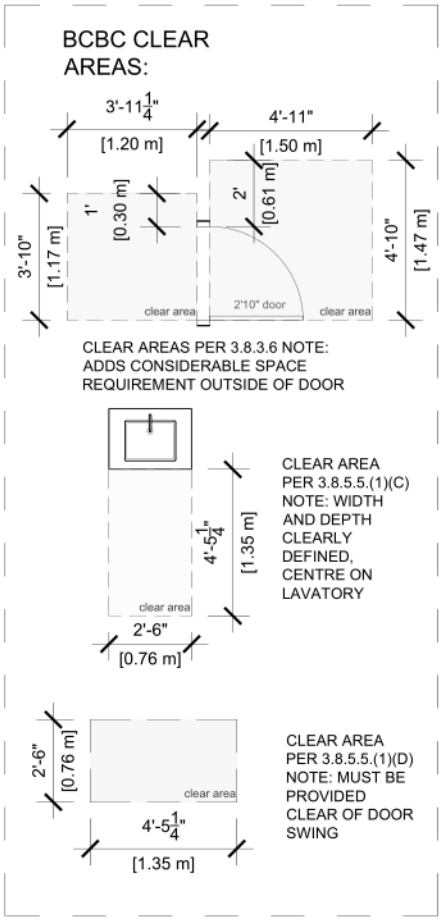
BCBC Adaptable Residential Washrooms



45.0 SQ. FT. inside clear area



44.9 SQ. FT. inside clear area



URBAN
DEVELOPMENT
INSTITUTE

SUITE 1100
1050 W PENDER STREET
VANCOUVER, BC V6E 3S7

September 7, 2023

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch

2023 BC Building Code Impacts of the Proposed Adaptability Requirements

Dear Mr. Jensen:

Impacts to New Construction

UDI members have been expressing significant concern with the proposed requirements for 100% adaptability in all new part 3 buildings apartment buildings. The proposals require the development community, new homebuyers and tenants to overcome a systemic issue in the existing building stock. UDI and the industry have always supported the principle that new projects pay their fair share of growth-related costs. However, asking for every unit to be adaptable, without offsets and mitigation measures, is well beyond a growth-related cost.

Further, solely focusing on new construction to generate accessible housing will not alleviate cost pressures as these new units will be larger (see below) and subject to market rates which are already high. In a province already struggling with affordability, introducing options that are only available to the upper-end of the housing market will not achieve widespread access and may be beyond the reach of many individuals requiring accessible housing.

If the proposals are adopted without effective mitigation measures and offsets, bathroom, bedrooms and hallway sizes will be substantially increased relative to other living spaces in homes – especially in smaller units. Liveability and marketability will be compromised – unless overall unit sizes increase – reducing the total number of dwelling units per project, which will undermine affordability.

Changes to Unit Sizes and Layouts

Our members have shared with us a few examples from real projects that illustrate these major issues. The plans that correspond with the points below are attached to this email.

Example 1: A new housing application containing 850+ family-friendly rental homes, including 5% at below-market rates, located next to a rapid transit station would need to increase the size of the homes in order to meet the requirements. This would result in a loss of more than 120 homes, or about 15% of the project, and is significant enough that it would render the project unviable.

Example 2: In another example, the bathrooms become very large, and suite entries increase in size, making it difficult to fit entryway closets, or resulting in lost space in kitchens. The bedrooms become 12' wide excluding the closets. There would also be impacts to bathroom sizes to accommodate the changes. If unit sizes remain the same, this would result in a decrease in the size of the kitchens and living rooms. Projects currently in-stream, will need to restart unit planning and elevations to accommodate layout changes.

Mitigation Measures
We strongly encourage the Province to delay the implementation of the proposal to make 100% of new part 3 buildings adaptable and look at mitigation measures, offsets or alternatives to this proposal. These include:

- Having stronger in-stream protection for projects currently in the development review process, in particular ones with pre-sales to avoid substantive changes having to be made to designs. As we noted in our June 16th letter, our members are concerned that pre-sale purchasers will not accept significant changes to their unit layouts, which could jeopardize projects.

- In some municipalities, density offsets are offered to accommodate accessibility requirements, which helps to mitigate the loss of units due to increases in square footage. This needs to be implemented for any adaptable unit under the proposed policy at the Provincial level through a standardized FAR exemption. It is imperative that this established at the Provincial level to avoid downloading the responsibility onto municipalities, who are facing their own capacity challenges while trying to speed up approvals timelines. Further, setback and height requirements will likely have to be adjusted to accommodate the increased allowable density. Without these adjustments, density offsets will be ineffective.

- If the Province is considering FAR exemptions for the requirements based on those already employed by some municipalities, the scale of the requirements would need to be accounted for. Current exemptions are meant to offset much smaller requirements – for example up to 20% adaptability – meaning the exemption criteria for a 100% adaptability requirement would need to be much greater to provide the same level of offset.

- Many municipalities do not currently have adaptability requirements for new residential construction, so moving from a 0% requirement to 100% requirement will be a dramatic shift. The Province could consider announcing the direction to achieve 100% adaptability in the future by phasing in more incremental

percentage requirements over the next few years. This will allow municipalities and builders to adjust to the provisions and prepare for full adaptability through staged increases.

- The Province should also consider adopting the City of Vancouver's approach to adaptable bathrooms, which allow for full accessibility but are much smaller – as described in Example 3 below.

Example 3: In a comparison between the Vancouver Building By-law (VBBL) requirements and the proposed BCBC 2023 requirements, the following impacts would occur:

- In a typical washroom adhering to the VBBL adaptability requirements, the square footage (sf) would increase between 2 – 4sf. Under the proposed 2023 BCBC requirements the square footage would increase by approximately 8sf. Considering the additional requirement for clear areas outside the washroom required in the 2023 BCBC proposals, but not the VBBL, this would total an increase of 15sf.

- If the 2023 BCBC adopts 100% adaptability requirements under the current proposal, the impact of the overall density of a project is considerable at 15-25sf per unit, further impacting the affordability of the units and the number of new homes delivered.

The adaptability proposals (as well as the seismic ones) are so substantial that there would need to be robust education and guidance for implementation of these changes, which will require time.

We hope to continue these discussions with the Ministry of Housing and Building and Safety Standards Branch prior to the finalization of the proposals, as there are multiple considerations that still need to be discussed to ensure new adaptability requirements in the 2023 BCBC do not impact the ability to deliver new housing in the province.

Yours sincerely,



Anne McMullin
President & CEO, Urban Development Institute

Page 103 of 356

Withheld pursuant to/removed as

s.13

RE: For review: UPDATED Draft MO Bullets - UDI Letter - Proposed BCBC Changes 2023

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: September 15, 2023 2:25:06 PM PDT
Attachments: image001.jpg, image003.jpg, image006.jpg, image005.jpg, image002.jpg, image004.jpg

Ok, I plan to send this up today as the e-app has gone up as well. I am just emailing to Lori at ADMO.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Friday, September 15, 2023 1:48 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: For review: UPDATED Draft MO Bullets - UDI Letter - Proposed BCBC Changes 2023

Hi Juni – thank you for the clarification.

I've made the required change. Here is a link to the updated file for you and Andy's review and comments.

I will send the eApproval with UDI's response to you as well.

Thank you,
Shannon

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, September 15, 2023 11:19 AM
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: For review: Draft MO Bullets - UDI Letter - Proposed BCBC Changes 2023

If you could please itemize all those issues they raised, that would be great. Not sure what would work best- to do item/response one by one or to just itemize all the UDI items and then all the responses..

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Friday, September 15, 2023 10:53 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: For review: Draft MO Bullets - UDI Letter - Proposed BCBC Changes 2023

Hello,

Other points raised include:

- Suggestion that the Province establish floor area ratio exemptions

- Suggestion that setback and height requirements will need to be adjusted
- Recommendation to adopt the VBBL adaptable requirements

I believe our bullets capture the key issues the one-year transition provides to mitigate concerns. Although happy to revise in any way.

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, September 15, 2023 10:40 AM
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: For review: Draft MO Bullets - UDI Letter - Proposed BCBC Changes 2023

Thanks, this looks just right. Are there other points made by UDI to address or was it limited to impact on building size and existing projects? In other words, is this the whole document or will there be more points? IF there are lots more points, you can probably strive to be more brief. If this is all, it's looking great.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Friday, September 15, 2023 9:52 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: For review: Draft MO Bullets - UDI Letter - Proposed BCBC Changes 2023

Hello Juni,

Here is the first draft for your review/input. I know a line by line comment was required, but when rolled up I thought the bullets address each concern from a Provincial level.

Thoughts? Happy to set a time to discuss.

Thank you,
Shannon

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 14, 2023 2:53 PM
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: UDI Letter - Proposed BCBC Changes 2023

Thank you, Shannon. I sent a follow up and blind copied you as well, just to note the letter to UDI will be high level but we will provide the bullets to Sian.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Thursday, September 14, 2023 1:06 PM

To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: UDI Letter - Proposed BCBC Changes 2023

Hello, Yes, I have it assigned in eApprovals with a Sept 22 due date. I will happily action ADM's request as noted.

Thank you,
Shannon

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 14, 2023 1:02 PM
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

We have a response letter, right? Shannon, do you have time to put together a few bullets on each concern and how we are addressing?

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Thursday, September 14, 2023 12:24 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi Juni,

Can you please pull together a short response summary to the UDI letter on 2023 Building Code impacts for next week?

Thanks - B

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Thursday, September 14, 2023 12:20 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Beninger, Dave HOUS:EX <Dave.Beninger@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi folks,

I don't have any technical expertise on the pieces UDI is raising but I'd like to get BSSBs take on what they've raised and whether we either have/intend to addressed their concerns or are factoring in a response to their concerns for when we announce the code. It's not a huge rush as I know folks are very busy but if you can let us know by next week, prior to the announcement that would be great.

Tx,
Siân

From: Cassandra Smith
Sent: September 7, 2023 2:50 PM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi Mark and Siân,

Here is a copy of the note we sent to the BSSB regarding the proposed BC Building Code changes. If you have any questions or want more information about the specific examples, let me know and I can connect you with the developers.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Cassandra Smith
Sent: September 7, 2023 2:47 PM
To: 'Jensen, Jun'ichi HOUS:EX' <Junichi.Jensen@gov.bc.ca>
Cc: 'Sawchuk, Bindi AEST:EX' <Bindi.Sawchuk@gov.bc.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter - Proposed BCBC Changes 2023

Hello Jun'ichi,

As I mentioned previously, we have put together some additional examples to illustrate the impacts of the proposed BC Building Code changes on new construction, specifically the adaptability requirements. Please find attached a letter outlining these impacts and our concerns, along with suggested mitigation measures.

If you would like to discuss these further or have questions related to the specific examples, please let us know and we would be happy to schedule a follow-up session.

Thanks,
Cassandra

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

NOTIFICATION - eApprovals Item ID: 81525 - Item Forwarded - Due 2023-09-22

From: JPSS eApprovals <donotreply@sp.gov.bc.ca>
To: Tubman, Tammy HOUS:EX <Tammy.Tubman@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: September 19, 2023 8:58:35 AM PDT

Ruhland, Brian [Assignee] forwarded an eApprovals item to Levesque, Starr PSSG:EX for action

Comment:

#: 61295

Title: UDI Letter - Proposed BCBC Changes 2023

Full Name: Cassandra Smith

Due Date: 9/22/2023

Category: Correspondence - Reply Direct

Go to item...

FW: Digital Innovation in Housing Construction

From:	May, Zachary HOUS:EX
To:	Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent:	September 19, 2023 10:46:39 AM PDT
Attachments:	image002.png, image003.png, image004.png, image001.png

From: Sue Paish <sPaish@digitalsupercluster.ca>
Sent: Sunday, July 2, 2023 2:51 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Digital Innovation in Housing Construction

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thank you Zachary:

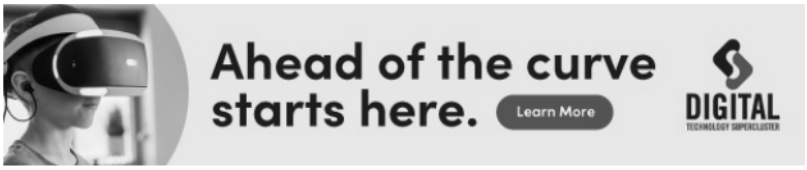
This is a wonderful summary. We are excited and keen to continue to engage with you and support this drive to digitize our housing construction sector(s) and system(s).

Many thanks again,
Sue

Sue Paish

CEO

Digital
C: 604.230.4602
E: spaish@digitalsupercluster.ca
www.digitalsupercluster.ca



From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, June 30, 2023 4:19 PM
To: 'pbogunovic@abbotsford.ca' <pbogunovic@abbotsford.ca>; 'pcaraher@ahma-bc.org' <pcaraher@ahma-bc.org>; 'sfralin@ahma-bc.org' <sfralin@ahma-bc.org>; XT:Irg, Mike Alberni-Clyoquot Regional District EAO:IN <mirg@acrd.bc.ca>; 'jjung@asttbc.org' <jjung@asttbc.org>; 'katy.fairley@bccassn.com' <katy.fairley@bccassn.com>; 'saafrin@bchousing.org' <saafrin@bchousing.org>; 'srutherford@bchousing.org' <srutherford@bchousing.org>; 'jpatel@bchousing.org' <jpatel@bchousing.org>; 'tyler.wightman@boabc.org' <tyler.wightman@boabc.org>; 'Jason.berlin@rdbn.bc.ca' <Jason.berlin@rdbn.bc.ca>; 'jason.llewellyn@rdbn.bc.ca' <jason.llewellyn@rdbn.bc.ca>; 'jason.watt@burnaby.ca' <jason.watt@burnaby.ca>; 'Trevor.Sweeney@campbellriver.ca' <Trevor.Sweeney@campbellriver.ca>; 'carmina@chbabc.org' <carmina@chbabc.org>; 'cassidy@3rdgenhomes.com' <cassidy@3rdgenhomes.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'jmitchell@coquitlam.ca' <jmitchell@coquitlam.ca>; King, David J M JEDI:EX <David.King@gov.bc.ca>; 'esangster@daustudio.ca'

<esangster@daustudio.ca>; 'mbarros@daustudio.ca' <mbarros@daustudio.ca>; 'TSwardh@delta.ca' <TSwardh@delta.ca>; 'msangret@delta.ca' <msangret@delta.ca>; Shawn Gervais <sGervais@digitalsupercluster.ca>; Sue Paish <sPaish@digitalsupercluster.ca>; 'afehr@egbc.ca' <afehr@egbc.ca>; 'jmunroe@fninspector.ca' <jmunroe@fninspector.ca>; 'bharasimiuk@rdffg.bc.ca' <bharasimiuk@rdffg.bc.ca>; 'kjonkman@rdffg.bc.ca' <kjonkman@rdffg.bc.ca>; 'diana@havan.ca' <diana@havan.ca>; 'ron@havan.ca' <ron@havan.ca>; 'george.hemsley@introba.com' <george.hemsley@introba.com>; 'brad.walton@jensenhughes.com' <brad.walton@jensenhughes.com>; 'tpollock@kimberley.ca' <tpollock@kimberley.ca>; 'jkassel@lakecountry.bc.ca' <jkassel@lakecountry.bc.ca>; 'jdelrosario@langleycity.ca' <jdelrosario@langleycity.ca>; Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>; Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; 'max@naikoon.ca' <max@naikoon.ca>; 'Abe.lang@nanaimo.ca' <Abe.lang@nanaimo.ca>; 'Darcy.fox@nanaimo.ca' <Darcy.fox@nanaimo.ca>; 'jeremy.holm@nanaimo.ca' <jeremy.holm@nanaimo.ca>; 'reed.botwright@nanaimo.ca' <reed.botwright@nanaimo.ca>; 'pthompson@rdn.bc.ca' <pthompson@rdn.bc.ca>; Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>; 'amcintyre@nelson.ca' <amcintyre@nelson.ca>; 'echow@cnv.org' <echow@cnv.org>; 'tryce@cnv.org' <tryce@cnv.org>; 'aboel@oakbay.ca' <aboel@oakbay.ca>; 'HStewart@oakbay.ca' <HStewart@oakbay.ca>; 'rmacleod@portmoody.ca,' <rmacleod@portmoody.ca>; 'Wil.Wedel@princegeorge.ca' <Wil.Wedel@princegeorge.ca>; 'tturner@quesnel.ca' <tturner@quesnel.ca>; 'ftewfik@richmond.ca' <ftewfik@richmond.ca>; 'lindsay.chase@saanich.ca' <lindsay.chase@saanich.ca>; 'hgoodland@scius.ca' <hgoodland@scius.ca>; 'psorfleet@sparwood.ca' <psorfleet@sparwood.ca>; 'bdollevoet@summerland.ca' <bdollevoet@summerland.ca>; 'RDube@surrey.ca' <RDube@surrey.ca>; 'richards@syncraconstruction.com' <richards@syncraconstruction.com>; 'nbrooks@terrace.ca' <nbrooks@terrace.ca>; 'sean.mckinnon@tn-bc.ca' <sean.mckinnon@tn-bc.ca>; 'p.zadeh@civil.ubc.ca' <p.zadeh@civil.ubc.ca>; 'ssf@civil.ubc.ca' <ssf@civil.ubc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'Amy.Vilis@vancouver.ca' <Amy.Vilis@vancouver.ca>; 'andrew.wroblewski@vancouver.ca' <andrew.wroblewski@vancouver.ca>; 'Rebecca.Doel@vancouver.ca' <Rebecca.Doel@vancouver.ca>; 'cgray@victoria.ca' <cgray@victoria.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>; Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>; Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>; Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>; 'will.grass@gov.bc.ca' <will.grass@gov.bc.ca>
Subject: Digital Innovation in Housing Construction

CAUTION: External E-mail.

Greetings everyone,

Thank you again for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction.

Attached is the *Ministry of Housing – Digital Innovation in Housing Construction, What We Heard Summary*. It also includes the Ministry's key engagement activities planned over the summer as we prepare to move into our product development stage this fall.

We really appreciated your participation and look forward to continuing to collaborate on this important work.

Wishing you all a safe and happy weekend!

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

NOTIFICATION - eApprovals Item ID: 81525 - Item Forwarded - Due 2023-09-22

From: JPSS eApprovals <donotreply@sp.gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Phillips, Linda HOUS:EX <Linda.Phillips@gov.bc.ca>, Alexander, Jessica C HOUS:EX <Jessica.Alexander@gov.bc.ca>, Tubman, Tammy HOUS:EX <Tammy.Tubman@gov.bc.ca>, Levesque, Starr HOUS:EX <Starr.Levesque@gov.bc.ca>
Sent: September 19, 2023 1:35:53 PM PDT

Levesque, Starr PSSG:EX [Colleague of Housing Correspondence] forwarded an eApprovals item to Ruhland, Brian for action

Comment: Hi Brian, to me by mistake, you can complete item. Thank you, Starr

#: 61295

Title: UDI Letter - Proposed BCBC Changes 2023

Full Name: Cassandra Smith

Due Date: 9/22/2023

Category: Correspondence - Reply Direct

Go to item...

RE: Digital Permitting QA draft

From: May, Zachary HOUS:EX
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>, Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: September 19, 2023 4:14:27 PM PDT
Attachments: NR Digital Permitting Updates Sept. 19 4pm_zm.docx
Suggested changes[s.13]
s.13

Zac

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Tuesday, September 19, 2023 3:59 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Digital Permitting QA draft

Hey Zach
That's great, thank you. All changes accepted, but still wanting to sharpen the lead. See changes to the suggested version in the attached.

s.13

VICTORIA – B.C. is moving forward with digitizing[s.13] the building permit process with the creation of a Digital Leadership Council and partnerships with 15 local governments and one First Nations government that will work with the government to shape how the digital building permit process will look and work.

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, September 19, 2023 3:22 PM
To: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Cc: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: FW: Digital Permitting QA draft

ED approved.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Tuesday, September 19, 2023 1:37 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Digital Permitting QA draft

My edits

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, September 19, 2023 12:31 PM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Subject: Re: Digital Permitting QA draft

Sounds good.

Also, John is the exec on this item, not Bindi.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Tuesday, September 19, 2023 12:20:22 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Subject: RE: Digital Permitting QA draft

Yes Zach, thanks. Hoping we can get those COV QA lines figured out too, so we can send it all over to Bindi in the AM.

Travis

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, September 19, 2023 12:19 PM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Subject: Re: Digital Permitting QA draft

Will do. End of day ok?

Get Outlook for iOS

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Tuesday, September 19, 2023 12:18:05 PM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Subject: RE: Digital Permitting QA draft

Nicole and Zach,

Please review NR and if there's a chance for clarity/to put something into plain language, please suggest.

Thanks
Travis

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Tuesday, September 19, 2023 11:16 AM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Subject: RE: Digital Permitting QA draft

Thanks Travis – Ill work on the first question today and get back to you.

Just wanted to check-in and see if the plan is currently still to issue the NR on the 27th?

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Tuesday, September 19, 2023 11:10 AM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Digital Permitting QA draft

Hey Nicole
It's no problem on our end to add some COV material in, s.13; s.16
s.13; s.16

What I would suggest, but what will need to go through approvals, is something like this.
s.13; s.16

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>

Sent: Monday, September 18, 2023 4:38 PM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Subject: FW: Digital Permitting QA draft

ZM still has to look but wanted to share what COV sent over

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Vukosavljevic, Nicole HOUS:EX
Sent: Monday, September 18, 2023 11:51 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Digital Permitting QA draft

I sent COV some excerpts from the KMQA s.13 They didn't have any suggestions on reframing our existing language but s.13 Ok to add this into the KMQA?

s.13; s.16

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, September 18, 2023 8:52 AM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: Digital Permitting QA draft

Hi Travis,

ED approved QA doc for digital permitting.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Page 117 of 356 to/à Page 118 of 356

Withheld pursuant to/removed as

s.13 ; s.16

For Review: NR and QA for Digital Permitting

From:	Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
To:	Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc:	Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Sent:	September 19, 2023 4:46:04 PM PDT
Attachments:	NR Digital Permitting Updates Sept. 19 420pm .docx, QA_Digital permitting update Sept. 19 440 pm.docx

Hi John

Please review: NR and QA for upcoming Sept. 28 digital permitting announcement.

@May, Zachary HOUS:EX Flagging two new QAs, No. 12 & 13, regarding the City of Vancouver's concerns.

Thanks
Travis

Travis Paterson | Senior Public Affairs Officer
Government Communications and Public Engagement
Ministry of Housing
250-882-8105
he, him

Page 120 of 356 to/à Page 121 of 356

Withheld pursuant to/removed as

s.13 ; s.16

CONFIDENTIAL ADVICE – SEPT. 28, 2023 (DRAFT)

Digital Permitting
Questions & Answers

Key Messages:

- The Province is taking action to position BC as a North American leader in digital permitting and construction, in partnership with Indigenous, local government, and industry leaders.
- The Province is establishing a Digital Leadership Council, consisting of 11 organizations representing the housing development and technology sectors, to keep the Province moving towards our vision and to become a North American leader.
- One of the first changes be the development of a provincial building permit submission tool that will make it easier and faster to submit building permits for new housing.
- We have heard from industry and local governments that different processes and formats in each community creates barriers and increases costs for new housing. The provincial building permit submission tool will make it fast and easy to determine when a building permit submission is complete and provide automatic review of key parts of the BC Building Code to speed up the review process.
- This is why we are partnering with 15 local governments and one First Nation government, along with select industry partners, to development and pilot the new building permit tool in March 2024. These partnerships will ensure that we build a tool that addresses the real challenges that communities and industry are experiencing in during the building permit process.
- The new tool will address these challenges by:
    - Standardizing the information collected in building permit applications across the province,
    - Checking the completeness of a building permit application,
    - Providing an evaluation of compliance with selected parts of the BC Building Code, and
    - Allowing for online permit submission.
- Through this we will help make the building permitting process quicker, more collaborative and deliver better outcomes for British Columbians.
- Advancing digital permitting and construction is part of the Province's new Homes for People plan, which was announced on April 3, 2023.

Questions and Answers:

1. What are you announcing?

- We are continuing to take action to make BC a North American leader in digital permitting and construction by:
    - Establishing a new Digital Leadership Council, made up of 11 representatives from across the housing development and tech sectors to keep us on track to becoming a North American leader.
    - Pilot partnerships with 15 local governments and one First Nation community to work closely with us to guide the development of the new digital permitting tool and test the tool in their communities.
- The Digital Leadership Council will commence in October.
- We are starting to work with pilot communities and select industry partners in October to develop the new digital building permit tool.

2. What are the organizations in the leadership council?

Table 1: List of Leadership Council contacts

Member	Organization
Jazz Pabla Director of Information Services	City of Kelowna
Tim Ryce Chief Building Official	City of North Vancouver
Rene Cravioto Program Manager – Innovation & Service Delivery	City of Vancouver
Tyler Wightman Executive Director	Building Officials' Association of BC
Helen Goodland Principal, Head of Research and Innovation	SCIUS Advisory, Inc.
Heidi Yang CEO	Engineers and Geoscientists BC
Mark Vernon CEO	Architectural Institute of British Columbia
Neil Moody CEO	Canadian Home Builders Association of BC
Anne McMullin President & CEO	Urban Development Institute
Sue Paish CEO	Digital
Dr. Sheryl Staub-French Director of BIM TOPiCS Lab	University of British Columbia

3. What is the pilot partnership?

- The pilot communities have committed to working very closely with us to guide the development of the digital building permit tool and test the tool in their communities.
- The pilot communities will share their challenges with the permitting process, lessons learned through their digital journeys to-date, and provide feedback on the design and development of the tool's features throughout the entire process.
- A small group of select industry partners, including homebuilders, developers, architects, and engineers will join the pilot communities in supporting the development of the tool.

- Bringing communities and key industry partners together through the pilot partnership ensures that we are developing a new tool that makes the building permitting experience better for those involved in the process.

4. What local governments comprise the pilot partnership?

Jurisdictions
1. District of Saanich*
2. City of Burnaby
3. City of Campbell River
4. City of Coquitlam
5. City of Kamloops*
6. City of Langley
7. City of Maple Ridge
8. City of Nanaimo
9. City of North Vancouver
10. City of Surrey
11. City of Terrace
12. City of Victoria*
13. City of Vancouver*
14. Cowichan Valley Regional District
15. Town of Qualicum Beach
16. Tsleil-Waututh Nation

*Selected municipalities for housing targets

5. Why is there only one First Nations community involved?

- Ensuring First Nation representation in our pilot partner communities is important to reflecting their unique experiences and priorities in the new digital building permit tool.
- We are continuing to discuss pilot partnership opportunities with a few First Nations communities. We understand that the capacity of communities may be limit their ability to be a pilot partner, and we are seeking additional resources with the goal of supporting more First Nations communities to join as pilot partners.
- Throughout the development of the building permit tool, all local governments and First Nations will have an opportunity to see demos of the features and provide feedback. This provides a less time-consuming way to provide feedback without being a pilot community.

6. What will digital permitting look like?

- We know that it is hard for homebuilders to know what is required for a building permit application when each community has its own administrative requirements. This creates confusion, slows down the process, and often leads to local governments receiving incomplete submissions that they can't accept.

- Once a building permit is ready to be reviewed for compliance with the BC Building Code, inconsistent interpretation of code requirements across communities creates disagreements between building officials and homebuilders, mistakes, and further slows the approvals process.
- The new tool will address these challenges by:
    - Standardizing the information collected in building permit applications across the province,
    - Checking the completeness of a building permit application,
    - Providing an evaluation of compliance with selected parts of the BC Building Code, and
    - Allowing for online permit submission.

7. How long will it take to get digital permitting up and running?

- The digital building permit tool will be ready for piloting in the 15 local governments and at least one First Nations community in March 2024. Some features will be available prior to March for testing.
- Following March 2024, we will work to expand the use of the digital building permit tool to other communities.
- The digital permitting tool will be updated on an ongoing basis to respond to the changing needs of the building sector.

8. Are you modelling your approach on one that's proven successful already?

- We know that digital permitting has had a lot of success in countries like Finland, the UK and Singapore, where timelines improved considerably.
- We've also seen numerous local governments across the province implement digital permitting with success.
- These are digital permitting models that will certainly inform our approach, to understand what works well and what doesn't, and this is why working we are working closely with a small group of local governments.
- We want to build upon the existing success of local governments and take the next step forward by creating a standard set of building permit information requirements across the province and adding unique code compliance functionality.

9. Will this integrate with the single permitting window approach you announced?

- The Ministries of Housing and Water, Land and Resource Stewardship are working towards a common goal of making permitting processes for housing more transparent and easier for homebuilders/developers to understand how to comply with permit and regulatory requirements.
- The Ministries are working closely to align our approaches, share lessons learned, and support the integration of our systems in the future.
- As my ministry developers the new building permit tool, we are considering how this work will lay the foundation for a platform that integrates all the different types of permits across the housing development process.

10. How much will this cost government?

- This work is critical to B.C.'s housing priorities and B.C.'s economy, and we are working with partners in industry and all levels of government to determine what investments are required to make this work a success.

- The Province has committed $1.45M in capital funding and staffed a dedicated team to develop the pilot building permit submission tool.

11. By how much will it speed up the permitting process?

- Countries that have digitized their permitting processes have seen real success with the move to digital and significant improvements in permit processing times.
- Every situation is somewhat unique, but it's clear that a move to digital permits can deliver significant improvements in permit timelines.
- We believe that digitization here in B.C. will also result in a marked improvement in local government permitting times.

12. Will digital permitting work the same for all cities (local governments)?

- The goal is for a uniform digital permitting program to use with the BC Building Code, however, some local governments, such as the City of Vancouver, have already launched interactive digital tools for the permitting process that are currently unique to their administrations.

13. What is different about the City of Vancouver's role in this partnership?

- The City of Vancouver is one of the local governments helping to guide the development of a provincial digital permitting tool for the BC Building Code.
- However, the City of Vancouver is unique in that it has its own building by-laws.
- Earlier this year, the City of Vancouver proudly introduced two new interactive digital tools as part of its ongoing commitment to modernize and prioritize the permitting experience.
- Please contact the City of Vancouver for more information.

-END-

FW: UDI Letter - Proposed BCBC Changes 2023

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Cc: Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Sent: September 20, 2023 9:55:14 AM PDT
Attachments: image002.jpg, image004.jpg, image005.jpg, image006.jpg, image003.jpg, image001.jpg

FYI

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Wednesday, September 20, 2023 9:53 AM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Cc: Beninger, Dave HOUS:EX <Dave.Beninger@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: UDI Letter - Proposed BCBC Changes 2023

Hi Sian, summary below on concerns raised by UDI on Building Code changes and provincial response info.

1. **UDI encourages the to Province delay implementing the 100% adaptable code requirements.**
    - The Province received several requests from industry partners, including developer and building organizations, to delay implementation of the new requirements to enable mitigation measures to provide the marketability and ensure affordability of new housing.
    - In response, the Province is planning to a one-year transition period. The adopting Ministerial Order, pending the Minister's approval, defines the application effective date as December 2024.

2. **UDI requests stronger in-stream protection for projects under the review process.**
    - The December 2024 effective date allows the continuation of in-stream projects when a building permit application is submitted prior to December 20, 2024.

3. **UDI suggests the Province implement a standardized floor area ratio exemption to avoid responsibility on local governments.**
    - The Province plans to collaborate with and encourage local governments to continue to offer density bonusing and floor space area exemptions to support developers and the creation of more accessible and sustainable housing.
    - Discussions with local governments and First Nations are planned to occur this fall.

4. **UDI recommends the Province consider an incremental approach to achieving 100% adaptable.**
    - To increase the supply of equitable and accessible housing options, the Province plans to proceed with 100% adaptable. This is considered a significant shift that considers human rights "duty to accommodate", prevents premium pricing for adaptable housing, support the housing needs of more people, and represents an important move towards complete accessibility.

5. **The Province should consider adopting the City of Vancouvers' adaptable bathroom requirements.**

- The new BC Building Code 2023 adaptable bathroom requirements harmonize clear maneuvering space with those of the National Building Code 2020.
- The new clearance space considers anthropometric data (i.e., the study of how the human body interacts with the built environment) to include the 90 percent of wheelchair devices.
- This is more than what is required (approximately 50 percent of wheelchairs per the 2015 National Building Code).
- City of Vancouver has not yet adopted these requirements.

6. **UDI indicates a considerable impact to useable and sellable floor space when implementing the new proposed adaptability requirements.**
   The Province's one-year transition provides time for regulated industry education partners to develop design solutions to better support developers and builders to implement the new requirements. The delayed effective date also provides architects and engineers time to adjust projects to protect the viability and affordability of housing, while also incorporating adaptable dwelling units.

   The Province has begun collaboration with BC Housing to develop and deliver adaptable dwelling unit floor plans to illustrate how the new requirements can be achieved.

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Thursday, September 14, 2023 12:20 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Beninger, Dave HOUS:EX <Dave.Beninger@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi folks,

I don't have any technical expertise on the pieces UDI is raising but I'd like to get BSSBs take on what they've raised and whether we either have/intend to addressed their concerns or are factoring in a response to their concerns for when we announce the code. It's not a huge rush as I know folks are very busy but if you can let us know by next week, prior to the announcement that would be great.

Tx,
Siân

From: Cassandra Smith
Sent: September 7, 2023 2:50 PM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: FW: UDI Letter - Proposed BCBC Changes 2023

Hi Mark and Siân,

Here is a copy of the note we sent to the BSSB regarding the proposed BC Building Code changes. If you have any questions or want more information about the specific examples, let me know and I can connect you with the developers.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

From: Cassandra Smith
Sent: September 7, 2023 2:47 PM
To: 'Jensen, Jun'ichi HOUS:EX' <Junichi.Jensen@gov.bc.ca>
Cc: 'Sawchuk, Bindi AEST:EX' <Bindi.Sawchuk@gov.bc.ca>; 'May, Zachary OHCS:EX' <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Letter - Proposed BCBC Changes 2023

Hello Jun'ichi,

As I mentioned previously, we have put together some additional examples to illustrate the impacts of the proposed BC Building Code changes on new construction, specifically the adaptability requirements. Please find attached a letter outlining these impacts and our concerns, along with suggested mitigation measures.

If you would like to discuss these further or have questions related to the specific examples, please let us know and we would be happy to schedule a follow-up session.

Thanks,
Cassandra

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

Fwd: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

From: May, Zachary HOUS:EX
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>, Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Sent: September 21, 2023 8:18:08 AM PDT
Attachments: image001.jpg, DRAFT ICAC Minutes April 24 2023.docx

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Milly Luc <mluc@bchousing.org>
Sent: Thursday, September 21, 2023 8:12:32 AM
To: rseifi@egbc.ca <rseifi@egbc.ca>; Denisa Ionescu <dionescu@bchousing.org>; Esther de Vos <edevos@bchousing.org>; Michelle Hayes <mhayes@bchousing.org>; Peter Mitchell <MITCHELL@egbc.ca>; Ron Rapp <ron@havan.ca>; patrick.ryan@vancouver.ca <patrick.ryan@vancouver.ca>; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; jjung@asttbc.org <jjung@asttbc.org>; Adam Terris <aterris@bchousing.org>; Tony Gioventu (external) <tony@choa.bc.ca>; Scott McIntyre (external) <smcintyre@egi.ca>; Neil Moody <neilmoody@chbabc.org>; Mary Gerges <mgerges@bchousing.org>; Mark Vernon <mvernon@aibc.ca>; Mark Sakai <msakai@bcrea.bc.ca>; Howard Friedman (external) <howard.friedman2@travelers.com>; Chris Gardner <chris@icba.ca>; Chris Atchison <chris.atchison@bccassn.com>; Ann McMullin <amcmullin@udi.org>; Vincent Tong <vtong@bchousing.org>; Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Tafadzwa Kadye <tkadye@bchousing.org>
Subject: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning all,

Hope this note finds you well. In preparation for our upcoming meeting, please send me any items you would like to add to the agenda.

For your reference, I have attached the draft minutes from our last meeting.

Please send in your items **by October 9th, 2023 EOD.**

Thank you,



Milly Luc (she/her)
Executive Assistant to Vincent Tong, CEO

e: mluc@bchousing.org | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səl̓ilwətaʔɬ (Tsleil-Waututh) people.

The 21st meeting of the **BC HOUSING INDUSTRY AND CONSUMER ADVISORY COUNCIL** was held on Monday, April 24, 2023 via TEAMs conference call.

IN ATTENDANCE:

Industry and Consumer Advisory Council:
Mark Sakai, BC Real Estate Association
Chris Atchison, BC Construction Association
Peter Mitchell, Engineers, and Geoscientists British Columbia
Jason Jung, ASTTBC
Tony Gioventu, Condominium Home Owners Association
Anne McMullin, Urban Development Institute
Ron Rapp, HAVAN

Ministry Representatives:
Zachary May, Building and Safety Standards Branch

BC Housing Representatives
Vincent Tong, Acting CEO (Chair)
Michelle Hayes, Executive Director and Registrar, Licensing and Consumer Services
Denisa Ionescu, Senior Manager, Technical Research and Education
Adam Terris, Director, Content Strategy
Milly Luc, Executive Assistant to CEO (recording)

Regrets:
Tyler Wightman, Building Officials Association of BC
Mark Vernon, Architectural Institute of British Columbia
Ron Rapp, HAVAN
Chris Gardener, Independent Contractors Association of BC
Howard Friedman, Travelers Guarantee
Andrew Armstrong, Aviva Canada
Chris Watters, RSA Home Warranty
Neil Moody, Canadian Home Builders' Association of BC
Mary Gerges, ED, Reconciliation and Equity Strategies

1. Welcome & Introductions

V. Tong welcomed participants to the meeting and acknowledged that BC Housing delivers its mission on the ancestral homelands of Indigenous Peoples across B.C., each with their own unique traditions and history. Respect was offered to their Peoples, past and present.

V. Tong went through the agenda and noted that we have updates from attendees.

2. APPROVAL OF AGENDA AND MINUTES

Today's Agenda and the minutes of October 31, 2022 were approved.

3. HOUSING STRATEGY ANNOUNCEMENT

V. Tong advised earlier this month, on April 3rd, the Province released the Homes for People action plan, a refreshed housing strategy that builds on the 2108 Homes for B.C.: A 30-Point Plan for Housing Affordability in British Columbia but focuses more on the housing needs of middle-income groups so that housing can be within reach for everyone.

Homes for People includes the launch of Belonging in BC, a comprehensive Homelessness Plan with the goals to prevent and reduce homelessness, through prevention, immediate response, and stability and community integration. This plan is the result of significant efforts across Ministries and BC Housing.

The new housing strategy includes funding for BC Housing to create approximately 25,000 new affordable homes for individuals, seniors, families, women, people experiencing or at risk of homelessness.

4. LICENSING AND CONSUMER SERVICES UPDATE

M. Hayes provided an update on licensing and new home construction stats. Updated on the BC Energy Step Code condition for licensed residential builders, which requires all general contractors to demonstrate competence building to Step 3 of the step code by taking training or providing evidence of demonstrated experience. To date 187 builders have satisfied the condition.

4.1 Consumer and Builder survey results

M. Hayes provided a high level of the results of the annual survey. The licensed residential builder survey is an annual provide wide survey. Overall satisfaction with the Residential builder Licensing System remains consistent with 90% very or somewhat satisfied. Some feedback includes builders would like to see improved CPD content and feels it is too repetitive and expensive. 70% of builders reported working with an energy advisor last year, up from 64% in the previous year. The top challenges reported associated with building to BC Energy Step Code is cost and lack of trades.

The (consumer survey) Current Homeowner survey takes place every two years.

M. Hayes highlighted some of the major findings including new residential building activities by region, climate changes factors and how that impacts the construction industry, and the percentage of builders building to step code 3.

5. RESEARCH UPDATES

5.1 Building Excellence Grant

D. Ionescu provided an update on the 2023 Building Excellence Research & Education grant program has wrapped up. BC Housing will fund 8 projects this year for a total of $223,600 in grant funding.

5.2 March 2023 New Home Registry Report

D. Ionescu provided highlights of the report. In the first three months of 2023, 9,843 new homes were registered in B.C., including 1,674 single detached3 and 8,169 multi-unit homes.

So far in 2023, total homes registration is down compared to 2022; registration for multi-unit homes decreased by 36.1%; single detached down by 38.7%.

6. OFFICE OF HOUSING AND CONSTRUCTION STANDARDS

6.1 Update on Building Code Consultation

Z. May provided an update on Building codes to date. Effective May 1, 2023 BC Building codes changes enable 20% better energy efficiency and provide an opt-in zero carbon step code for all new construction.

6.2 Digital Building Codes and Permits Initiative

The BC Building Code is currently only available in print or PDF format. The digitally enhanced code will include features that will make it faster and easier for builders and building inspectors to understand and interpret the information. It will also allow for more automation during building permit reviews.

Government is investing in Digital, previously known as the Digital Technology Supercluster, which is part of the federal Global Innovation Cluster network, with a $9-million, three-year grant to accelerate the development and adoption of innovative technologies in the construction sector. This work will involve collaborating with several partners in industry, academia and at all levels of government to create digital solutions for the construction sector and designing pilot projects to test those solutions. The plan will speed up delivery of new homes, increase the supply of middle-income housing, fight speculation and help those who need it the most.

7. BCH RECONCILATION STRATEGY

This update has been deferred to the meeting on October 23, 2023.

8. BCH ACCESSIBILITY STRATEGY

This update has been deferred to the meeting on October 23, 2023.

9. DISCUSSION ITEMS

9.1 Heat Pumps

T. Gioventu introduced this item for discussion. Recently some heat pumps were installed in some units in Vancouver for cooling; however, the installation did not meet code.

As the first few units are being installed in another building, engineers from Morrison Hershfield will be documenting detailed specification and come back to BCH and perhaps we can establish some standards collectively. Warranty providers have made it clear that if owners install the heat pumps with penetration after the envelop and cladding are complete, that will nullify the warranty.

D. Ionescu added that BCH + CoV (City of Vancouver) are putting together a document for builders of existing buildings on wall penetration when installing heat pumps or exterior wall or balconies and what provisions they need to look at.

9.2 Glass Balconies

T. Gioventu introduced this item for discussion. There is a research project underway understanding the effects of glass panels on balconies that came off during recent windstorms last fall; this is not limited to BC but to other provinces. CEO Engineering in Ottawa are writing the research and creating the test mock up imaging for the bulletin. The bulletin will be release in the

coming months. This is to bring awareness of the issue that suspended glass panels will need regular maintenance and inspection.

10. **ROUND TABLE**

V. Tong opened the meeting for a roundtable discussion with the Council to determine what issues have emerged for industry and consumers.

T. Gioventu noted that there will be a 1 Day Electrification Conference scheduled for October 11th. It's a partnership between BCH, CoV, BC Hydro, and Ministry of Energy.

T. Gioventu advised that there is a spike in complaints from market to lease hold housing on indigenous lands that are not in the BC charter agree. Is there a way BCH facilitate conversation or relationship with FNs with respect to building failures, management issues, cost affordability various issues to provide support.
V. Tong advised if Tony has contacts to those market lease hold stakeholders, then BCH can look into facilitating something in the near future and partnership with the Ministry of Housing.

T. Gioventu also advised entered Industry partnership with AHMA and Landlord BCH for an application to the National Research Council grant for the electrification and energy upgrade grant. Will enable facilitation opportunities for energy managers, coaches and consultants if successful with the application.

P. Mitchell – busy working with Architectural Institution of BC in terms issuing communication to various stakeholders regarding architectural regulations , new thresholds requirements go in effect Feb 2023.
Also discuss the various work that EGB is doing on building resiliency, including workshops/ presentations to the public.

ADJOURNMENT

There being no further business, the meeting was adjourned at 2:30 p.m. Next meeting will be scheduled in October 2023.

RE: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Sent: September 22, 2023 8:52:09 AM PDT
Attachments: image001.jpg

Ok, Zac, if appropriate please forward the invite. I will provide an update at the round table portion, so no need to add the item to the agenda.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Friday, September 22, 2023 8:44 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Subject: RE: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

Hi Juni –

More than happy if you can provide a BCBC update.

Kevin

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 21, 2023 4:37 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Subject: RE: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

Thanks, Zac. Will you attend and do another digital update?

Kevin, I can do a BCBC update if you like. I'm not sure how/if the format has evolved. At one point Cheryl did the updates as ADM but it looks to be more staff level report outs?

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, September 21, 2023 8:18 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Subject: Fwd: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

Best,
Zachary D. May, MBA

Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Milly Luc <mluc@bchousing.org>
Sent: Thursday, September 21, 2023 8:12:32 AM
To: rseifi@egbc.ca <rseifi@egbc.ca>; Denisa Ionescu <dionescu@bchousing.org>; Esther de Vos <edevos@bchousing.org>; Michelle Hayes <mhayes@bchousing.org>; Peter Mitchell <MITCHELL@egbc.ca>; Ron Rapp <ron@havan.ca>; patrick.ryan@vancouver.ca <patrick.ryan@vancouver.ca>; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>; May, Zachary OHCS:EX <zachary.may@gov.bc.ca>; jjung@asttbc.org <jjung@asttbc.org>; Adam Terris <aterris@bchousing.org>; Tony Gioventu (external) <tony@choa.bc.ca>; Scott McIntyre (external) <smcintyre@egi.ca>; Neil Moody <neilmoody@chbabc.org>; Mary Gerges <mgerges@bchousing.org>; Mark Vernon <mvernon@aibc.ca>; Mark Sakai <msakai@bcrea.bc.ca>; Howard Friedman (external) <howard.friedman2@travelers.com>; Chris Gardner <chris@icba.ca>; Chris Atchison <chris.atchison@bccassn.com>; Ann McMullin <amcmullin@udi.org>; Vincent Tong <vtong@bchousing.org>; Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Tafadzwa Kadye <tkadye@bchousing.org>
Subject: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning all,

Hope this note finds you well. In preparation for our upcoming meeting, please send me any items you would like to add to the agenda.

For your reference, I have attached the draft minutes from our last meeting.

Please send in your items **by October 9th, 2023 EOD.**

Thank you,

BC HOUSING

Milly Luc (she/her)
Executive Assistant to Vincent Tong, CEO

e: mluc@bchousing.org | d: 236.984.0309

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URBAN
DEVELOPMENT
INSTITUTE

SUITE 1100
1050 W PENDER STREET
VANCOUVER, BC V6E 3S7

To: The Hon. Ravi Kahlon, Minister of Housing
From: The Urban Development Institute (UDI)
Date: September 28, 2023
Re: Metro Vancouver Development Cost Charge Increases

Context

Metro Vancouver Regional District (MVRD) currently charges builders development cost charges (DCCs) on new residential and non-residential construction. The funds that are collected are used to pay for regional serving infrastructure and service delivery for water and liquid waste. These are allocated based on a Capital Plan approved by Metro Vancouver's Board of Directors.

These DCCs are charged by the regional district, although they are administered by local governments. The charges are in addition to the development charges levied by local governments, and TransLink. Metro Vancouver follows the requirements set out in the *Local Government Act* for DCCs which prescribes only a one-year in-stream protection.

Proposals

Metro Vancouver is reviewing its DCC program and proposing to make three key changes:

1. Create a new DCC for parkland acquisition: This will fund regional parks and increase the amount of park space available to residents beyond the current municipal park standards.
2. Decrease the regional assist factor for all DCCs to 1% by 2027: The assist factor represents the component of infrastructure investments supported directly the municipality and tax base.
3. Account for cost increases and new items added to Metro Vancouver's financial plan.

These proposals will increase Metro Vancouver's combined DCCs by up to 3.5 times by 2027, resulting in charges of between $17,663 and $22,108 per apartment unit – including purpose-built rental homes. These are illustrated in the table below:

TOTAL REGIONAL DCC

TOTAL REGIONAL DCC	Existing	Step 1	Step 2	Step 3 1%
VSA				
Residential Lot Development Unit	$10,027	$21,941	$29,196	$34,133
Townhouse Dwelling Unit	$8,679	$19,874	$26,406	$30,861
Apartment Dwelling Unit	$6,249	$13,392	$17,873	$20,906
Non-Residential (per square foot)	$5.02	$10.84	$14.37	$16.78
NSSA				
Residential Lot Development Unit	$9,992	$21,203	$28,385	$33,214
Townhouse Dwelling Unit	$8,482	$19,277	$25,748	$30,113
Apartment Dwelling Unit	$6,291	$13,099	$17,548	$20,533
Non-Residential (per square foot)	$5.06	$10.54	$14.04	$16.40
LISA				
Residential Lot Development Unit	$10,005	$17,126	$24,058	$28,512
Townhouse Dwelling Unit	$8,452	$15,208	$21,423	$25,404
Apartment Dwelling Unit	$6,303	$10,610	$14,906	$17,663
Non-Residential (per square foot)	$4.93	$8.09	$11.43	$13.56
FSA				
Residential Lot Development Unit	$12,946	$22,886	$30,218	$35,270
Townhouse Dwelling Unit	$11,086	$20,296	$26,865	$31,375
Apartment Dwelling Unit	$8,530	$14,396	$18,956	$22,108
Non-Residential (per square foot)	$6.69	$10.95	$14.49	$16.91

Challenges

Cost Impact

The proposed DCC increases are significant and will add to the cost of new construction. These increased costs will put upward pressure on home prices and rents, in contrast to the objectives of the Province and local governments to build more housing and make it more affordable. Due to the rapid escalation of these costs, along with the other cost pressures currently experienced by builders, it will be challenging for the land market to adjust. This will undermine the ability of builders to obtain development sites and deliver new housing.

This was acknowledged through the economic testing conducted by Coriolis Consulting, as part of Metro Vancouver's review. Metro Vancouver estimates that the impact of the proposed DCC increases is similar to the impact of rising financing costs on new housing over the past 12 months, which have had an enormous impact on housing construction.

This is occurring at a time when construction costs across the country, including Metro Vancouver are rising. A recent report from RBC Economics found that residential construction costs in Canada have increase by 51% over 2020 levels.

The following cost summary illustrates the impacts on a hypothetical project if it was subject to the proposed DCC rates. The summary shows the DCC increases over a five-year time horizon, including the large increases that Metro Vancouver had introduced at the beginning of 2023. ***For this example, the Metro Vancouver DCCs will have increased by over 6 times the 2022 rates, over a five-year period.*** The cumulative impact of these increases along with fee increases from other levels of government, interest rate increases, and construction cost escalations are creating substantial barriers for new housing.

BURNABY PROJECT DCC FORECAST					*623 Units*
	Previous	**Existing**	**Proposed**		
	01-Jan-22	**01-Jul-23**	**01-Jan-25**	**01-Jan-26**	**01-Jan-27**
Water DCC	$0	$2,656,023	$4,233,057	$6,541,883	$7,619,003
Liquid Waste DCC	$2,200,367	$2,661,010	$4,551,580	$4,896,283	$5,414,273
Park DCC	$0	$0	$188,870	$377,740	$747,377
Total	$2,200,367	$5,317,033	$8,973,507	$11,815,907	**$13,780,653**

For rental housing the impacts are even more severe, as these projects are more sensitive to interest rate increases as a result of their high equity requirements. ***The recent announcement by the Federal Government to rebate 100% of the GST for new rental housing will certainly support future projects and those stalled in the pipeline. However, if the cost forecast above were for a rental project, we estimate that nearly 70% of this benefit could be eliminated by 2027 because of Metro Vancouver's DCC increases.*** This means that rental projects will continue to face the barriers that have resulted in decisions to defer projects – or to not proceed with them at all.

	Total	Per Unit	% of GST rebate savings eliminated by DCC increases
Savings from Federal GST Rebate	-$19,708,920	-$31,619	
Cumulative increase in costs from DCCs	**$13,780,653**	**$22,108**	**69.9%**

Cost Proportionality
The proposed DCC increases will disproportionally affect new homeowners and renters, meaning that those households are now able to buy a new home or live in a new purpose-built rental building are paying the most to expand and upgrade regional infrastructure. By decreasing the assist factor to 1% for all DCCs by 2027, this shifts the burden onto the new home sector and off of those who already own homes in the region. If housing supply increases in the region, inevitably, so will the number of residents paying for regional infrastructure

Timeline and Process
UDI has repeatedly raised the challenge created for builders when charges are increased without adequate notice to factor these cost increases into the price of the land. Although Metro Vancouver is attempting to address this concern by setting out the DCC increases to 2027 – this will still likely affect many projects that are already underway, due to the lengthy review and approval timelines. In addition, the land market will adjust very slowly, faced with these rapid cost increases, as vendors will likely maintain their price expectations or take properties off the market until they can be met.

Metro Vancouver is currently conducting engagement with stakeholders, including the development industry, however, the proposals are planned to be finalized and submitted to the Provincial Inspector of Municipalities for review by the end of October – leaving little time to address the many concerns raised during the engagement.

This engagement process will not allow for the review of additional economic testing currently being conducted by Metro Vancouver. The testing that has been made available is both limited in scope and fails to assess the impact that other identified cost pressures (financing and hard costs) will have in addition to the proposed DCC increases. The cumulative impact that these costs will have on new construction, the land market and the ability of builders to deliver new homes cannot be understated, given that Metro Vancouver municipalities will be expected to achieve housing targets.

Recommendations
We recognize the need to upgrade and expand regional infrastructure to serve new residents coming to Metro Vancouver. We also acknowledge the principle that growth pays its fair share of these costs. However, the impact that these cost increases will

have on new housing delivery is substantial. The impacts are so large that they will impact the ability to deliver new housing of all tenures and levels of affordability.

We recommend four key measures in response to Metro Vancouver's proposed DCC increases:

1. That these changes *not be approved* by the Provincial Inspector of Municipalities, until a robust analysis of the impact of that these changes will have on the viability of development is conducted and provided for consultation.
2. Going forward, we recommend that role of the Province in reviewing regional and municipal DCCs includes the impact to economic viability of projects
3. Extend in-stream protections beyond the standard one-year period and phase in cost increases over a much longer period. Further, the new Parks DCC program needs to be deferred to after the other DCC increases are phased in.
4. Financial support from senior levels of government to regional districts to pay for the infrastructure that is needed to service growth. For example, regional projects should be eligible for the Federal *Housing Accelerator Fund*. However, this additional funding should be tied to reducing charges on new development.

NOTIFICATION - Pending Removal of eApprovals Item ID: 81525 - Correspondence - UDI Letter - Proposed BCBC Changes 2023 - Due 9/22/2023

From: JPSS eApprovals <donotreply@sp.gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: September 28, 2023 1:02:33 AM PDT

This is a reminder that eApprovals item ID: 81525 will be deleted in 24 hours. Please print item history and download all documents as appropriate.

Go to item

-----Original Appointment-----
From: Shepherd, Lisa HOUS:EX On Behalf Of Collins, Teri HOUS:EX
Sent: Monday, September 25, 2023 9:13 AM
To: Collins, Teri HOUS:EX; Sawchuk, Bindi HOUS:EX
Subject: MRK | UDI Quarterly Meeting
When: September 28, 2023 9:00 AM-10:00 AM (UTC-08:00) Pacific Time (US & Canada).
Where: Zoom

Meeting:

MRK and UDI

Topic:

* Quarterly meeting with a focus on rental housing production challenges and issues scan

Date & Time:

September 28th 9 -10am

Location/Link:

Urban Development Institute is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting
s.15; s.17

Meeting Materials

-DMO-KMQA once agenda is received

Attending from Housing:

MO – Mark/ Siân

DMO – Teri

BCH – NA

Attending from (other ministry/stakeholder):

UDI executive

Contact:

Cassandra Smith

Director, Policy & Research

Direct: (604) 661-3032

csmith@udi.org <mailto:csmith@udi.org>

Notes:

Parking:

URBAN
DEVELOPMENT
INSTITUTE

SUITE 1100
1050 W PENDER STREET
VANCOUVER, BC V6E 3S7

To: **The Hon. Ravi Kahlon, Minister of Housing**
From: **The Urban Development Institute (UDI)**
Date: **September 28, 2023**
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DRAFT

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Cumulative increase in costs from DCCs	**$13,780,653**	**$22,108**	**69.9%**

Cost Proportionality
The proposed DCC increases will disproportionally affect new homeowners and renters, meaning that those households are now able to buy a new home or live in a new purpose-built rental building are paying the most to expand and upgrade regional infrastructure. By decreasing the assist factor to 1% for all DCCs by 2027, this shifts the burden onto the new home sector and off of those who already own homes in the region. If housing supply increases in the region, inevitably, so will the number of residents paying for regional infrastructure

Timeline and Process
UDI has repeatedly raised the challenge created for builders when charges are increased without adequate notice to factor these cost increases into the price of the land. Although Metro Vancouver is attempting to address this concern by setting out the DCC increases to 2027 – this will still likely affect many projects that are already underway, due to the lengthy review and approval timelines. In addition, the land market will adjust very slowly, faced with these rapid cost increases, as vendors will likely maintain their price expectations or take properties off the market until they can be met.

Metro Vancouver is currently conducting engagement with stakeholders, including the development industry, however, the proposals are planned to be finalized and submitted to the Provincial Inspector of Municipalities for review by the end of October – leaving little time to address the many concerns raised during the engagement.

This engagement process will not allow for the review of additional economic testing currently being conducted by Metro Vancouver. The testing that has been made available is both limited in scope and fails to assess the impact that other identified cost pressures (financing and hard costs) will have in addition to the proposed DCC increases. The cumulative impact that these costs will have on new construction, the land market and the ability of builders to deliver new homes cannot be understated, given that Metro Vancouver municipalities will be expected to achieve housing targets.

Recommendations
We recognize the need to upgrade and expand regional infrastructure to serve new residents coming to Metro Vancouver. We also acknowledge the principle that growth pays its fair share of these costs. However, the impact that these cost increases will

have on new housing delivery is substantial. The impacts are so large that they will impact the ability to deliver new housing of all tenures and levels of affordability.

We recommend four key measures in response to Metro Vancouver's proposed DCC increases:

1. That these changes *not be approved* by the Provincial Inspector of Municipalities, until a robust analysis of the impact of that these changes will have on the viability of development is conducted and provided for consultation.
2. Going forward, we recommend that role of the Province in reviewing regional and municipal DCCs includes the impact to economic viability of projects
3. Extend in-stream protections beyond the standard one-year period and phase in cost increases over a much longer period. Further, the new Parks DCC program needs to be deferred to after the other DCC increases are phased in.
4. Financial support from senior levels of government to regional districts to pay for the infrastructure that is needed to service growth. For example, regional projects should be eligible for the Federal *Housing Accelerator Fund*. However, this additional funding should be tied to reducing charges on new development.

PACIFIC REGION URBAN DEVELOPMENT INSTITUTE

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UDI Executive Committee Meeting
Thursday, September 28, 2023
9:00 am – 10:00 am
Zoom

Attendees (UDI)

Rick Ilich, Townline (UDI Chair)
Jon Stovell, Reliance Properties
Evan Allegretto, Intracorp
Rob Blackwell, Anthem
Cynthia Jagger, Goodman Commercial
Byron Chard, Chard Development
Roque Hsieh, KPMG
Jordan Milne, GMC Projects
Mike Mackay, Strand Development
David Sander, Hollyburn Properties
Beau Jarvis, Wesgroup
Rob Bruno, Polygon
Anne McMullin, UDI
Jeff Fisher, UDI
Mike Drummond, UDI
Cassandra Smith, UDI

Agenda

1. **Welcome and Opening Remarks** *(UDI Chair-Min. Kahlon)*

2. **Rental Housing – Barriers and Opportunities**
   - Tax reductions: PST on materials, property taxes, and federal tax measures (EIFEL)
   - GST on PBR and concerns regarding local government expectations: Inclusionary Zoning, CACs, Offsites, and heights/densities
   - Annual allowable rent increase and rising operating costs

3. **Metro Vancouver Development Cost Charges**
   - Impact to new development (Memo)

4. **BC Building Code Changes**
   - Impact of proposed seismic and accessibility changes
   - Mitigation measures: standardization of FSR calculation and exemptions
   - Next steps and in-stream protections

5. **Next Steps and Future Meetings**

Cliff: 61625
Date Prepared: September 25, 2023

MINISTRY OF HOUSING
MEETING BULLETS

PURPOSE: MEETING Bullets for the Honourable Ravi Kahlon, Minister of Housing

Meeting with: UDI Executive Committee on September 28, 2023

Issue: Government Policies Affecting Housing Development in British Columbia

BULLETS: Meeting bullets follow UDI meeting agenda (Attachment 1).

Agenda Item #2: Rental Housing – Barriers and Opportunities

Tax measures and other implications for rental housing

- In publications from recent years, the Urban Development Institute (UDI) has advocated for tax measures to create certainty for home builders, and intentionally support the development of new rental housing.
- This includes removing barriers to purpose-built rental (PBR) supply, such as:
  - Government Sales Tax (GST) rebates criteria reform (which has seen recent federal action).
  - Provincial Sales Tax (PST) rebates for construction materials for new and substantially renovated PBR projects.
  - Provincial Property Transfer Tax exemption for properties purchased for new PBR development, rather than for the sale of new rental buildings.
- The Province has two related tax exemptions for rental housing:
  - Provincial Property Tax Exemption (Additional School Tax): Where a municipal revitalization exemption bylaw is in place for the purpose of new rental housing, eligible properties can apply for an exemption to their provincial property taxes.
  - Property Transfer Tax Exemption (Forthcoming, January 2024): An exemption for eligible purchasers of new PBR buildings from the further 2% property transfer tax on the amount of the residential property value exceeding $3 million.
- The Ministry of Finance holds responsibility for tax policy and the Ministry of Housing shares information with the Ministry of Finance on recommendations to support the development of rental and other forms of housing.
- Possible additional requests for provincial support for advocacy on municipal and federal policy levers from UDI include the following:
  - UDI appears to have concerns that municipal governments may leverage the GST rebate to attempt to secure deeper affordability for housing projects or to advance other policy priorities through tools such as inclusionary zoning, Community Amenity Contributions (CAC), etc.

- Excessive Interest and Finance Expenses Limitations (EIFEL) limit the interest and financing costs that companies can write off, which has become challenging for the development sector in the context of rising interest rates.

Inclusionary Zoning

- The Ministry of Housing is aware that some local governments currently have inclusionary housing policies to facilitate affordable housing.
  - s.13

  - There are a variety of factors to consider in any inclusionary zoning framework, including how it works with other development finance tools (such as amenity charges) to avoid deterring development, and being flexible enough to accommodate the variability of local market and economic conditions.

Allowable Rent Increases

- UDI has argued that limits to rent increases are insufficient to cover increasing expenses and operating costs. Further, UDI has previously criticized the model of setting allowable rent increases for lacking predictability.
- The Province introduced a process of setting annual allowable rent increases and processes to serve tenants with a Notice of Rent Increase to provide predictability, and to balance the differing needs of landlords and tenants.
- For the second consecutive year, BC's maximum allowable rent increase is being set below the inflation rate, at a maximum increase of 3.5% for 2024.
- The 2024 allowable rent increase is set below the inflation rate but is higher than the 2023 cap of 2%. This protects renters from increased costs of living while ensuring that landlords can recoup costs of maintaining their rental properties.
- Before 2018, the annual allowable rent increase was based on the inflation rate plus 2%. Following a recommendation by the Rental Housing Task Force, the Province reduced the rent increase to just the inflation rate.
- As inflation returns to normal levels, the Province intends to return to an annual rent increase that is tied to BC's Consumer Price Index in future years.

Agenda Item #3: Metro Vancouver Development Cost Charges

- UDI provided a draft memo on Metro Vancouver Development Cost Charge Increases (Attachment 2).
- The Minister of Municipal Affairs (MUNI) has responsibility for the *Local Government Act* that sets out the regulatory scheme for Development Cost Charges (DCCs) and the Inspector of Municipalities. UDI's feedback in the memo will be shared with MUNI.

- Development Cost Charges are calculated so that developers pay for the share, or capacity of, new infrastructure that will service their developments. This is the core goal of the DCC as a development finance tool (growth pays for growth).
- The Inspector (an ADM in MUNI appointed to that role), relies on the professional responsibilities of the engineers and planners that prepare these calculations to ensure that the share attributed to new development is as accurate as possible.
- The Inspector is aware of the significant increase in total DCCs for lower mainland communities, however that role is focused on ensuring legislative and policy requirements are met, and is not a “market watchdog” with a mandate to ensure cost fairness or balance.
- If developers are relieved of their share of DCCs by a greater assistance factor, that foregone revenue is most likely to be recovered from existing property taxpayers, who are facing their own affordability pressures.
- Similarly, extending in-stream protection beyond the current allowance of 12 months may delay the construction of much needed service infrastructure or increase the cost burden on existing property owners.
- Financial support from senior levels of government, such as the $1 billion Growing Communities Fund, may help reduce the impact of DCCs.
- The economic study by Metro Vancouver and information provided by UDI will help inform the Inspector’s policy for impact analysis of DCC bylaws.
- Senior government funding programs are not tied to DCCs or the reduction thereof.

Agenda Item #4: BC Building Code Changes

- In a 2022 report, UDI identified energy efficiency and building code changes as a threat to rental development, based on the costs that accrue and uncertainty when policies change during a project’s development.
- The Ministry of Housing is finalizing the next edition of the BC Building Code and anticipates its adoption by the end of this year or early next year.
- The Ministry is reviewing input on changes related to adaptability and seismic provisions to ensure a smooth transition to new requirements.
- The next edition of the code will contribute to making buildings in BC more accessible, safer, and more climate resilient than before. The code will also advance changes related to cooling, mass timber construction, and radon safety.
- Public review of the draft BC Building Code resulted in generally positive comments from the public, interested parties, and industry partners.
- The Ministry continues work to identify and review opportunities to support cost-effective and efficient construction of new homes for people. The Ministry is working with fire safety professionals and national parties to examine opportunities in codes, such as egress stairs, that may simplify the design of smaller buildings and create options for quicker and more affordable construction.

Prepared by:
Leslie Cramer
Senior Policy Analyst
Housing Policy Branch
778-405-1861

Approved by:
Teri Collins
Deputy Minister
Deputy Minister's Office
250-952-2569

Bindi Sawchuk
Assistant Deputy Minister
Housing & Land Use Policy Division
250-216-0346

Attachment:

- Attachment 1 – UDI Executive Committee Meeting Agenda (September 28, 2023)
- Attachment 2 – Draft Memo on Metro Vancouver Development Cost Charge Increases

UDI MRK Meeting September 28, 2023

Rick Illich

- Appreciate support on GST policy
- Building Code: seismic is sufficient
- All things stacked on increase costs

MRK

- UDI is a partner
- Appreciate concerns
- Rent Freeze; s.16
- Pleased with GST; advocating for some time
- s.13; s.16

Anne McMullin

- 24,000 units under construction in BC; $915 million rolled in

Rick

- Equity is 2.5 times for rental vs condo

Anne

- Significant amount of capital

Evan

- GST does not affect land cost, so a really good tool

MRK

- Anne, one page? Yes.
- Building Code: appreciate challenges, especially, seismic. s.13; s.16
  s.13; s.16

Rick

- Independent technical groups in siloes. Need to connect these to assess impact on residential construction costs.
- Anything that touches housing should go through the Ministry of Housing to assess impact.

MRK

- We do that in BC. Code changes came from national…

Beau

- Code: adaptability and accessibility
- Ministry of Environment: soil is an issue… response "We have a mandate…"
- Propose a moratorium on all policy changes (code, environment, all levels of government, working groups etc.) a looking off time to allow time to collaborate and assess impact on costs

MRK

- We have limited influence
- We are back in Legislature next week with a lot of policy changes… and then take time to assess (staff overwhelmed).
- Policies are edgy…
- Metro Vancouver
    - Understand Minister Fraser's position s.16 s.16
    - I called an emergency meeting on Tuesday with MSF and MV to address the issue…
    - We will reconnect tomorrow.
    - s.16
    -
    -

Rick

- Need a provincial methodology for calculating FSR
- Simplify so we don't have to negotiate with LGs
- Additional FSR would allow us to recover some costs
- Evan Allegretto (chat): Kelowna and Esquimalt are best examples for FSR

MRK
Agree on FSR, just not now. Happy to meet in the future

Rob Blackwell

- Hurley comments today re s.16 s.16
- DCC was a done deal - no real consultation, or considering comments
- s.16
-
- MV needs to rethink how they will pay for infrastructure

MRK

- Your points are valid.
- We need to pause before we reconvene.
- I don't have an answer for you right now.

Rob

- MV will go to decision to move this ahead.

Anne

- Can we pause until we know how these changes affect construction costs

Jon

- ON HST – the GST waiver applied after… but understand that PST portion also waived 2-3% of cost of construction.
- Cynthia: Yes, Ontario removed PST

MRK

- Minister of Finance is reviewing
- We spent two days back and forth to fully understand
- Not all provinces have aligned.
- ON and BC wrote a joint letter to feds on waiving GST
- BC doesn't change PST on transfer of property. s.13; s.16

s.13; s.16

Jon

- MV position is that infra costs are the result of growth
- New construction pays the price whereas existing owners/renters do not…

MRK

- LG mayors ask me for loans, and I wonder my they don't borrow from Infra Bank

Beau

- Reports that new housing is taxed upward of 30%+ which is breaking the back of housing cost
- TransLink, BC Hydro LGs etc. are getting into this game
- My understanding is that the Province plays a role: application for fee
- MV issue is shedding light on the issue
- Hope we can move toward a coordinated approach to assess cumulative impacts in a regional context
- MV mayors voting on this in lieu of raising property taxes

Evan

- Coquitlam + Metro Van + TransLink is over $50k increase per unit to housing

MRK

- We must consult LGs
- Two important conversations this fall: 1) parking minimums, and 2) digitizing permitting process (BIM-enabled code compliance – will take a couple of years to move to a standardized system). More details on the next call.
- Please share your ideas on these initiatives. Anne will sit at this table.

R. Bruno

- Township of Langley in the range of $35K to $70K per unit depending on product type

David Sander

- Thanks for HTO
- Re: ON rent increase is limited to 2.5%; ON is not a great example… housing issues are policy
- BC in 2018: property tax matching?
- BC Assessment assesses on assumption of rental buildings are highest and best use

Jordan Milne

- BC Assessment:
    - Segregate rental mill rate that is not greater than owner

- Market rent and tax
    - Rental: pay for services like trash, better use of land…
    - Capital improvements: significant upgrade that owners would like to make, and tenants want, but need to make capital invest to get Annual Rent Increase
    - Fed with GST send message that we need PBR.
    - BC would waive property tax of new PBR

Beau

- Fully agree
- Need a working group on aging PBR

MRK

- Please submit a bulleted list of topics. We can then assess working group and topics.
- Everyone looks at BC and ON, so we are always linked together
- HTO: net new. 75% minimum. Vancouver is 38K. We'll announce next group in a couple of months

Anne: BC Builds?

MRK

- s.16
-
- When we want something built, who can we partner with…
- We'll get back to you on how that will be structured for our next meeting. Internal processes before sharing.
    - Land Bank
    - Financing
    - Legislative tools

Rick

- If we lose sight of the BCBC issues, there will be a huge pause on building permits next year
- Need to understand timing… just ticking a box…

MRK

- We're not ticking a box. There are a lot of vulnerable people

Comments

Jon Stovell

- Seismic Life safety standards have been achieved several building codes ago. What is really being achieved with the latest code?
- Can we talk about the PST potion of GST?
- Re Metro a lot of the costs are replacements of old infrastructure that benefit all the rate payers. These costs should be paid through property taxes. Not new homeowners and new renters.

And if you do that energy or life safety work you may have to pay GST on the entire value of the rental property. So those renos should be exempted if they do no result in evictions.

Jordan Milne

- For better. The exclude common areas which enables developers to include thoughtful amenity spaces that improve livability and help to foster social connection. When common and amenity spaces are included in FSR it creates a disincentive to create anything more than is required by building code or municipal requirement.

Mike McKay

- Cost relief for rental housing is going to become acutely important given that bond yields continue to spike and the expectation is that “rates will be higher for longer”. This is affecting valuations for rental apartment buildings and serves to disincentivize new investment in rental housing. Further, with cap rates increasing, anyone looking to develop rental housing cannot expect to realize compensation for the risk of developing that housing by way of realizing a spread between a market cap rate and one’s “going in yield”. Effectively rental developments are producing negative leverage. I have not seen a time like it in my career where demand is so high and supply so scarce for this type of housing yet it remains so unappealing to make new investments in this asset class.

Cynthia

- My point was - "existing stock" brings up the image of an old building. But, each one of these new builds effectively becomes the existing stock one day after occupancy. They are subject to the same constraints - rent control and increasing expenses. A wholesale shift in mentally is needed on the policies applied to buildings once they are complete and operating.

Jordan

- When does the new building code come into effect? Are there any considerations for the Island?
- There is an avalanche of building permits coming in order to vest under the current code. Currently we are limited to 12 months from the date of building permit approval to pick up the permit. Given the current landscape, can the Province extend this two 24 months so we can see this product more likely created?

Bruno

- One more thought on Metro Vancouver. New costs estimates are based on today's costs which we all know have increased significantly over the last 5 years. If cost relief (or design improvements) occurs we all know that the fees never decrease …

Mile McKay

- Add the doubling of CMHC premiums to the pile...

Jon

- Wood Frame may become unviable.

RE: FOR ACTION DUE Oct 5 | Stakeholder list Updates

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: September 29, 2023 9:26:09 AM PDT
Attachments: image001.png

Hi, I do see the big or "primary" ones on there such as BOABC, AIBC, EGBC, ASTTBC, UBCM, UDI, CHBA. Some "secondary" ones could be added but not sure the level of depth expected. Any thoughts from the team? I suspect if we pull out our master list there are dozens in the "secondary category". At that point I think we can just get Brian to transcribe, maybe with some help to identify which of the 100's make the dozens list…

Examples off the top of my head:

Mobile Home Association BC – Sukh Johal (no longer Gord Rattray)
Municipal Insurance Association-?
Fenestration and Glazing Industry Alliance- Amy Roberts Amy Roberts Aroberts@fgiaonline.org or Janice Yglesias jyglesias@fgiaonline.org
Fenestration Canada – Terry Adamson terry@fenestrationcanada.ca

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Friday, September 29, 2023 9:07 AM
To: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: FW: FOR ACTION DUE Oct 5 | Stakeholder list Updates

Hi all,

Please review (if able) and update the stakeholder list.

Cheers,

Kevin

From: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Sent: Friday, September 29, 2023 9:06 AM
To: Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; Ashbourne, Jade HOUS:EX <Jade.Ashbourne@gov.bc.ca>
Cc: Doerksen, Heather HOUS:EX <Heather.Doerksen@gov.bc.ca>; Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>; Thomson, Lia HOUS:EX <Lia.Thomson@gov.bc.ca>; Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>
Subject: FOR ACTION DUE Oct 5 | Stakeholder list Updates

Good morning,

Can you please have your teams review the stakeholder list located on our teams site for any updates as it was last updated in March and the MO has asked for an updated list.

Ministry Stakeholder list can be found here Stakeholder List

Due for Bindi's review Oct 5th at 4:00 pm

***It is the Office Manager's responsibility to keep track of these deadlines**

Thank you,
Lori Willms
Manager, Divisional Operations
Housing and Land Use Policy
Ministry of Housing

Minister's schedule request

From: May, Zachary HOUS:EX
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Sent: September 29, 2023 11:00:38 AM PDT
Attachments: Digital Advisory Council Contact List.docx, Digital Advisory Council_Meeting #1_Agenda.docx

Hi Nikki,

Can you secure a date and time for the first meeting of the Minister's Digital Advisory Council during the week of Oct. 30? Agenda and attendee list attached. Once a date/time is chosen please let me know so I can update our consultant and the invitations to other attendees.

I have a separate eapps for the signed invitation letter that we will have the CU send out next week.

Let me know if you have any questions.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

Digital AdviCouncil Membership List

Last Updated: September 20 by Will

Member	Organization	Email
Jazz Pabla Director of Information Services	City of Kelowna	jpabla@kelowna.ca
Tim Ryce Chief Building Official	City of North Vancouver	tryce@cnv.org
Rene Cravioto Program Manager – Innovation & Service Delivery	City of Vancouver	Rene.Cravioto@vancouver.ca
Tyler Wightman Executive Director	Building Officials' Association of BC	tyler.wightman@boabc.org
Helen Goodland Principal, Head of Research and Innovation	SCIUS Advisory, Inc.	hgoodland@scius.ca
Heidi Yang CEO	Engineers and Geoscientists BC	Hyang@egbc.ca
Mark Vernon CEO	Architectural Institute of British Columbia	MVernon@aibc.ca
Neil Moody CEO	Canadian Home Builders Association of BC	Neilmoody@chbabc.org
Anne McMullin President & CEO	Urban Development Institute	amcmullin@udi.org
Sue Paish CEO	Digital	spaish@digitalsupercluster.ca
Dr. Sheryl Staub-French Director of BIM TOPiCS Lab	University of British Columbia	ssf@civil.ubc.ca
Vincent Tong CEO	BC Housing	vtong@bchousing.org

October 30, 2023 (90 minutes)
Proposed Agenda

Time	Agenda Item	Notes
30 minutes	Minister's Opening • Minister's Opening Statement • Participant Introductions ○ Why is this work important to your organization? ○ If you were to select one thing your organization would need to consider BC a North American leader, what would it be?	Minister's articulation of why he thinks this work is important.
30 minutes	Provincial Vision & Streams of Work • Stream 1: Digitized Codes (Ministry of Housing & BC Housing) • Stream 2 and 3: Digital Building Permit and Integration Platform (Ministry of Housing, City of Vancouver, & Ministry of Water, Land and Resource Stewardship)	Articulation of the vision and highlighting the economic and social benefits that will come from this work. Confirmation of the Province's articulation of the vision and identification of any adjustments. Key partners to speak to where they have seen success and positive results from
10 minutes	Accelerating Industry Innovation (Digital)	Update on their mission map, call for partners, and challenge projects.
15 minutes	Key Milestone Overview	Highlighting key milestones over the next 1-year period to where Leadership Council advice and guidance will be required. Showing March 2024 pilot solution and seeking advice whether more features should be added before it is rolled out to more communities. Build shared accountability and seek members to direct their membership / organizations to engage in this work and to prepare for the digital transformation across the housing development system.
5 minutes	Next Steps / Next Meeting	Mid-January 2024

Housing Target Methodology: Experts Briefing MS Teams Chat Record - October 3, 2023

HOUS Staff
Collins, Teri HOUS:EX was invited to the meeting.
Sawchuk, Bindi HOUS:EX was invited to the meeting.
Corpe, Cimarron HOUS:EX was invited to the meeting.
Gartner, Candice HOUS:EX was invited to the meeting.
Nicholls, Eric HOUS:EX was invited to the meeting.

External Participants
Matt Thomson (Urban Matters)

Bridgitte Anderson
Owen Brady
Thomas Davidoff
Casey Edge
Lindsay Fernandes
Greg Gillespie
David Gregory
Alex Hemingway
Anne McMullin UDI
Andrés Peñaloza
Ron Rapp
Mark Sakai
Cassandra Smith
Leo Spalteholz
Carmina Tupe (CHBA BC)
Jens von Bergman
Peter Waldkirch
Duncan Wlodarczak
Russil Wvong
Andy Yan

Cassandra Smith was invited to the meeting..
Owen Brady was invited to the meeting.
Guest was invited to the meeting.
Anne McMullin UDI (Guest) was invited to the meeting.
Alex Hemingway (Guest) was invited to the meeting.
Andrés Peñaloza (Guest) was invited to the meeting.
Leo Spalteholz was invited to the meeting.
Duncan Wlodarczak was invited to the meeting.
Andy Yan (Guest) was invited to the meeting.
Russil Wvong
Mark Sakai
Leo Spalteholz
Ron Rapp
Bridgitte Anderson
Lindsay Fernandes
Peter Waldkirch

Page 167 of 356 to/à Page 171 of 356

Withheld pursuant to/removed as

s.13

Urban Land Institute

From: May, Zachary HOUS:EX
To: jfisher@udi.org
Sent: October 4, 2023 11:30:13 AM PDT

Hi Jeff,

Do you have any experience with the Urban Land Institute? It looks like that group would have significant overlap with UDI membership, but wondered if you have any insights about whether they bring a unique perspective to the table that would differ from UDI.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Urban Lands Institute inclusion in Digital Leadership Council

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: October 4, 2023 11:43:23 AM PDT
MO sees them as different, FYI. They don't represent developer interests.

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, October 4, 2023 11:35 AM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Subject: RE: Urban Lands Institute inclusion in Digital Leadership Council

Confirming I'll reach out to ULI and determine if their membership/perspective is unique from UDI and if they would be interested in serving on the DAC.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: Tuesday, October 3, 2023 11:45 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: FW: Urban Lands Institute inclusion in Digital Leadership Council

Hi Zac –

Please see request below from MO re: Membership on Digital Advisory Council and let me know what you think.

John

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Tuesday, October 3, 2023 10:54 AM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: Urban Lands Institute inclusion in Digital Leadership Council

Thanks Bindi. Sorry for the confusion!

And thank you John for reaching out to them!

All the best,

Mark

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Tuesday, October 3, 2023 10:22 AM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: Urban Lands Institute inclusion in Digital Leadership Council

Thanks Mark – John is the lead for digital innovation work and can action this.

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Tuesday, October 3, 2023 9:32 AM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: Urban Lands Institute inclusion in Digital Leadership Council

Hi Bindi,

I hope you are well.

The Minister asked me to see if we can include representatives of the Urban Lands Institute (ULI), on the Digital Leadership Advisory Council?

The best folks to contact about this would be:

Duncan Wlodarczak
Chair, ULI British Columbia
duncan.wlod@gmail.com

Opreet Kang
s.22

Let me know if this works for you folks and all the best,

Mark
Mark Hosak, *he/him*
Senior Advisor to
The Honourable Ravi Kahlon
Minister of Housing
Cell: 250-886-1834

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

October 5, 2023

Hi everyone,

I just sent a reminder email for agenda items. If you have anything you would like to discuss with the council please let me know. More information will be shared as we get closer to the date.

Thank you for your attention.

Best,

Milly Luc (she/her)
Executive Assistant to Vincent Tong, CEO

e: mluc@bchousing.org<mailto:mluc@bchousing.org> | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xmkym (Musqueam), Skwxwú7mesh (Squamish), and slililwta (Tsleil-Waututh) people.

Good morning all,

Please hold the date and time for our next ICAC meeting. I will be reaching out for agenda items as we get closer to the date.

Warm regards,

Milly Luc (she/her)
EA to CEO | EXECUTIVE OFFICE

e: mluc@bchousing.org<mailto:mluc@bchousing.org> | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xmkym (Musqueam), Skwxwú7mesh (Squamish), and slililwta (Tsleil-Waututh) people.

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15; s.17

Page 176 of 356

Withheld pursuant to/removed as

s.15

Re: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

From:	Tony Gioventu <tony@choa.bc.ca>
To:	Milly Luc <mluc@bchousing.org>
Cc:	Adam Terris <aterris@bchousing.org>, Ann McMullin <amcmullin@udi.org>, Chris Atchison <chris.atchison@bccassn.com>, Chris Gardner <chris@icba.ca>, Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>, Denisa Ionescu <dionescu@bchousing.org>, Enemark, Gord HOUS:EX <Gord.Enemark@gov.bc.ca>, Esther de Vos <edevos@bchousing.org>, Howard Friedman (external) <howard.friedman2@travelers.com>, Mark Sakai <msakai@bcrea.bc.ca>, Mark Vernon <mvernon@aibc.ca>, Mary Gerges <mgerges@bchousing.org>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Michelle Hayes <mhayes@bchousing.org>, Neil Moody <neilmoody@chbabc.org>, Peter Mitchell <MITCHELL@egbc.ca>, Ron Rapp <ron@havan.ca>, Scott McIntyre (external) <smcintyre@egi.ca>, Tafadzwa Kadye <tkadye@bchousing.org>, Vincent Tong <vtong@bchousing.org>, jjung@asttbc.org, rseifi@egbc.ca
Sent:	October 5, 2023 3:09:28 PM PDT
Attachments:	image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

I would like to address our survey findings from new buildings (less than 5 yrs) and the development of iur guide on the first year of a strata corporation. Thanks

On Thu, Oct 5, 2023 at 5:49 PM Milly Luc <mluc@bchousing.org> wrote:

> Hi all,
>
> Just a friendly reminder if you have any items to be discussed at our upcoming ICAC meeting, may I ask you to send them to me by **Oct 11th EOD.**
>
> Thank you,
>
> Milly
>
> ---
>
> **From:** Milly Luc
> **Sent:** September 21, 2023 8:13 AM
> **To:** rseifi@egbc.ca; Denisa Ionescu <dionescu@bchousing.org>; Esther de Vos <edevos@bchousing.org>; Michelle Hayes <mhayes@bchousing.org>; mitchell@egbc.ca; Ron Rapp <ron@havan.ca>; patrick.ryan@vancouver.ca; Enemark, Gord OHCS:EX <Gord.Enemark@gov.bc.ca>; Zachary.May@gov.bc.ca; jjung@asttbc.org; Adam Terris <aterris@bchousing.org>; Tony Gioventu (external) <tony@choa.bc.ca>; Scott McIntyre (external) <smcintyre@egi.ca>; Neil Moody <neilmoody@chbabc.org>; Mary Gerges <mgerges@bchousing.org>; Mark Vernon <mvernon@aibc.ca>; Mark Sakai <msakai@bcrea.bc.ca>; Howard Friedman (external) <howard.friedman2@travelers.com>; Chris Gardner <chris@icba.ca>; Chris Atchison <chris.atchison@bccassn.com>; Ann McMullin

<amcmullin@udi.org>; Vincent Tong <vtong@bchousing.org>; Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Cc: Tafadzwa Kadye <tkadye@bchousing.org>
Subject: Call for Agenda Items for Upcoming ICAC Meeting - October 23, 2023

Good morning all,

Hope this note finds you well. In preparation for our upcoming meeting, please send me any items you would like to add to the agenda.

For your reference, I have attached the draft minutes from our last meeting.

Please send in your items **by October 9th, 2023 EOD.**

Thank you,

BC HOUSING

Milly Luc (she/her)

Executive Assistant to Vincent Tong, CEO

e: mluc@bchousing.org | d: 236.984.0309

I would like to gratefully acknowledge that BC Housing is located on the traditional and unceded territory of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and səlilwətaɁɬ (Tsleil-Waututh) people.

URBAN
DEVELOPMENT
INSTITUTE

SUITE 1100
1050 W PENDER STREET
VANCOUVER, BC V6E 3S7

To: **The Hon. Ravi Kahlon, Minister of Housing**
From: **The Urban Development Institute (UDI)**
Date: **October 6, 2023**
Re: **Follow-up to September 28 Meeting - UDI Recommendations**

Minister Kahlon,

Thank you for taking the time to meet with UDI and members of our Board and Executive on September 28. In follow-up to that discussion, we have outlined several recommendations made in the meeting for consideration.

General

- **Pause regulatory changes, policy changes and fee increases at the municipal, regional, and provincial levels that add new costs and delays to housing development.**

Rationale: Market factors, like construction costs, and the cost of financing have strained development pro formas in recent years. New development is particularly sensitive to interest rate changes and the cost and availability of capital have made it considerably more difficult to deliver new housing.

Government-driven taxes, fees and charges have compounded these challenges and new and proposed requirements that increase construction costs or complexity have had a similar effect. These include:

- Proposed BC Building Code changes;
- Energy efficiency and carbon reduction requirements,
- Contaminated sites remediation policies,
- Provincial permits and authorizations,
- Municipal inclusionary zoning,
- Municipal fees and levies
- Property taxes, and
- Development fees such as Community amenity charges, and Development Cost Charges.

To implement these new changes without addressing the existing barriers to housing delivery will only compound the challenges. The cost burden placed on new housing has become untenable and if these increases do not stabilize and/or not mitigated, new housing developments continue to be delayed or deferred.

- **Ensure that the Ministry of Housing retains visibility into policy development across other ministries that affect housing delivery.**

Rationale: As policy development occurs in other ministries there is frequently an impact on housing delivery, whether through cost increases, process complications or delays. This is particularly relevant for the Ministries of Environment, Forests, Finance, Water, Land and Resource Stewardship, Transportation & Infrastructure and BC Hydro. It is critical that a "housing lens" be applied to draft and new Provincial policies and requirements, which includes a financial analysis to assess the full impact any proposals.

- **Develop more comprehensive oversight and monitoring of cumulative taxes, fees and charges levied on new development.**

Rationale: Taxes fees and charges are levied across all levels of government, without coordination. This frequently leads to cumulative charges increasing significantly in a short timespan. Each level of government frequently assesses the impact of a new charge independent of other levies leading to the underestimation of the impact on new housing delivery.

The proposed Metro Vancouver DCC increases are an example of this challenge, where the increases are occurring at the same time as other fee increases at the municipal level without coordination. A coordinated approach, overseen by the Ministry of Housing, would allow for the financial impact of these fees to be evaluated holistically in the context of the delivery of new housing and affordability.

- **Eliminate Community Amenity Contributions (CACs) on rental housing.**

Rationale: This represents an opportunity to incentivize rental housing by reducing the government-driven fees and charges. Rental housing remains very challenging to build due to cost sensitivity, and requiring that local governments not charge CACs on this form of housing would improvise viability.

BC Building Code

- **Standardize the density calculation as it applies to all provincial and municipal policies.**

Rationale: Floor Space Ratio (FSR) calculations should be standardized across the province, as this is critical to maintaining consistency between municipalities. Some jurisdictions currently use a calculation for FSR that corresponds to net saleable/leasable density. UDI views this as a best practice. This would measure livable space and would make the calculations less sensitive to building code, energy efficiency, and other building changes. This approach is currently used in Esquimalt and Kelowna. In addition,

to ensure any exempt FSR can be utilized by builders, local government setback and height policies may need to be adjusted.

In addition, to incentivize certain types of units, a standardized exemption for the third bedroom and associated space increases would reduce the financial burden of providing larger homes.

- **Reduce or mitigate the proposed adaptability measures in the BC Building Code update.**

Rationale: The proposals require the development community, new homebuyers and tenants to overcome a systemic issue in the existing building stock. UDI and the industry have always supported the principle that new projects pay their fair share of growth-related costs. However, asking for every unit to be adaptable, without offsets and mitigation measures, is well beyond a growth-related cost.

If adopted, the proposals would result in either increases to unit sizes to accommodate the requirements, meaning that the cost and square-footage of units would increase and the number of units would be reduced. Alternatively, unit layouts would shift, reducing livable space. Neither outcome will support the accelerated delivery on more new housing units.

We strongly encourage the Province to delay the implementation of the proposal to make 100% of new Part 3 buildings adaptable and look at mitigation measures, offsets or alternatives to this proposal.

Tax Measures

- **Waive the Provincial portion of property taxes on new rental housing and require municipalities to take similar steps using the Revitalization Tax Exemption (RTE) tool.**

Rationale: Municipalities have the ability to waive property taxes on specific types of development for a defined period of time using the RTE, and in the 2018 Homes for B.C. Plan, the Province agreed to match any property tax exemptions municipalities provided for rental housing. Property tax waivers or reductions for rental housing would contribute to lowering development risk and stabilize operational costs, particularly in the first years after construction.

- **Remove the Provincial Sales Tax (PST) embedded in rental construction.**

Rationale: Although there is no PST charged on the transfer of a completed rental development, B.C. still charges sales tax on materials used for the construction of rental housing. During previous discussions with the Ministry of Finance when the HST reverted to a separated sales tax, the embedded PST was estimated at 2-3% on costs.

Existing Rental Housing

- **Develop a working group with rental builders and operators to review and provide recommendations on provincial measures affecting rental operations.**

Rationale: There are several cost barriers affecting existing rental operators, which will require in-depth discussion to develop solutions. Areas this group could address include: property tax reductions, BC Assessment valuation methodology, Additional Rent Increase framework, BC Hydro rates, and annual allowable rent increases.

MO Request for updated list for Invitation to participate on the Digital Advisory Council | FW: 61804

From: HOUS Correspondence Unit HOUS:EX <OHCSCORR@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: October 6, 2023 1:39:03 PM PDT
Attachments: 61804 Digital Advisory Contact List.docx, 61804 Digital Advisory Council Min Sig Draft.docx, image001.png

Good afternoon,

MO is asking for an updated/full list of names (see below highlighted in yellow).

The list attached to this email is the list uploaded to the eApprovals.

Can you please provide as soon as possible, and I will forward on?

Thank you,

Linda Phillips
Correspondence Clerk
Ministry of Housing
Phone: 778-974-2013
OHCSCORR@gov.bc.ca

From: AG CMSB House Correspondence AG:EX <HOUS.Correspondence@gov.bc.ca>
Sent: Friday, October 6, 2023 1:12 PM
To: HOUS Correspondence Unit HOUS:EX <OHCSCORR@gov.bc.ca>
Subject: FW: 61804
Importance: High

Mark would like full list pls.

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Friday, October 6, 2023 12:48 PM
To: AG CMSB House Correspondence AG:EX <HOUS.Correspondence@gov.bc.ca>
Subject: RE: 61804

Hi Angella,

I am sending the letter for approval to MRK but I believe there is an update to the list attached as names have been added post September 20th. May we see the full list?

Cheers,

Mark

From: AG CMSB House Correspondence AG:EX <HOUS.Correspondence@gov.bc.ca>
Sent: Friday, October 6, 2023 11:08 AM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: 61804
Importance: High

Hi Mark, Minister letter for your approval, I would have sent via eapps but I see you are not set up on the new eapps system. If you need help with that let me know.

Angella Thompson, Team Lead

Corporate Correspondence Unit
Business Planning and Priorities
Corporate Management Services Branch
Ministries of Attorney General, Public Safety and Solicitor General and Housing
Victoria, British Columbia
778-974-3799



Digital AdviCouncil Membership List

Last Updated: September 20 by Will

Member	Organization	Email
Jazz Pabla Director of Information Services	City of Kelowna	jpabla@kelowna.ca
Tim Ryce Chief Building Official	City of North Vancouver	tryce@cnv.org
Rene Cravioto Program Manager – Innovation & Service Delivery	City of Vancouver	Rene.Cravioto@vancouver.ca
Tyler Wightman Executive Director	Building Officials' Association of BC	tyler.wightman@boabc.org
Helen Goodland Principal, Head of Research and Innovation	SCIUS Advisory, Inc.	hgoodland@scius.ca
Heidi Yang CEO	Engineers and Geoscientists BC	Hyang@egbc.ca
Mark Vernon CEO	Architectural Institute of British Columbia	MVernon@aibc.ca
Neil Moody CEO	Canadian Home Builders Association of BC	Neilmoody@chbabc.org
Anne McMullin President & CEO	Urban Development Institute	amcmullin@udi.org
Sue Paish CEO	Digital	spaish@digitalsupercluster.ca
Dr. Sheryl Staub-French Director of BIM TOPiCS Lab	University of British Columbia	ssf@civil.ubc.ca
Vincent Tong CEO	BC Housing	vtong@bchousing.org

VIA EMAIL Ref. 61804

Addressees:
[Please see 61804 Digital Advisory Council Contact List attached to eApprovals]

Subject: Invitation to Participate on the Minister of Housing's Digital Advisory Council

The Province is taking action to make BC a North American leader in digital permitting and construction as part of our efforts to help deliver more homes for people, faster. In the interest of making this a collaborative process, I am establishing a Digital Advisory Council, representing the housing development and technology sectors, to provide advice and feedback on our progress towards this vision.

I would like to invite you to participate as a member of the Ministry of Housing's Digital Advisory Council. The Council will meet on a quarterly basis. My office is working to set up the first meeting for the week of October 30, 2023.

The first meeting will be held virtually, and we will look for opportunities to meet in person for future meetings. Closer to the meeting date, a calendar invitation and meeting materials.

I look forward to working with you on this exciting opportunity.

If you have any questions, please feel free to reach out to Zachary May, Executive Director of Housing Innovations with the Ministry of Housing at zachary.may@gov.bc.ca.

Sincerely,

Ravi Kahlon
Minister of Housing

pc: Zachary May, Executive Director, Housing Innovations, Ministry of Housing

RE: MO Request for updated list for Invitation to participate on the Digital Advisory Council | FW: 61804

From: May, Zachary HOUS:EX
To: HOUS Correspondence Unit HOUS:EX <OHCSCORR@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: October 6, 2023 3:45:56 PM PDT
Attachments: 61804 Digital Advisory Contact List Oct 6 update.docx, image001.png

Contact list updated to include the Urban Land Institute (MO request).

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: HOUS Correspondence Unit HOUS:EX <OHCSCORR@gov.bc.ca>
Sent: Friday, October 6, 2023 1:39 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Subject: MO Request for updated list for Invitation to participate on the Digital Advisory Council | FW: 61804
Importance: High

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Linda Phillips
Correspondence Clerk
Ministry of Housing
Phone: 778-974-2013
OHCSCORR@gov.bc.ca

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Subject: FW: 61804
Importance: High

Mark would like full list pls.

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Sent: Friday, October 6, 2023 12:48 PM
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Subject: RE: 61804

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Cheers,

Mark

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Sent: Friday, October 6, 2023 11:08 AM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: 61804
Importance: High

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Angella Thompson, Team Lead
Corporate Correspondence Unit
Business Planning and Priorities
Corporate Management Services Branch
Ministries of Attorney General, Public Safety and Solicitor General and Housing
Victoria, British Columbia
778-974-3799

Empowered Partners and Leaders
Providing Outstanding Service

Corporate Management
Services Branch

Digital Advisory Council Membership List

Last Updated: October 6, 2023

Member	Organization	Email
Jazz Pabla Director of Information Services	City of Kelowna	jpabla@kelowna.ca
Tim Ryce Chief Building Official	City of North Vancouver	tryce@cnv.org
Rene Cravioto Program Manager – Innovation & Service Delivery	City of Vancouver	Rene.Cravioto@vancouver.ca
Tyler Wightman Executive Director	Building Officials' Association of BC	tyler.wightman@boabc.org
Helen Goodland Principal, Head of Research and Innovation	SCIUS Advisory, Inc.	hgoodland@scius.ca
Heidi Yang CEO	Engineers and Geoscientists BC	Hyang@egbc.ca
Mark Vernon CEO	Architectural Institute of British Columbia	MVernon@aibc.ca
Neil Moody CEO	Canadian Home Builders Association of BC	Neilmoody@chbabc.org
Anne McMullin President & CEO	Urban Development Institute	amcmullin@udi.org
Sue Paish CEO	Digital	spaish@digitalsupercluster.ca
Dr. Sheryl Staub-French Director of BIM TOPiCS Lab	University of British Columbia	ssf@civil.ubc.ca
Vincent Tong CEO	BC Housing	vtong@bchousing.org
Duncan Wlodarczak	Urban Land Institute	duncan.wlod@gmail.com

ULI BC Chair		Cc: Opreet Kang s.22

RE: Due ASAP: Digital Permitting NR

From: May, Zachary HOUS:EX
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>, Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Cc: Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: October 10, 2023 9:50:09 AM PDT
Attachments: NR Digital Permitting Updates 10Oct23 730am zm.docx

Updated with language connecting this work to BIM.

No word from Kelowna.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: Tuesday, October 10, 2023 8:39 AM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Due ASAP: Digital Permitting NR

Hi Travis –

s.13 . Zac should be able to help if he's online soon but also cc'd Nicole who might be able to get started.

J

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Tuesday, October 10, 2023 8:33 AM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Subject: Re: Due ASAP: Digital Permitting NR

Sorry - it is an additional question we wanted to ask about if you can find a spot.

s.13

Get Outlook for iOS

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: Tuesday, October 10, 2023 8:29:00 AM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Subject: RE: Due ASAP: Digital Permitting NR

Hi Travis –

Zac to confirm please. I can't attend @ 9:15.

Pretty sure the answers remain 'not confirmed' as we await paperwork.

John

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Tuesday, October 10, 2023 7:31 AM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Butler, Liam GCPE:EX <Liam.Butler@gov.bc.ca>
Subject: Due ASAP: Digital Permitting NR
Importance: High

Hi

Two questions from MO on today's NR (set for 215pm), current draft attached.
Is Kelowna ready to be included as a pilot community?
Are there additional members on the advisory council? (UII?)
Thanks
Travis

Travis Paterson | Senior Public Affairs Officer
Government Communications and Public Engagement
Ministry of Housing
250-882-8105
he, him

BRITISH COLUMBIA

NEWS RELEASE

Not Approved
Oct. 10, 2023

Ministry of Housing

New digital building permit tool will help create more homes faster

VICTORIA – More new homes for people will be approved faster as the Province works with partners to develop a new digital building permit tool.

"People will soon see new homes approved faster as we make good on our commitment to position B.C. as a North American leader in digital permitting and construction," said Ravi Kahlon, Minister of Housing. "We are excited to start work together with our partners to design and then implement this new digital building permit tool, so we can speed up the delivery of new homes and create the types of housing options people need in B.C."

Currently, many jurisdictions in B.C. rely on a paper-based application process for new housing developments that leads to delays and slow approval times. Once completed, the new digital building permit tool will make it faster and simpler for builders and developers to digitally submit building permits for new housing and for local governments to receive and process the application. The tool will also automatically review the submission to ensure it is compliant with key parts of the BC Building Code to prevent any delays with the submission process.

Establishing a provincial building permit submission tool is the first step towards a modern housing development process that embraces innovation and digital collaboration technologies like Building Information Modelling (BIM). The Ministry of Housing is also working with the National Research Council of Canada to make construction codes machine readable, which will allow for more automated and faster permit reviews in the future.

"A fast, efficient permitting process is key to ensuring infrastructure projects are able to move forward in a timely manner," said Lisa Beare, Minister of Citizens' Services. "Citizens' Services staff are lending their expertise to help develop the new digital permitting tool which will help make this happen."

The tool is being developed through a pilot partnership between the Province, 15 local governments and one First Nations government that will implement the new digital building permit tool. The tool is expected to begin testing in partnership communities by March 2024, following which it will be expanded into other communities.

"In this critical time, it is imperative that we work together to tackle the housing crisis head on so we find housing solutions that support all members of the community-families, individuals, young people and seniors," said Linda Buchanan, mayor, North Vancouver. "Involving local and First Nations governments in the development of the new digital building permit process tool is vital to ensuring people with diverse needs are able to find appropriate and affordable housing faster. That goal perfectly aligns with our city's Housing Action Plan, too."

In addition, the Province has also created a new digital advisory council to provide strategic advice, ensuring the Province is achieving the broader vision of becoming a North American leader in digital permitting and construction. The council will include representatives from 11

leading organizations across the housing development system, such as construction organizations, engineers, architects, local governments and the tech sector. The council will begin regular meetings this fall.

"Digitizing the BC Building Code and building permit processing will help builders more

efficiently obtain approvals to deliver the homes and job spaces British Columbians need," Anne McMullin, president and CEO, Urban Development Institute. "UDI is pleased to participate on the digital advisory council for this pilot partnership and is committed to working with the government on innovative solutions like this."

These projects build on the government's work to digitize the BC Building Code and establish a single-application portal for provincial housing permits and authorizations, which was launched in September 2023. It also builds on the Province's development approvals process review, which began in 2018 and helps local governments improve their processes.

"This is an important initiative that is designed to help get more housing built faster and to mitigate costs related to delays," said Tom Dyas, mayor, Kelowna. "The City of Kelowna has been working on a similar system over the past year and is eager to share our learnings as well as learn what else can be done by working collaboratively across governments."

Advancing digital permitting and construction is part of the Province's new housing plan Homes for People. The plan will speed up delivery of new homes, increase the supply of middle-income housing, fight speculation and help those who need it the most.

Learn More:

To read the Homes for People action plan, visit:
https://news.gov.bc.ca/files/Homes_For_People.pdf

To learn more about the Single Housing Application Service, visit:
https://news.gov.bc.ca/releases/2023HOUS0058-001472

A backgrounder follows.

Contact:

Ministry of Housing
Media Relations
236 478-0251

Connect with the Province of B.C. at: news.gov.bc.ca/connect

BRITISH COLUMBIA

BACKGROUNDER

Not Approved
Oct. 10, 2023

Ministry of Housing

Local governments partner with Province to test new digital tool

Through a new pilot partnership, 15 local governments and one First Nations community are working with the Province to design the new digital permitting tool and test the tool in their communities, starting in March 2024.

They include:

- Tsleil-Waututh Nation
- District of Saanich
- City of Burnaby
- City of Campbell River
- City of Coquitlam
- City of Kamloops
- City of Langley
- City of Maple Ridge
- City of Nanaimo
- City of North Vancouver
- City of Surrey
- City of Terrace
- City of Victoria
- City of Vancouver
- Cowichan Valley Regional District
- Town of Qualicum Beach

In addition, the new Digital Advisory Council will provide feedback and guidance on how the new digital permitting tool will look and work. The council is comprised of the following 11 representatives from across the housing development and tech sectors:

- Digital (previously known as Digital Technology Supercluster)
- Building Officials' Association of B.C.
- Scius Advisory
- Engineers and Geoscientists of B.C.
- Architectural Institute of B.C.
- Canadian Home Builders Association of B.C.
- University of British Columbia
- Urban Development Institute
- City of Kelowna
- City of North Vancouver
- City of Vancouver

Contact:

Ministry of Housing
Media Relations
236 478-0251

Connect with the Province of B.C. at: news.gov.bc.ca/connect

61804 Anne McMullin

From: AG CMSB House Correspondence AG:EX <HOUS.Correspondence@gov.bc.ca>
To: amcmullin@udi.org
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: October 10, 2023 12:26:04 PM PDT
Attachments: Anne McMullin 61804.pdf

Dear Anne McMullin:

Sending the attached letter on behalf of the Honourable Ravi Kahlon, Minister of Housing.

BRITISH
COLUMBIA

VIA EMAIL

Ref. 61804

October 10, 2023

Anne McMullin
President & CEO
Urban Development Institute
Email: amcmullin@udi.org

Dear Anne McMullin:

Subject: Invitation to Participate on the Minister of Housing's Digital Advisory Council

The Province is taking action to make BC a North American leader in digital permitting and construction as part of our efforts to help deliver more homes for people, faster. In the interest of making this a collaborative process, I am establishing a Digital Advisory Council, representing the housing development and technology sectors, to provide advice and feedback on our progress towards this vision.

I would like to invite you to participate as a member of the Ministry of Housing's Digital Advisory Council. The Council will meet on a quarterly basis. My office is working to set up the first meeting for the week of October 30, 2023.

The first meeting will be held virtually, and we will look for opportunities to meet in person for future meetings. Closer to the meeting date, a calendar invitation and meeting materials.

I look forward to working with you on this exciting opportunity.

.../2

Office of the Minister of Housing

Website: www.gov.bc.ca/housing

Mailing Address:
PO Box 9074 Stn Prov Govt
Victoria BC V8W 9E9
Phone: 236 478-3970

Location:
Parliament Buildings
Victoria BC V8V 1X4
Email: HOUS.Minister@gov.bc.ca

If you have any questions, please feel free to reach out to Zachary May, Executive Director of Housing Innovations with the Ministry of Housing at zachary.may@gov.bc.ca.

Sincerely,

Ravi Kahlon
Minister of Housing

pc: Zachary May, Executive Director, Housing Innovations, Ministry of Housing

RE: UDI Submission: proposed B.C.-specific Building Code changes

From:	Cassandra Smith <csmith@udi.org>
To:	Lily Shields-Anderson <lshieldsanderson@udi.org>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc:	Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent:	October 12, 2023 2:27:07 PM PDT
Attachments:	image011.jpg, image015.jpg, image002.jpg, image003.jpg, image016.jpg, image001.jpg, image013.jpg, image014.jpg, image012.jpg, image009.jpg, image010.jpg, image008.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I hope you're doing well. I'm confirming that you're still able to participate in our Building Code meeting next Thursday afternoon via Zoom? Let me know if you have any slides/materials that we can circulate to our committee in advance.

I'm hoping that you'll be able to provide an update on the status of the 2023 BC Building Code updates and any potential mitigation measures, would this be possible?

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

*** Vacation Alert ***s.22

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: September 15, 2023 11:06 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Jun'ichi,

Please see a few alternate times below:

Monday, October 16th at 10 am
Thursday, October 19th at 2pm

Let me know if either of these dates work for you.

Thanks,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 14, 2023 2:57 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

My apologies, Lily but something I committed to had not yet been input in to my calendar and I realize now that October 18 at 2 I will be in another presentation. Would the following day work?

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Wednesday, September 13, 2023 4:32 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I have sent an invite for 2 pm on October 18th.

Thank you,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, September 13, 2023 10:02 AM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Lily,

I can make it work any time in that window.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Tuesday, September 12, 2023 10:45 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thank you for the update.

If you think the timing would work to have more information later in the fall, we would be happy to move our Building Codes Committee meeting. Are you available in the afternoon on October 18th? Any time between 1pm – 4 pm works on our end.

Thank you,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 7, 2023 4:52 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

Thank you, I did receive your other email and will respond soon after we've had time to review and discuss.

On this note, I don't have a set day yet, but we do expect to know a bit more in late September or early October. I can definitely attend a meeting shortly after, but I'm sorry that I don't have a specific date I can give you.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, August 31, 2023 2:44 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi

Thanks for following up on this. If the Sept. 21 timing no longer aligns, we can shift our meeting date to accommodate your schedule. This will avoid us needing to have two meetings in short succession, as the Building Code changes remain a major topic of discussion. Please let us know what timing would work better.

As well, we have gathered additional information from our members estimating the changes required to comply with the proposed accessibility requirements and we be able to share that next week. Hopefully this information is helpful and can still be considered as part of the process.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 28, 2023 5:44 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

It sounds like there will be some further clarity on this just after your meeting- closer to the end of September. That means I won't have anything to share on September 21. Please feel free to let folks know we are expecting to know more shortly after the meeting. If helpful, I could attend the subsequent meeting to answer questions. For now, please do not hold a space for me on Sept 21. Thank you so much for working with me on this and for accommodating the changes as they've happened.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Wednesday, August 16, 2023 4:06 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>

Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thanks for the update. We will plan to have you provide a virtual update at the September 21st meeting. There may also be topics that our members want to discuss with you related to the BCBC changes as well.

I'd also flag that going into the fall our members will be looking for confirmation of the implementation timeline for the Building Code changes, as they were slated to come into effect by the end of the year. They're already reaching out to us looking for information to help direct their design processes, since these proposed changes will have a large impact. If you have any updates on when they will be effective that would be of interest to our members in September, or whenever information is available.

Feel free to reach out to myself or Jeff if there's any way we can be of assistance.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

UDI URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 16, 2023 1:47 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

I think meeting with the group on Sept 21 will be fine for me. I may or may not have any news to share at that time, but we can touch base closer to the date to confirm.

Thanks again,

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, August 14, 2023 1:57 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thanks for the quick reply. Keep me posted on the next steps and whether follow-up discussion is needed.

Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 14, 2023 1:52 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

Thanks for following up. I hope to know this week if we will need to speak with the group again.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, August 14, 2023 1:48 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I hope you had a great vacation and got some R&R! I'm just picking up this thread from last month to confirm the timing of a follow-up meeting with UDI and our Building Codes Committee. We still have our next Committee meeting booked for Sept. 21, but could convene the group earlier if needed.

Let me know what the timing looks like for the next steps and we can set up a meeting with our Committee.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: July 21, 2023 9:26 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Jun'ichi,

Sounds good. Have a great vacation and I look forward to connecting in a few weeks!

Thanks,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, July 20, 2023 4:49 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Thank you, Lily for the quick response. I will pick this up on my return as I should know a bit more about the topic of discussion in early August.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Thursday, July 20, 2023 2:46 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thank you for reaching out and glad to hear you are enjoying your summer!

We would be pleased to meet to discuss the options you are looking at. Our next Building Codes Committee meeting is scheduled for September 21st, 10am-11am. If it is preferred to meet with the group earlier, or if you require more than 1 hour, this can be adjusted.

Please let us know what your timing looks like to receive feedback on this and we look forward to continuing this discussion.

Best regards,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, July 19, 2023 1:24 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Lily and Cassandra,

I hope you are both finding some time to relax this Summer. I've got some vacation coming up next week :)

When is your UDI building code committee meeting next? I would like to discuss with the group some proposed options for delayed implementation of some code requirements. This is based on the suggestion of tying the new code requirements to development permits.

Thanks,

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, June 16, 2023 1:17 PM
To: HOUS BSSB Public Review HOUS:EX <BSSB.public.review@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Good afternoon,

On behalf of Anne McMullin, President & CEO of UDI and our members, please find attached our submission on the proposed B.C.-specific Building Code changes. Throughout our letter we recommend that additional time be taken before implementation to analyze the impacts of the proposed changes and develop offsets to mitigate them. We

reiterate our appreciation for the work being done by the Building and Safety Standards Branch, and would be pleased to provide support if it is determined that further analysis will be done.

If you would like to discuss any of our recommendations further, please let us know.

Regards,

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

RE: update on BCBC

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Sent: October 12, 2023 3:58:20 PM PDT

That is what we've heard and we will be meeting with them soon, possibly with ADM support to confirm and discuss possible solutions.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Sent: Thursday, October 12, 2023 10:58 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: update on BCBC

Hi Jun'ichi,

Do you know if the combined effect of both seismic and adaptability requirements on new construction (floor space ration) is what the concern is?

Stephen Watt | *Senior Codes Administrator*
Ph: 236-478-0578
Building and Safety Standards Branch | Ministry of Housing

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, October 12, 2023 10:23 AM
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Dang, Tommy HOUS:EX <Tommy.Dang@gov.bc.ca>; Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>; Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Subject: update on BCBC

Hi team,

Still awaiting more direction before we proceed with these items, but heads up below that this is what will likely go to the Minister this week, so will likely be where we are going next. I suspect next up is a DBN on seismic, which Kevin and I can take care of.

- Timing for Minister's regulation dependent on direction re: Seismic.

- Working with Engineers and Geoscientists BC (EGBC) to assemble industry experts to analyze impacts of changes to seismic requirements proposed to be adopted from the model National Building Code. White paper to advise engineers from Structural Engineers Association of BC possible for fall 2023. This work is intended to inform approaches to work with local governments to mitigate space impacts of the code changes on new housing projects.

-

Additional round of consultation with key interested parties (UDI, CHBABC, potentially others) being planned to identify pressures on housing supply arising from seismic
risk mitigation measures and to identify options such as floor space ratio adjustments that may help address pressures.

- Note on options to mitigate pressures arising from seismic and adaptability provisions in code being drafted to advance.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: Booking consultation session next week on seismic

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: October 13, 2023 12:49:21 PM PDT
Attachments: image001.png

s.13

We need to validate the seismic approach with stakeholders.

I will ensure that we are prepared to receive questions about adaptability at the consultation.

Kevin

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Friday, October 13, 2023 12:48 PM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: Booking consultation session next week on seismic

Yes, I can distribute the invitation from the BSSB box. I will action this asap today.

Are we also doing a consultation on adaptable dwellings?

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Friday, October 13, 2023 12:17 PM
To: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: Booking consultation session next week on seismic

Hello Aman,

Answers below.

From: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Sent: Friday, October 13, 2023 12:14 PM
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: Booking consultation session next week on seismic

Kevin – Meeting invite (below) has been updated based on Juni's suggestion. A few questions for you

- Did we want to add an agenda (see attached) or it could be added to the invite afterwards once attendance is confirmed?
  Send the agenda once attendance is confirmed
- Confirm whose name should be on the signature line (ADM or You, right now drafted with ADM)
  Send under my name.
- Review the distribution list and confirm that it is ok
  Distribution list OK
- Are you ok with October 20, 2:30 to 3:30?
  OK – let's do this

Shannon – Once approved by Kevin, are you able to send from the BSSB inbox? Distribution List is attached.

***Subject**: BCBC Seismic Requirements – Review and Discussion of Industry Feedback*

Greetings,

The Ministry of Housing is working toward finalizing the 2024 British Columbia Building Code. Thank you for participating in the earlier public review of code changes and providing feedback on proposed seismic mitigation provisions. The purpose of this session is to continue that discussion and consider options to mitigate any unintended impacts of the seismic provisions in the proposed 2024 British Columbia Building Code.

Please feel free to send the appropriate representative from your organization.

Sincerely,

Bindi Sawchuk,
Assistant Deputy Minister
Housing and Land Use Policy Division

Aman Gill | A/Director, Policy & Legislation

Ministry of Housing
Building and Safety Standards Branch
Email: Aman.X.Gill@gov.bc.ca
Phone: 778 974-3899

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Friday, October 13, 2023 11:13 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Subject: RE: Booking consultation session next week on seismic

Hello,

I have added the contacts, as requested, and provide updates in blue.

Please let me know if you require anything further.

Thank you.
Shannon

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, October 13, 2023 10:40 AM
To: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: Booking consultation session next week on seismic

Hi Aman,

My contacts may not be the contacts the organizations will send, so please advise them in the invitation they have option to send the right folks. Kevin, no VRBA? Shannon- please see some questions for you below.

EGBC
afehr@egbc.ca Amy Fehr
Allison Chen achen@egbc.ca
Their new boss is Raman (sp?)

but I don't know his last name and can't find it-they will want a copy to go to him.

AIBC
Maura Gatensby mgatensby@aibc.ca
you should copy MVernon@aibc.ca Mark Vernon but this is very much a Maura thing.

UDI
jfisher@udi.org Jeff Fisher
Lily Shields-Anderson <lshieldsanderson@udi.org>
Cassandra Smith <csmith@udi.org>
Their president or ED sent me a letter- Anne? Shannon will have the letter and name.
Anne McMullin amcmullin@udi.org

CHBABC

~~CEO Neil Moody- I believe he signed the letter to us Shannon? neilmoody@chbabc.org~~
pauline@chbabc.org Pauline Rupp signed the letter to BSSB
Carmina Tupe carmina@chbabc.org

HAVAN
Diana Dilworth, Director of Government Relations – Homebuilders Association Vancouver #778-373-9784
diana@havan.ca

Shannon may be able to find the a letter from them with a contact- I think they sent one for PR

VRBA?? Victoria Residential Builders Association
'Casey Edge, Executive Director, vic.builders@vrba.ca

In addition, we also received letters in regard to seismic provisions from:

Independent Contractors and Businesses Association
Chris Gardner, President
infopg@icba.ca
250-596-8118

Denciti Development Corp
604-638-0771 info@denciti.ca
No signatory provided

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Friday, October 13, 2023 9:29 AM
To: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Booking consultation session next week on seismic

I do not – hoping that Juni may be able to find time to provide those. Shannon may also know.

From: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Sent: Friday, October 13, 2023 9:29 AM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>

Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Booking consultation session next week on seismic

Hi Kevin:

I'm happy to coordinate with ADMO to find a time Thurs/Fri next week. I'll prepare a draft invite and send your way this morning as well. Do we have a list of key representatives from the organizations?

Thanks,

Aman Gill | A/Director, Policy & Legislation

Ministry of Housing
Building and Safety Standards Branch
Email: Aman.X.Gill@gov.bc.ca
Phone: 778 974-3899

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Friday, October 13, 2023 9:23 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: Booking consultation session next week on seismic
Importance: High

Hi folks,

We have the go-head to book a meeting with Bindi and stakeholders for a consultation on *seismic* requirements and potential mitigation. s.13
s.13

Attendees would be:

- UDI
- CHBABC
- HAVAN
- EGBC
- AIBC (?)

Bindi would like a meeting to be scheduled at the end of next week so that she can get past the introduction of legislation early in the week. Can we find someone with time to connect to ADMO (Indy/Lori) to find an hour or so Thurs/Fri with Bindi for a teams meeting and then invite stakeholder contacts?

The invitation to stakeholders is to be general, a continuation of review of their feedback relating to seismic requirements pending BCBC approval. I'd like to review text of the invite.

Thank you,

Kevin Harding | A/Executive Director

Building and Safety Standards Branch, Housing and Land Use Policy Division
Ministry of Housing
Email: kevin.harding@gov.bc.ca
Telephone: 250-213-5461 (direct)

RE: 61804 Vincent Tong

From: Denisa Ionescu <dionescu@bchousing.org>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Esther de Vos <edevos@bchousing.org>
Sent: October 19, 2023 11:29:08 AM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac: Thank you. I can see the names of a few BC Housing ICAC members and industry and academia representatives BC Housing works with.

Best wishes,
Denisa

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: October 19, 2023 11:20 AM
To: Denisa Ionescu <dionescu@bchousing.org>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Esther de Vos <edevos@bchousing.org>
Subject: RE: 61804 Vincent Tong

Hi Denisa,

The purpose of the council is to provide advice to the Minister of Housing on the Province's commitment to position BC as a North American leader in digital permit and construction. Minister Kahlon is the chair, and the group consists of executive leaders from across the construction and tech sector (see current membership list below).

The most helpful thing for Vincent to provide at this council is how digital transformation in the sector can be done in a way that provides positive outcomes for BC Housing and the people BC Housing serves. In practice, this likely means some close collaboration between our teams on this work so you can provide background info to Vincent in advance of the quarterly meetings.

Member	Organization	Email
Jazz Pabla Director of Information Services	City of Kelowna	jpabla@kelowna.ca
Tim Ryce Chief Building Official	City of North Vancouver	tryce@cnv.org
Rene Cravioto Program Manager – Innovation & Service Delivery	City of Vancouver	Rene.Cravioto@vancouver.ca
Tyler Wightman Executive Director	Building Officials' Association of BC	tyler.wightman@boabc.org
Helen Goodland Principal, Head of Research and Innovation	SCIUS Advisory, Inc.	hgoodland@scius.ca
Heidi Yang	Engineers and Geoscientists BC	Hyang@egbc.ca

CEO		
Mark Vernon CEO	Architectural Institute of British Columbia	MVernon@aibc.ca
Neil Moody CEO	Canadian Home Builders Association of BC	Neilmoody@chbabc.org
Anne McMullin President & CEO	Urban Development Institute	amcmullin@udi.org
Sue Paish CEO	Digital	spaish@digitalsupercluster.ca
Dr. Sheryl Staub-French Director of BIM TOPiCS Lab	University of British Columbia	ssf@civil.ubc.ca
Vincent Tong CEO	BC Housing	vtong@bchousing.org
Theresa McCurry CEO	Association of Trades and Technologists of BC	tmccurry@asttbc.org
Duncan Wlodarczak Chief of Staff Opreet Kang	Urban Land Institute	duncan.wlod@gmail.com s.22
TBD	BC Tech Association	

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Denisa Ionescu <dionescu@bchousing.org>
Sent: Thursday, October 19, 2023 10:58 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Esther de Vos <edevos@bchousing.org>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: 61804 Vincent Tong

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac: Would you be able to share a bit of background on this advisory council so we can better support you. What industry representatives are part of this forum and what type of input you are seeking. Thanks a lot.

Best wishes,

Denisa

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: October 16, 2023 5:02 PM
To: Esther de Vos <edevos@bchousing.org>; Denisa Ionescu <dionescu@bchousing.org>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: FW: 61804 Vincent Tong

Hi Esther and Denisa,

Flagging this letter that went to Vincent for you. The first meeting of the advisory council is Oct 31 from 11-12:30, and we're hoping Vincent (or his delegate) can speak to BC Housing's perspective on digital transformation in construction.

Let me know if a pre-meeting would be helpful to make sure everyone is prepared.

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: AG CMSB House Correspondence AG:EX <HOUS.Correspondence@gov.bc.ca>
Sent: Tuesday, October 10, 2023 12:37 PM
To: 'vtong@bchousing.org' <vtong@bchousing.org>
Cc: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: 61804 Vincent Tong

Dear Vincent Tong:

Sending the attached letter on behalf of the Honourable Ravi Kahlon, Minister of Housing.

Greetings,

The Ministry of Housing is working toward finalizing the British Columbia Building Code.

Thank you for participating in the earlier public review of code changes and providing feedback on proposed seismic mitigation provisions.

The purpose of this session is to continue that discussion and consider options to mitigate any unintended impacts of the seismic provisions in the proposed British Columbia Building Code. An agenda is attached.

Please feel free to send this invitation to the appropriate representative from your organization.

Sincerely,

Kevin Harding

A/Executive Director

Building and Safety Standards Branch

Ministry of Housing

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15; s.17

FW: BCBC Seismic Requirements - Review and Discussion of Industry Feedback

From: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: October 19, 2023 2:15:51 PM PDT
Attachments: image001.jpg
FYI

From: Casey Edge <vic.builders@vrba.ca>
Sent: Thursday, October 19, 2023 2:15 PM
To: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>
Cc: 'Ellie Sercombe' <ellie@limonagroup.com>; 'John Sercombe' <limona.john@shaw.ca>; admin@vrba.ca
Subject: RE: BCBC Seismic Requirements - Review and Discussion of Industry Feedback

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Ellie Sercombe, VRBA President & John Sercombe, Limona Group will attend, in the interests of housing affordability.

Thank you,

Casey Edge
Executive Director
Victoria Residential Builders Association
#1-3690 Carey Rd
Ph: 250-383-5044
vic.builders@vrba.ca
www.vrba.ca
www.careawards.ca

VICTORIA RESIDENTIAL BUILDERS ASSOCIATION

-----Original Appointment-----
From: HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>
Sent: Thursday, October 19, 2023 12:05 PM
To: Jayme Colville; 'afehr@egbc.ca'; 'achen@egbc.ca'; 'maura'; 'MVernon@aibc.ca'; 'jfisher@udi.org'; 'lshieldsanderson@udi.org'; 'csmith@udi.org'; 'amcmullin@udi.org'; pauline@chbabc.org; 'diana@havan.ca'; 'vic.builders@vrba.ca'; 'infopg@icba.ca'; 'info@denciti.ca'; Sawchuk, Bindi HOUS:EX; May, Zachary HOUS:EX; Jensen, Jun'ichi HOUS:EX; Harding, Kevin HOUS:EX; Laboucane, Shannon HOUS:EX; 'carmina@chbabc.org'; 'neilmoody@chbabc.org'
Cc: Gill, Aman X HOUS:EX; Ramin Seifi; Sophie Pan; Andrew Harmsworth; Harrison Glotman; Chase, Andy HOUS:EX
Subject: BCBC Seismic Requirements – Review and Discussion of Industry Feedback
When: October 20, 2023 2:30 PM-3:30 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Greetings,

The Ministry of Housing is working toward finalizing the British Columbia Building Code.

Thank you for participating in the earlier public review of code changes and providing feedback on proposed seismic mitigation provisions.

The purpose of this session is to continue that discussion and consider options to mitigate any unintended impacts of the seismic provisions in the proposed British Columbia Building Code. An agenda is attached.

Please feel free to send this invitation to the appropriate representative from your organization.

Sincerely,

Kevin Harding
A/Executive Director
Building and Safety Standards Branch
Ministry of Housing

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting

s.15; s.17

RE: notes from seismic

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>, Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: October 20, 2023 3:42:03 PM PDT

Thank you, Juni.

Here is a link to the draft notes from the session.

I will review and revise as you likely captured some points I may have missed.

Kevin, please let me know if you would like a summary of key themes.

Thank you.

Shannon

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, October 20, 2023 3:31 PM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: notes from seismic

Impacts to non seismic communities- Quesnel due to snow load

John Sercombe- costs are always more than originally anticipated, shear walls settle at different rates, which can lead to other problems. Step code scoring- engineering requirements affect how they can meet step code- need to do more to achieve step code due to engineering. 2 storey wood frame- the inspectors don't accept prescriptive. 3-5% increase is still big due to overall cost in relation to affordability. 2 storey wood frame- no deaths in earthquakes in Canada.

Cassandra smith- UDI- summary captures mitigation measures, but add nuance on FSR- standardize FSR calculation for province- definitions vary. Look at net saleable area (eg Esquimalt or Kelowna). Changing what we can do on a site- can we do a density transfer to allocate density elsewhere?

Casey Edge- diminishing returns on seismic- why is the old inadequate? Why not focus cost on existing? New is the safest and most energy efficient. Reno rebates? Costs are already so high, any increase is significant. Every small increase contributes to the problem. If we need to save, need to cap costs – DCC's have increased a lot.

Pauline- FSR may not be as suitable because because they are not needing to add extra walls- it will be more a case of extra plywood and materials, rather than floor space impacts. Question for EGBC- can engineers use the prescriptive path? If not, they may not get used and cost savings may not be seen. Amy Fehr noted that an engineer may or may not use part 9- professional discretion. Often they move towards Part 3. Allison noted Guidelines provide that you should follow CWC guidelines, which is above and beyond. Need dates- what is the longest runway?

Amy Fehr- EGBC- concerns with not adopting seismic- life safety- thorough research and better understanding of ground motions- 3 types of earthquakes. Science is correct- may seem like overdesign until we experience an earthquake. Schools in BC all being upgraded and using NBC 2020- site specific response analysis is confirming the new seismic loads are similar to NBC. 20-40% increase in load is 3-5% increase in cost.

Harrison Glotman engineer- cost is minimal, but EQ loads have gone up 50% due to newly discovered fault line, so wood frame with concrete topping is less viable. May need a new acoustical product instead of concrete topping.

Alison Chen- EGBC- if you push a material too far it is costly and may need to switch to hybrid concrete and wood. Acknowledge increasing cost- cost is also from land- is there a solution there? SRG- uses 2020 NBC for 3 years- the SSRA is very close to NBC values- not overdesigned.

Mass timber report---- please respond by Oct 31 with comments and last minute suggestions

From: Denisa Ionescu <dionescu@bchousing.org>

To: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>, McDonald, Cameron JEDI:EX <Cameron.McDonald@gov.bc.ca>, Bingham, Brittany JEDI:EX <Brittany.Bingham@gov.bc.ca>, Nicol, Lee A JEDI:EX <Lee.Nicol@gov.bc.ca>, Rotgans, Trudy JEDI:EX <Trudy.Rotgans@gov.bc.ca>, Smith, Dawn M JEDI:EX <Dawn.M.Smith@gov.bc.ca>, Andrew.Lis@gov.bc.ca, Bi, William FOR:EX <William.Bi@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Hutchinson, Jarrett JEDI:EX <Jarrett.Hutchinson@gov.bc.ca>, sonya zeitlerfletcher <sonya.zeitlerfletcher@bcfii.ca>, Nina Dmytrenko <ndmytren@cmhc-schl.gc.ca>, chris.higgins <chris.higgins@vancouver.ca>, Enright, Patrick <Patrick.Enright@vancouver.ca>, Mohammad, Mohammad (NRCan/RNCan) <mohammad.mohammad@canada.ca>, Coxford, Richard (NRCan/RNCan) <richard.coxford@canada.ca>, Duncan Hill (dhill@cmhc-schl.gc.ca) <dhill@cmhc-schl.gc.ca>, Jieying Wang <jieying.wang@fpinnovations.ca>, Michael Lachocki <mlachocki@bchousing.org>, Peter Moonen <pmoonen@wood-works.ca>, rockys@adera.com, Wiesel, Matthew JERI:EX <Matthew.Wiesel@gov.bc.ca>, Jeff Fisher <jfisher@udi.org>, jack.christopher@aviva.com, jan.rasilainen@travelers.com, darren.vanwart@pacificwarranty.com, Tack, Stefan E FOR:EX <Stefan.Tack@gov.bc.ca>, Tony Gioventu (external) <tony@choa.bc.ca>, Allison DenToom <adentoom@egbc.ca>, Patrick Wittmann <Patrick.Wittmann@nhwg.ca>, Maura Gatensby <mgatensby@aibc.ca>, Michelle Hayes <mhayes@bchousing.org>, Sheryl Peters <speters@bchousing.org>, Esther de Vos <edevos@bchousing.org>, XT:McCurry, Theresa GCPE:IN <tmccurry@asttbc.org>, Jigar Patel <jpatel@bchousing.org>, Ren Bai <rbai@bchousing.org>, Sadia Afrin <saafrin@bchousing.org>, Michelle Lee <milee@bchousing.org>, Bill MacKinnon <bmackinnon@bchousing.org>, Wilma Leung <wileung@bchousing.org>, Sarah Rutherford <sruther@bchousing.org>, Quang Tran <qtran@bchousing.org>, Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Thomas Bevan <tbevan@bchousing.org>, Matthew Brodie <mbrodie@bchousing.org>, Cameron Skoglund <cskoglund@bchousing.org>, Arash Azadeh <aazadeh@bchousing.org>

Cc: Eric Wood <EWood@morrisonhershfield.com>, John Wall <john@publicdesign.ca>, Ken King <kking@hanscomb.com>, jsullivan@fastepp.com, ykulikov@fastepp.com, Amy Collis <acollis@bchousing.org>, XT:Brown, Derek HOUS:IN <debrown@bchousing.org>

Sent: October 26, 2023 2:07:21 PM PDT

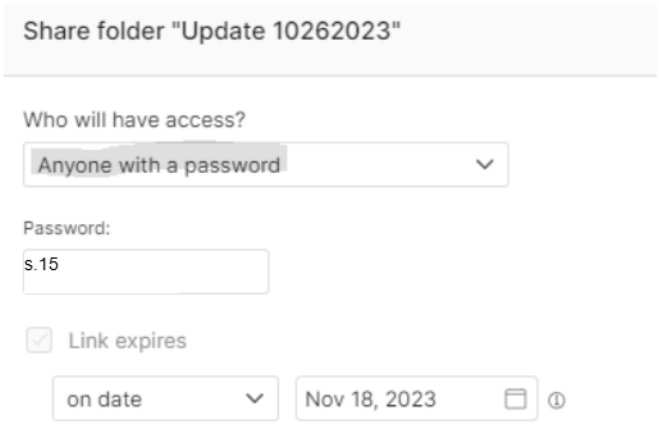
Attachments: image001.png, image004.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hello everyone: Thanks for the interest in this work, valued input and funding. Here's the link to the Final Report, with the addition of the French translation of the Executive Summary as per CMHC request.

We are in the process of seeking final approvals to release the report followed by posting on King's Printer website. Please **respond by Oct 31** with comments and/or any last minute critical edits we might have missed. Thanks again!

New links to the EMTC report included here:
Update 10262023
Password:[s.15]
https://mh.egnyte.com/fl/tw0FcEweQU



Best wishes,
Denisa

Denisa Ionescu, Ph.D.| Sr. Manager Research & Education
BC Housing | Mobile: 604-454-7303
dionescu@bchousing.org | www.bchousing.org
1701 - 4555 Kingsway, Burnaby, BC V5H 4V8

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Visit our Research Centre Library and sign up for the latest updates.

BC Housing gratefully acknowledges that we live and work on the unceded traditional and ancestral homelands of hundreds of Indigenous Peoples and Nations each with their own unique traditions, history, and culture.

With gratitude, I live and work on the unceded traditional territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and səlilwətaɬ (Tsleil-Waututh) Nations.

CLIFF # | eApps #
TBD
Request submitted by:
Zachary May, ED Housing Innovations
Meeting/Briefing Title/Group:
Minister's Digital Advisory Council – Meeting #1
Meeting/Briefing Purpose:
Meet with leaders from across the construction and technology sectors to seek advice on the Ministry of Housing's commitment to position BC as a North American leader in digital permits and construction.
Requested Participants:
See attached doc.
Timing Implications:
October
Meeting Duration:
90 minutes

MSTeams:

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15; s.17

Materials:
PPT and background materials to be provide in advance of the meeting.
Other Notes:
Please note, this is a meeting to be chaired by the Minister, not a briefing or requested meeting with the Minister.

Invitation letter for the Minister's signature has been sent separately and will be distributed by HOUS correspondence unit.

Permit Connect BC --Webinar on November 14th!

From: Denisa Ionescu <dionescu@bchousing.org>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, Evci, Kemal CITZ:EX <Kemal.Evci@gov.bc.ca>, Ren Bai <rbai@bchousing.org>, Jigar Patel <jpatel@bchousing.org>, Michelle Hayes <mhayes@bchousing.org>, Esther de Vos <edevos@bchousing.org>, Sarah Rutherford <sruther@bchousing.org>, Alireza Asharioun <aasharioun@bchousing.org>
Sent: October 27, 2023 4:20:04 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

fyi

From: UDI Events <events@udi.org>
Sent: October 27, 2023 4:15 PM
To: Denisa Ionescu <dionescu@bchousing.org>
Subject: Register for UDI's Permit Connect BC Webinar on November 14th!

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Page 227 of 356

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UDI has many events offering networking, education & member engagement.
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Additional sponsorship opportunities are available.
Sponsorship or Event Questions? Please contact us at **events@udi.org**.

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FW: High rise residential buildings in cold climates

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>, Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: October 27, 2023 4:26:38 PM PDT
Attachments: image001.png

Here's another email from Wilma about that meeting.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

The Ministry continues to review feedback on the new BC Codes and expects to confirm the updated Codes in fall 2023. An implementation date is not currently available.

Until new codes are adopted, the current BC Codes will continue to be in force.
When the new BC Codes are adopted, a transition period will provide local governments, the construction industry, education providers, and others time to adapt and adjust their practices and training materials.

From: Wilma Leung <wileung@bchousing.org>
Sent: Monday, October 16, 2023 6:09 PM
To: John Sherstobitoff <john.sherstobitoff@ausenco.com>; Marianne Touchie <marianne.touchie@utoronto.ca>; Liam O'Brien <liam_obrien@carleton.ca>; chris.higgins <chris.higgins@vancouver.ca>; Armstrong, Marianne <Marianne.Armstrong@nrc-cnrc.gc.ca>; Ralph Wells <ralph.wells@ubc.ca>; Patrick Enright (Patrick.Enright@vancouver.ca) <Patrick.Enright@vancouver.ca>; Faught, Brady <Brady.Faught@vancouver.ca>; Li, Charling <charling.li@vancouver.ca>; Williams, Scott B HOUS:EX <Scott.B.Williams@gov.bc.ca>; Stylianou, Meli <meli.stylianou@NRCan-RNCan.gc.ca>; Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>; Raouf Chehaiber <rchehaib@cmhc-schl.gc.ca>; Tony Yang, UBC Engineering <outreach@apsc.ubc.ca>; Cara Lozinsky <cara.lozinsky@mail.utoronto.ca>; Lacasse, Michael <Michael.Lacasse@nrc-cnrc.gc.ca>; Aziz Laouadi (Abdelaziz.Laouadi@nrc-cnrc.gc.ca) <Abdelaziz.Laouadi@nrc-cnrc.gc.ca>; Klein, Yaheli ENV:EX <Yaheli.Klein@gov.bc.ca>; Henderson, Elyse <Elyse.Henderson@bchydro.com>; Ainaz Bozorgzadeh <ainaz.bozorgzadeh@technicalsafetybc.ca>; Pape-Salmon, Andrew EMCR:EX <Andrew.Pape-Salmon@gov.bc.ca>; Kevin Cant <kcant@uvic.ca>; Ted Kesik <ted.kesik@daniels.utoronto.ca>; Terri Peters <terri.peters@ryerson.ca>; Nik Schruder <nschrude@cmhc-schl.gc.ca>; remi.charron@mail.mcgill.ca; David Bristow (dbristow@uvic.ca) <dbristow@uvic.ca>; XT:Henderson, Sarah ENV:IN <Sarah.Henderson@bccdc.ca>; arlene.oetomo@uwaterloo.ca; mehdi.ghobadi@nrc-cnrc.gc.ca; Graham Finch <gfinch@rdh.com>; Alex Blue ablue@EvokeBuildings.com <ablue@EvokeBuildings.com>; Jamie Fine <Jamie.Fine@rwdi.com>; Michelle Hoar <mhoar@sfu.ca>; Phalguni Mukhopadhyaya <phalguni@uvic.ca>; Joanna Eyquem <joanna.eyquem@uwaterloo.ca>; Koski, Chris ENV:EX <Chris.Koski@gov.bc.ca>; Maura Gatensby (mgatensby@aibc.ca) <mgatensby@aibc.ca>; Chang, Stephanie <stephanie.chang@ubc.ca>; Sean Pander (sean.pander@vancouver.ca) <sean.pander@vancouver.ca>; Sharmalene Mendis-Millard <sharmalene.mendis-millard@uwaterloo.ca>; dsandink@iclr.org; Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; Allison Chen <achen@egbc.ca>; Ralph Evins (revins@uvic.ca) <revins@uvic.ca>; arysanek@sala.ubc.ca; Jeff Fisher <jfisher@udi.org>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Joyce Kim (joyce.kim@uwaterloo.ca) <joyce.kim@uwaterloo.ca>; David MacLeod <David.MacLeod@toronto.ca>; Sasha Tsenkova - University of Calgary (tsenkova@ucalgary.ca) <tsenkova@ucalgary.ca>; NConnolly@richmond.ca; Jieying Wang <jieying.wang@fpinnovations.ca>; Koski, Chris ENV:EX <Chris.Koski@gov.bc.ca>; Melina Scholefield <melina.scholefield@zeic.ca>; Chris Chopik <cchopik@iclr.org>; Wilson, Mary-Ann (NRCan/RNCan) <mary-ann.wilson@canada.ca>; roberto@zebx.org; Malcolm Edwards (Malcolm.Edwards@tbs-sct.gc.ca) <Malcolm.Edwards@tbs-sct.gc.ca>; Nightingale, Trevor <Trevor.Nightingale@nrc-cnrc.gc.ca>; Lindsay Matthews <lmatthew@cmhc-schl.gc.ca>
Subject: High rise residential buildings in cold climates

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi everyone,

I've just finished a call with my colleague from City of Vancouver, and concluded there may be a need to have a multi-disciplinary research project on high-rise residential buildings in cold climates, potentially covering the following aspects:

- Compartmentalization
- Base/segmental isolation (for seismic zones)
- Exterior shading and other passive cooling strategies
- Cooling Energy Demand (CEDi)
- Elevator designs
- Accessibility
- Refuge area/floor
- Social interaction space (Dunbar's number etc.)
- Outdoor and planting space
- Multigenerational living/units
- Resilience : power, water, V2B, future-proofing
- Parking, flooding prevention, decarbonization of foundation construction
- Zero carbon, circularity, biodiversity and nature-based solutions

If you (or your colleagues) are interested to participate in this fairly open-ended discussion to identify what this multi-solving research project may look like, please provide your availability using this doodle poll. Ideally, we'll be able to identify some building design/typologies that will be most conducive in getting more of our real needs met.
https://doodle.com/meeting/participate/id/e39jW7nb

An example of inquiry may be "Would the sweet spots for the following overlap: segmental isolation, Dunbar's number, compartmentalization, refuge area and elevators?"

Please also respond to me with your suggested questions to discuss. I'll use them to develop the agenda.

On another news, we will be working on redesigning the MBAR initiative as an innovation program, and will be hosting an info session for prospective new pilot projects on Nov 14. I hope to see more of you at our quarterly MBAR Roundtables and Deeper Dive Circles (email mbar@bchousing.org for details). Our research library has a growing volume of resources (Tags: MBAR) but there are more shared by our MBAR network of practitioners on the SharePoint site.

Thank you, Huy chexw & Hay ce:p q̓ə,
Wilma

To honour the truth, I acknowledge that I live and work on the shared, ancestral and unceded homelands of the hən̓q̓əmin̓əm̓ and Sḵwxwú7mesh-speaking people who have been caring for these lands, along with the waters and all that is above and below, since time immemorial. As a newcomer to the Salish Coast, I am on a journey to reciprocate by working towards reconciling with all our relations here and beyond.

Wilma Leung (she/her/hers) | Senior Manager, Technical Research & Education | BC Housing
wileung@bchousing.org | Mobile: 604-218-1095 | www.bchousing.org/research-centre



Supporting a Strong Housing Sector. Sharing Best Practices. Enhancing Consumer Protection.
Visit our Research Centre Library and sign up for the latest updates.

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15; s.17

RE: MRK | Digital Advisory Council

From: Kaur, Kiran HOUS:EX <Kiran.Kaur@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>, Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Sent: November 7, 2023 1:47:19 PM PST
Attachments: image002.png, image003.png

Hi Zac,

MRK has the mats in his calendar since this mtg is being moved and Teri as well.
I will now send the materials to all the participants attending this mtg ASAP.

Thank you!

Sincerely,

Kiran Kaur
Documents Coordinator
Deputy Minister's Office
Ministry of Housing
PH - 7784056439

From: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Sent: Tuesday, November 7, 2023 1:38 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Kaur, Kiran HOUS:EX <Kiran.Kaur@gov.bc.ca>
Cc: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Subject: RE: MRK | Digital Advisory Council

Hi Zach, the materials are with Kiran now I believe.
Kiran, can you let Zach, know if we have the materials to send?
Thanks!

Jana Sexton
A/ Manager, Executive Operations
Deputy Minister's Office
Ministry of Housing
614 Humboldt St, Victoria, BC
T: 236.475.1562 C: 250.896.3587

BC Public Service | Where ideas work

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, November 7, 2023 1:21 PM
To: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: RE: MRK | Digital Advisory Council

Hi Lisa and Jana,

The materials for this meeting have been sitting with the Minister's Office for a while now. Can you see if we can get them approved so they can be shared with participants? Ideally sent by tomorrow (Wednesday).

Speaking of sending out materials, we have a consultant facilitating meetings and able to send out materials. Is that something we can delegate to them, or do materials need to come from the DMO?

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

-----Original Appointment-----
From: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Sent: Friday, September 29, 2023 2:05 PM
To: Collins, Teri HOUS:EX; Michael Pistrin; May, Zachary HOUS:EX; jpabla@kelowna.ca; tryce@cnv.org; Rene.Cravioto@vancouver.ca; tyler.wightman@boabc.org; hgoodland@scius.ca; Hyang@egbc.ca; MVernon@aibc.ca; Neilmoody@chbabc.org; amcmullin@udi.org; spaish@digitalsupercluster.ca; ssf@civil.ubc.ca; vtong; XT:McCurry, Theresa GCPE:IN; duncan.wlod@gmail.com; s.22 Thomson, John HOUS:EX; Vukosavljevic, Nicole HOUS:EX; jtipping@wearebctech.com
Cc: BCH Meeting Calendar (ministrymeetings@bchousing.org); Opreet Kang
Subject: MRK | Digital Advisory Council
When: November 15, 2023 1:00 PM-2:30 PM (UTC-08:00) Pacific Time (US & Canada).
Where: MST

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting
s.15; s.16

FOR REVIEW: Draft Technical Breifing: Outline and Invitee List

From:	Corpe, Cimarron HOUS:EX
To:	Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc:	Karim, Susan HOUS:EX <Susan.Karim@gov.bc.ca>, Gartner, Candice HOUS:EX <Candice.Gartner@gov.bc.ca>, King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Sent:	November 16, 2023 9:31:41 PM PST
Attachments:	image003.png, image001.png, HTO Technical Briefing 2 Outline & Participants 2023 11 16.docx

Hi Bindi,

Susan has prepared the attached draft meeting outline with the list of proposed invitees for next week's briefing. Once confirmed, we can work with the ADMO to schedule the briefing and invite.

Cimarron Corpé
a/Executive Director

Housing Targets Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

Housing Targets Methodology Follow-up Technical Briefing: November 2023

Dates/Times: Week of November 20th (Tues/Wed preferred; between 9-10:30 AM)
Duration: 45-minutes
Attendees: MRK/MO, HOUS executive & staff – Bindi to Chair, Matt Thomson (Urban Matters) and stakeholders (see appendix).

Agenda:	Lead	Time
Introduction	Bindi	5 mins
Presentation		
▪ Purpose: lessons learned, confirm previous feedback/concerns, broader context: CMHC report		5 mins
▪ Review Concerns (7 Qs etc.)	Bindi/Candice	5 min
▪ Methodology	Matt	15
Discussion & Next Steps	Bindi	15 mins

Approach and Framing

- Acknowledgement of contributions and feedback from previous meetings
- s.13
- Include T. Davidoff's concerns s.13 with Abundant Housing's concerns
- Balance of information presented at meeting to be primarily methodological, with high-level information on key policy underpinnings as needed to support the methodology discussion, e.g.
    - Alignment of selection index and targets methodology
    - Comparison of targets and CMHC estimates
- Address critique that the targets are too low

Key Messages

- We understand you may have some remaining questions or concerns and we want to give space to hear them and have a robust yet purposeful discussion.
- We want to gain clarity on your perspectives before we select the next cohort of municipalities.
    - We've learned a lot from you already and value your input.
- We are not necessarily looking for full consensus or agreement – it may be that we agree to disagree in some areas.
- Your feedback may inform the program policy objectives in a future review.

Meeting Goals

- Housing Advocates and experts leave the meeting with:
    - more in-depth understanding of the methodology used (additional information and value added over previous meeting);
    - additional perspective on rationale for select HOUS policy decisions made relating to targets
- Urban Matters and HOUS have fuller understanding of any remaining concerns of housing advocates and experts.
- HOUS will be positioned to consider potential future additional analysis or communications work to further address remaining concerns.

Housing Targets Methodology Follow-up Technical Briefing: November 2023

Proposed Participants

1. Owen Brady: Director, Abundant Housing
2. Thomas Davidoff, UBC Sauder School of Business
3. Jens von Bergman: Mountain Math
4. Peter Waldkirch: Abundant Housing (Lawyer – Appellant Advocacy)
5. Andy Yan, SFU City Program

Potential Attendees

6. Alex Hemingway: Canadian Centre for Policy Initiatives
7. Mark Sakai: Advocacy Projects Manager, BC Real Estate Association

October 3rd Participants (not included in this meeting)

- Bridgitte Anderson: Greater Vancouver Board of Trade
- Casey Edge: Executive Director, Victoria Residential Builders
- Lindsay Fernandes: Greater Vancouver Board of Trade
- Anne McMullin: CEO, UDI
- Cassandra Smith: Director of Policy and Research, UDI
- Greg Gillespie: Director at UDI, Capital Region
- Ron Rapp: CEO: Homebuilders Association Vancouver (HAVAN)
- Leo Spalteholz, Homes for Living
- Carmina Tupe (CHBA BC)
- Andrés Peñaloza: BC Non-Profit Housing Association
- Duncan Wlodarczak: Onni Group of Companies (real estate developer)
- Russil Wvong: Software Engineer (Vancouver Needs More Housing)
- David Gregory: No information

PROPOSED: Housing Targets Methodology Follow-up Technical Briefing: November 2023

Dates/Times: Week of November 20th (Tues/Wed preferred; between 9-10:30 AM)
Duration: 45 minutes
Attendees: Matt Thomson (Urban Matters), HOUS staff, MO staff, and stakeholders (**see Appendix A**).

Agenda:	Lead	Time
Introduction & Purpose	Bindi or Teri	5 min
Methodology Overview	Matt	15 min
Review Questions and concerns & discussion	Bindi/Candice	20 min
Next Steps	Bindi or Teri	5 min

Meeting Goals:

- Participants leave the meeting with:
  1. More in-depth understanding of the methodology above what was presented in the previous meeting
  2. s.13
  3.

- Urban Matters and HOUS have fuller understanding of:
  1. s.13
  2. Any remaining concerns of housing advocates and experts s.13 s.13
  3. s.13

Approach and Framing

- s.13
- Acknowledgement of contributions and feedback from previous meetings
- Balance of information presented at meeting to be primarily methodological, with high-level information on key policy underpinnings as needed to support the methodology discussion, e.g.
  - Alignment of selection index and targets methodology
  - Comparison of targets and CMHC estimates
- Communicate s.13 the concerns and response (Abundant Housing, T Davidoff and any others)

Preliminary Key Messages

- We understand you may have some remaining questions or concerns and we want to give space to hear them and have a robust yet purposeful discussion.
- We want to gain clarity on your perspectives before we select the next cohort of municipalities.
  - We've learned a lot from you already and value your input.
- We are not necessarily looking for full consensus or agreement – it may be that we agree to disagree in some areas.
- Your feedback may inform the program policy objectives in a future review.

PROPOSED: Housing Targets Methodology Follow-up Technical Briefing: November 2023

Appendix A – Proposed Participants (from list of those invited to the last methodology session)

Name	Organization	Invite Y/N	Rationale
Peter Waldkirch	Abundant Housing	Y	s.13
Owen Brady	Abundant Housing	Y	
Others?	Abundant Housing	?	
Thomas Davidoff	UBC Sauder School of Business & Mountain Math	Y	
Jens von Bergman	Mountain Math	Y	
Andy Yan	SFU City Program	Y	
Alex Hemingway	Canadian Centre for Policy Initiatives	Y	
Mark Sakai	Advocacy Projects Manager, BC Real Estate Association	Y	
Andrés Peñaloza	BC Non-Profit Housing Association	Y	
Russil Wvong	Software Engineer (Vancouver Needs More Housing)	Y	
Bridgitte Anderson	Greater Vancouver Board of Trade	N	
Lindsay Fernandes	Greater Vancouver Board of Trade	N	
Casey Edge	Executive Director, Victoria Residential Builders	N	
Anne McMullin	CEO, UDI	N	
Cassandra Smith	Director of Policy and Research, UDI	N	
Greg Gillespie	Director at UDI, Capital Region	N	
Ron Rapp	CEO, Homebuilders Association Vancouver (HAVAN)	N	
Leo Spalteholz	Homes for Living	N	

PROPOSED: Housing Targets Methodology Follow-up Technical Briefing: November 2023

Name	Organization	Invite Y/N	Rationale
Carmina Tupe	CHBA BC	N	s.13
Duncan Wlodarczak	Onni Group of Companies	N	
David Gregory	No information	N	

FW: Briefing: Building code briefing with CHBA & UDI RUSH Request

From: Kaur, Kiran HOUS:EX <Kiran.Kaur@gov.bc.ca>
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Sent: December 1, 2023 12:34:42 PM PST

Hi Indy,

Please see a RUSH request below, are we able to do a presentation as requested, Pls note the mtg is thing Monday Dec 4th.

Thank you!
Kiran

From: Warbeck, Caitlin HOUS:EX <Caitlin.Warbeck@gov.bc.ca>
Sent: Friday, December 1, 2023 12:30 PM
To: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>; Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Cc: Kaur, Kiran HOUS:EX <Kiran.Kaur@gov.bc.ca>; Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>
Subject: Briefing: Building code briefing with CHBA & UDI RUSH Request
Importance: High

Good Afternoon:

Just got this from Siân (No MRK). Timing for this meeting has been decided, there is no wiggle room, sorry.

Please, invite ADM Sawchuk and staff she'd invite as necessary. Jana and Lisa will be invited from Dave's calendar.

Kiran, Please note we are looking for a presentation on Building Codes.

Thank you!

Meeting:	Building code briefing with CHBA & UDI
Topic/Agenda:	Building code briefing
Date & Time:	Monday Dec 4, 1:00pm-1:45pm
Location/Link: (Hybrid, MSTeams, in-person)	Teams Microsoft Teams meeting **Join on your computer, mobile app or room device** s.15; s.17

Meeting Materials	**DMO:**

	Presentation **GCPE:** **Do materials need to be sent to anyone once received:** No
Attending from Housing:	**MO:** **Required:** Dave, Mark **Optional: Siân** **Ministry:** **Required:** Bindi & other BSSB staff **Optional:** Tracy Campbell **BC Housing:**
Attending from another ministry/stakeholder:	
Contact:	Please invite Carmina Tupe from CHBA carmina@chbabc.org & Cassandra Smith from csmith@udi.org. They may invite other colleauges which is totally fine.

Sincerely,

Caitlin Warbeck
Administrative Assistant to the
Honourable Ravi Kahlon, Minister of Housing
and Parliamentary Secretary Roly Russell
Parliament Buildings | Room 248 | 250.208.7610

FW: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: December 1, 2023 12:45:58 PM PST
Attachments: FW: Briefing: Building code briefing with CHBA & UDI RUSH Request Background FYI

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Friday, December 1, 2023 12:39 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

Hi Juni,

For your information and context, please find request from DMO attached

Thanks,

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, December 1, 2023 12:23 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Subject: RE: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

It will be a staff briefing… so I will chair the meeting and you would provide the content.
MO staff will join.

Yes focus on factual info on what's in the code, adoption dates, mitigation measures.

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, December 1, 2023 12:01 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>

Subject: RE: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

Hi Bindi,

Who will deliver the deck? MRK? I assume we focus as much on the mitigation strategy as the code changes themselves, which are already known?

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, December 1, 2023 11:58 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Subject: TIME SENSITIVE BRIEFING REQUEST: NEW CODE
Importance: High

Hi Juni,

We have been asked to briefing UDI and CHBA on the significant code changes on Monday morning before the announcement.
We will need to develop a briefing deck today pls, for ADM review of the weekend.

Happy to meet and discuss the approach – (ADMO this is a priority).

Thx - B

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

RE: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

From: Jensen, Jun'ichi HOUS:EX
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>, King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: December 1, 2023 1:19:12 PM PST

Ok, I just heard from GCPE she saw and signed off the NR, so in theory she is up to date.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, December 1, 2023 1:18 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Subject: RE: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

I don't know – can check on Monday

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, December 1, 2023 1:01 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Subject: RE: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

One more question- do you know if the briefing for PS Chant has occurred or will occur prior to this UDI briefing? Prior to Tuesday announcement?

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, December 1, 2023 12:23 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Subject: RE: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

It will be a staff briefing… so I will chair the meeting and you would provide the content.
MO staff will join.

Yes focus on factual info on what's in the code, adoption dates, mitigation measures.

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, December 1, 2023 12:01 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Subject: RE: TIME SENSITIVE BRIEFING REQUEST: NEW CODE

Hi Bindi,

Who will deliver the deck? MRK? I assume we focus as much on the mitigation strategy as the code changes themselves, which are already known?

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Friday, December 1, 2023 11:58 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Subject: TIME SENSITIVE BRIEFING REQUEST: NEW CODE
Importance: High

Hi Juni,

We have been asked to briefing UDI and CHBA on the significant code changes on Monday morning before the announcement.
We will need to develop a briefing deck today pls, for ADM review of the weekend.

Happy to meet and discuss the approach – (ADMO this is a priority).

Thx - B

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

RE: rush eApproval Request

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
To: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Sent: December 1, 2023 3:09:15 PM PST

No need to action this. Sorry, we already have one.

From: Laboucane, Shannon HOUS:EX
Sent: Friday, December 1, 2023 2:03 PM
To: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>
Subject: rush eApproval Request
Importance: High

Hi Brian – another rush eApproval request, please.

Could you please set up a cliff and eApp?

Requested by	Shannon Laboucane, Sr. Policy Analyst
Type of document requested	Staff PPT
Purpose	Brief CHBABC and UDI
Topic	BC Building Code 2024 Changes and Mitigation Strategies
Who is this being prepared for? • ED • ADM • DM • MIN • Premier • Other (Parliamentary Secretariat, Other Ministers, etc)	ADM
Due date (See below for more info)	December 4, 2023
Any additional information *(meeting date, attendees, timing implications, etc.)*	Routing: OHCS CU --> Analyst --> Director --> ED --> ADM Meeting scheduled for Dec 4th at 1:30pm.

Thank you,

Shannon Laboucane
Senior Policy Analyst
Building and Safety Standards Branch
Ministry of Housing
Phone: 778-974-3912 | Email: Shannon.Laboucane@gov.bc.ca

Alert: s.22

With gratitude, I respectfully acknowledge the Coast Salish Peoples, specifically of the Lək̓ʷəŋən (Songhees and Esquimalt/Xwsepsum Nations) and WSÁNEĆ, on whose territories I am grateful to work, live, and continuously learn on.

Re: UDI/CHBA presentation

From: Jensen, Jun'ichi HOUS:EX
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: December 3, 2023 8:06:42 PM PST

Great, thanks for letting me know.

Jun′ichi Jensen
Director, Codes and Standards
Building and Safety Standards
Province of BC
250 888 1001

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Sunday, December 3, 2023 3:08:02 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: UDI/CHBA presentation

All good for the briefing tomorrow- thx Juni

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Sunday, December 3, 2023 2:15 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Subject: UDI/CHBA presentation

Hi Bindi,

Edits made to notes and slides and back with you in e-apps.

Thanks.

Jun’ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

ensure to review previous CHBA and UDI

From: Jensen, Jun'ichi HOUS:EX
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: December 4, 2023 1:21:54 PM PST

Jeff- standardized FAR exemption- JJ noted still trying to understand before we move forward for large buildings.

ensure to review previous CHBA and UDI

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

UDI/CHBA briefing

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: December 4, 2023 3:45:58 PM PST

Hi Aura and Shannon,

MRK requested UDI/CHBA briefing went fine today- expect a code announcement tomorrow. Aura, I can fill you in- this all happened Friday.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: (Time sensitive) Media questions re. new BC Building Code

From: Jensen, Jun'ichi HOUS:EX
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>, Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: December 5, 2023 11:51:48 AM PST

Hi Tasha,

A bit more context might be helpful but I think it's probably ok, if a little incomplete. I say the latter because we have already started education and assessing impacts to design, and in fact the impacts to design were discussed throughout all code changes. But we do plan to do more in this regard, which may be what this is pointing to?

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Tuesday, December 5, 2023 11:48 AM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: (Time sensitive) Media questions re. new BC Building Code

Hi – reporter just asked me if this line is accurate for her story. Any concerns with this?:

- Specifics on how the codes will influence building techniques and the design of projects will be included in future discussions.

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Tuesday, December 5, 2023 11:36 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: RE: (Time sensitive) Media questions re. new BC Building Code

Tasha – re floor space ratios – this is something that we committed to yesterday in a meeting with UDI and CHBA to "look at" in the future. There is something in the pending Small Scale Multi Unit Housing policy guidance document to be delivered to local governments, but we will not release that today (not BSSB's file).

From now until 2025, Ministry staff will be working to engage with housing partners to identify additional mitigation strategies to address increases in costs from the building code and it's possible that floor space rations will be part of that conversation for larger buildings. It's part of our work to come.

Kevin

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Tuesday, December 5, 2023 11:32 AM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Subject: RE: (Time sensitive) Media questions re. new BC Building Code

Hi Tasha,

It will go up on our website ASAP after the announcement. But we don't regulate floor space ratios in the code.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing

250 858 1325

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Tuesday, December 5, 2023 11:31 AM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: FW: (Time sensitive) Media questions re. new BC Building Code

Hi Kevin and Jun'ichi,
A reporter is asking when we will release the technical regs for the Codes ie. Floor space ratios etc. Can you please advise?

From: Claire Wilson <clwilson@glaciermedia.ca>
Sent: Tuesday, December 5, 2023 11:27 AM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: Re: (Time sensitive) Media questions re. new BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tasha,

By regulations, I'm referring to the technical regulations that are attached to the new codes (things like floor space ratios, accessibility requirements, etc.) will those also be published today for the construction industry to look at?

Thanks!
Claire

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Tuesday, December 5, 2023 11:19 AM
To: Claire Wilson <clwilson@glaciermedia.ca>
Subject: RE: (Time sensitive) Media questions re. new BC Building Code

CAUTION: This email originated from outside of the organization.

Hi Claire,
The code itself will be on the website at 11:45am today as I understand it.

From: Claire Wilson <clwilson@glaciermedia.ca>
Sent: Tuesday, December 5, 2023 10:52 AM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: Re: (Time sensitive) Media questions re. new BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tasha,

Question regarding the codes: will the specific regulations attached to the new codes be released today or will those be released at a later date?

Thanks!
Claire

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Tuesday, December 5, 2023 10:29 AM
To: Claire Wilson <clwilson@glaciermedia.ca>

Subject: RE: (Time sensitive) Media questions re. new BC Building Code

CAUTION: This email originated from outside of the organization.

Hi Claire,
This is going out at 11:45am today.

From: Claire Wilson <clwilson@glaciermedia.ca>
Sent: Tuesday, December 5, 2023 9:33 AM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: Re: (Time sensitive) Media questions re. new BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tasha,

That would be perfect! Thanks so much!

Cheers,
Claire

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Tuesday, December 5, 2023 9:28 AM
To: Claire Wilson <clwilson@glaciermedia.ca>
Subject: RE: (Time sensitive) Media questions re. new BC Building Code

CAUTION: This email originated from outside of the organization.

Hi Claire,
We will be putting out a news release about the new BC Building Code at 11:45am this morning and it will confirm that the implementation date will be next March.
Happy to send you an embargoed copy of the news release….as soon as it's ready to go.

From: Claire Wilson <clwilson@glaciermedia.ca>
Sent: Monday, November 27, 2023 11:02 AM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: Re: (Time sensitive) Media questions re. new BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tasha,

Thanks so much for confirming! In that case, I think we'll wait for the official date to publish something.

If you're able to let me know when it will be scheduled to come out (once that has been finalized) that would be great.

Best,
Claire

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Monday, November 27, 2023 10:51 AM
To: Claire Wilson <clwilson@glaciermedia.ca>
Subject: RE: (Time sensitive) Media questions re. new BC Building Code

CAUTION: This email originated from outside of the organization.

Hi Claire,
We plan to issue a news release in the next week or so confirming the date. It may end up being March, it's just that a formal decision hasn't been made yet so we can't confirm it just yet.

From: Claire Wilson <clwilson@glaciermedia.ca>
Sent: Monday, November 27, 2023 10:49 AM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: Re: (Time sensitive) Media questions re. new BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tasha,

Thanks for sending this over!

Just wanted to confirm the following the accurate: the March 2024 effective date is not correct and a news release will be released in the future once the date is confirmed, which will be sometime in 2024.

Best,
Claire

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Friday, November 24, 2023 6:05 PM
To: Claire Wilson <clwilson@glaciermedia.ca>
Subject: RE: (Time sensitive) Media questions re. new BC Building Code

CAUTION: This email originated from outside of the organization.

Hi Claire,

Here is our response about the Building Code….we will be in a position to release more information, soon. Sorry to get you this so late on a Friday!

- The Province is committed to delivering buildings and homes that meet people's needs. That is why we are adopting a new BC Building Code to ensure that buildings across the Province are more accessible, adaptable, safe, and healthy.
- The Province anticipates adopting the updated BC Building Code next year.
- The Ministry of Housing's website was updated prematurely and has since been fixed. We intend to issue a news release once a date has been confirmed.
- Until new Codes are adopted, the current BC Codes will continue to be in force.
- Proposed changes include new standards on accessibility, earthquake design, mass timber construction, radon safety, and overheating requirements.
- The application of the Code is linked to a building permit's application date. When the next edition of the building code is adopted, the adopting Ministerial Order will establish the 'effective' date.
- The adopting Order will establish that building permits for new buildings and permits for alterations to existing buildings as of a certain date will need to conform to either the existing (2018) or new edition of the Building Code.
- Building permits applied for before the date established in the Ministerial Order will generally not be affected.
- The Province will continue to collaborate with education partners to develop and deliver training and educational resources to support low to no-cost design solutions to support developers and builders in implementing these code changes.

- The Ministry of Housing is reviewing and considering all public review feedback in drafting the updated building code.

From: Claire Wilson <clwilson@glaciermedia.ca>
Sent: Friday, November 24, 2023 10:41 AM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: Re: (Time sensitive) Media questions re. new BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tasha,

If it's possible to get a written response that would be amazing. If it is, are you able to let me know roughly when it might be ready?

Thanks!
Claire

From: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Sent: Friday, November 24, 2023 10:37 AM
To: Claire Wilson <clwilson@glaciermedia.ca>
Subject: RE: (Time sensitive) Media questions re. new BC Building Code

CAUTION: This email originated from outside of the organization.

Hi Claire,
Yes, the BCBC is under the Ministry of Housing. Are you looking for a written response?

From: Claire Wilson <clwilson@glaciermedia.ca>
Sent: Friday, November 24, 2023 10:22 AM
To: Schollen, Tasha GCPE:EX <Tasha.Schollen@gov.bc.ca>
Subject: (Time sensitive) Media questions re. new BC Building Code

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Tasha,

Hope you're having a pleasant morning!

I wanted to reach out as I noticed that the BC gov webpage for the BC Building Codes was updated to indicate that the new building codes will come into effect in March 2024.

Does the Ministry of Housing handle the BC Building Codes? If yes, I have a few questions on how these codes will differ from Building Codes 2018 and what new regulations are available now.

We are hoping to get something up by end of day with at least of an overview of what the construction industry can expect.

Thanks so much!

Best wishes,

Claire Wilson
Glacier Media and BIV
s.22
clwilson@glaciermedia.ca

RE: CHBA request for meeting with MRK

From: Chase, Andy HOUS:EX
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: December 6, 2023 11:39:41 AM PST

Those bills are not BSSB bills…

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Wednesday, December 6, 2023 11:38 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

There is this meeting is happening on December 14th:

Meeting:	CHBA + UDI Housing Briefing (staff only)
Topic/Agenda:	Briefing on Housing legislations (Bill 44, 46, 47 and STR). Rapid fire/quick overview (20 min if possible!) followed by QA.
Date & Time:	Dec 14th, 9:00am -10:30am
Location/Link:	MSTeams

Meeting Materials	**DMO:** Condensed Tech Deck **Do materials need to be sent to anyone once received:** No
Attending from Housing:	**MO:** Nina (required) Mark (required) **Ministry:** Bindi and staff **BC Housing:** No
Attending from another ministry/stakeholder:	No
Contact:	-
Notes:	Once you find the time that works for Bindi's team and MO, Mark will send link to CHBA and UDI.

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, December 6, 2023 10:28 AM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

Thanks- that one was a different topic and I attended. Nothing upcoming as a reschedule to Nov 28 meeting? Would include PLUM staff.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Wednesday, December 6, 2023 10:09 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

Hi Juni,

There was a CHBA meeting on Monday, but MRK didn't attend. Here's the meeting info:

Meeting:	Building code briefing with CHBA & UDI
Topic/Agenda:	Building code briefing
Date & Time:	Monday Dec 4, 1:00pm-1:45pm
Location/Link: (Hybrid, MSTeams, in-person)	

Meeting Materials	**DMO:** Presentation **GCPE:** **Do materials need to be sent to anyone once received:** No
Attending from Housing:	**MO:** **Required:** Dave, Mark **Optional: Siân** **Ministry:** **Required:** Bindi & other BSSB staff **Optional:** Tracy Campbell **BC Housing:**
Attending from another ministry/stakeholder:	
Contact:	Please invite Carmina Tupe from CHBA carmina@chbabc.org & Cassandra Smith from csmith@udi.org. They may invite other colleauges which is totally fine.
Notes:	

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Monday, December 4, 2023 4:32 PM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: CHBA request for meeting with MRK

Hi Indiana,

Do you know if the meeting CHBA requested with MRK occurred? We had an e-app 131-1054 and sent it to 2 other branches for input and it got stuck, now the meeting date has passed. We're not sure if the meeting occurred on Nov 28

as indicted in the e-app or if it got rescheduled. It's a broad set of concerns they want to discuss related to housing legislation, so I doubt they would have cancelled, (nor been satisfied with other building code related meetings that have since happened).

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

FW: 8761.00 - BC Housing Grant – Single Stair Study

From: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: December 6, 2023 11:48:51 AM PST
Attachments: image001.jpg, image002.jpg, image003.jpg
FYI, I knew I had said something similar previously..

Stephen Watt | *Senior Codes Administrator*
Ph: 236-478-0578
Building and Safety Standards Branch | Ministry of Housing

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, April 28, 2023 11:49 AM
To: 'Darrell Li' <DL@ghl.ca>; 'Andrew Harmsworth' <ah@ghl.ca>
Cc: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Subject: RE: 8761.00 - BC Housing Grant – Single Stair Study

Hi Darrell and Andrew,

Here are the initial thoughts I got back from Stephen, who sits on SCFP for us. As I mentioned, we would likely support the committee developing this in the interest of housing affordability, but with heavy caution that we do not want to take a step back in fire and life safety. One other thing I didn't mention is evacuation for persons with disabilities could be affected since we no longer have areas of refuge and this would further cut back on safe places in fire for that occupant profile. Stephen does allude to this below with his comments on aging populations. I do support the idea of GHL and SCFP looking at this in a holistic and scientific way to make appropriate recommendations.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Sent: Friday, April 28, 2023 8:53 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: 8761.00 - BC Housing Grant – Single Stair Study

My first thoughts :

The NFC regulates occupancy load after construction and is calculated per room.

Under the NFC, each suite with a single door would allow 60 persons when the net floor area, when divided up based on .4m2 per person, will allow that number.

This means would mean that the NFC would need to be changed as well to place a restriction on the occupancy load for this type of building. (also note that regulating and enforcing the occupy load in a private dwelling may be problematic for fire code enforcement officials.)

There is also an assumption that there is a responding fire department, as we know Part 3 buildings should not be built in an area that has not fire department but this is a local government decision.

The Code would need to actually state that there must be a responding fire department in order to allow a building to be built with 1 exit, not just that there must be a fire alarm to notify the fire department.

Maintenance of the life safety systems (smoke alarms, fire alarms, sprinkler, fire doors kept closed when not in use), to ensure they are functioning as designed, will become even more critical for a building with only on exit.

45min closures are used in 1hr fire separations but they don't mention the fire separation requirements other than for the closure.

I'm also not sure how one would regulate the building to not be used for persons to retire in if they own the suite. (if all suite owners are retired does it become a retirement home?)

Stephen Watt | *Senior Codes Administrator*
Ph: 236-478-0578
Building and Safety Standards Branch | Ministry of Housing

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, April 27, 2023 8:27 PM
To: Watt, Stephen HOUS:EX <Stephen.Watt@gov.bc.ca>
Subject: FW: 8761.00 - BC Housing Grant – Single Stair Study

For discussion…

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Darrell Li <DL@ghl.ca>
Sent: Thursday, April 27, 2023 3:31 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Andrew Harmsworth <ah@ghl.ca>
Subject: 8761.00 - BC Housing Grant – Single Stair Study

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Juni,

Looks like we're playing phone tag. I'll aim to call you again tomorrow around 11am.

Wondering if BSSB was aware/looking into the attached proposed code change. We've been in touch with both BC Housing and UDI on this and wanted your thoughts on this.

Cheers.
s.22

Darrell Li, P Eng
GHL CONSULTANTS LTD celebrating **30** years
Building Codes & Fire Science
700 W Pender Street, Suite 800, Vancouver, BC V3N 1G8
P 604 689 4449 Ext 120 \ **E** dl@ghl.ca \ **W** www.ghl.ca

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RE: CHBA+UDI Briefings & eApproval logs

From: Jensen, Jun'ichi HOUS:EX
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>, Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>, Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>, Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Sent: December 13, 2023 3:31:58 PM PST

Thanks, Indi. I will just flag that the previous (Dec 4) meeting did not provide an opportunity to discuss digitized building codes. It was focused on code adoption. Zac or Nicole may have connected separately so I'll let them chime in.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Wednesday, December 13, 2023 3:24 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Subject: CHBA+UDI Briefings & eApproval logs

Hi All,

Just reaching out in regards to eApp 131-1054, as there seems to be some confusion. The below meeting that I shared with you is a rapid-fire briefing to CHBA + UDI regarding Bill 44, 46, 47, and STR. There are no references to the building code in the meeting tomorrow.

The original CHBA + UDI housing briefing on November 28thth was cancelled, and split into two staff-level briefings without MRK:

1. December 4th on Building Code (eApp 131-3031)
2. December 14th on Bill 44, 46, 47, and STR (eApp 131-2393)

eApp 131-2393 is the correct eApproval log for tomorrow, and it correctly ONLY contains information for bills 44, 46, 47, and STR. Building codes and digitization are not included in tomorrow's briefing. Unfortunately, I believe that eApp 131-1054 was a duplicate eApp log to 131-3031 and can be closed.

Thank you,

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, December 6, 2023 5:01 PM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

Thank you, that was the one I was looking for. We and the digital team have contributed to the e-app already and I've now sent to PLUM to address their items. I now see STR on the list- that may be new as I don't think this has been addressed yet- HPB may also need to look. E-app 131-1054

Thanks, all!

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Wednesday, December 6, 2023 11:38 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

There is this meeting is happening on December 14th:

Meeting:	CHBA + UDI Housing Briefing (staff only)
Topic/Agenda:	Briefing on Housing legislations (Bill 44, 46, 47 and STR). Rapid fire/quick overview (20 min if possible!) followed by QA.
Date & Time:	Dec 14th, 9:00am -10:30am
Location/Link:	MSTeams

Meeting Materials	**DMO:** Condensed Tech Deck **Do materials need to be sent to anyone once received:** No
Attending from Housing:	**MO:** Nina (required) Mark (required) **Ministry:** Bindi and staff **BC Housing:** No
Attending from another ministry/stakeholder:	No
Contact:	-
Notes:	Once you find the time that works for Bindi's team and MO, Mark will send link to CHBA and UDI.

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, December 6, 2023 10:28 AM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

Thanks- that one was a different topic and I attended. Nothing upcoming as a reschedule to Nov 28 meeting? Would include PLUM staff.

Jun'ichi Jensen

Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Wednesday, December 6, 2023 10:09 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

Hi Juni,

There was a CHBA meeting on Monday, but MRK didn't attend. Here's the meeting info:

Meeting:	Building code briefing with CHBA & UDI
Topic/Agenda:	Building code briefing
Date & Time:	Monday Dec 4, 1:00pm-1:45pm
Location/Link: (Hybrid, MSTeams, in-person)	

Meeting Materials	**DMO:** Presentation **GCPE:** **Do materials need to be sent to anyone once received:** No
Attending from Housing:	**MO:** **Required:** Dave, Mark **Optional: Siân** **Ministry:** **Required:** Bindi & other BSSB staff **Optional:** Tracy Campbell **BC Housing:**
Attending from another ministry/stakeholder:	
Contact:	Please invite Carmina Tupe from CHBA carmina@chbabc.org & Cassandra Smith from csmith@udi.org. They may invite other colleauges which is totally fine.
Notes:	

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Monday, December 4, 2023 4:32 PM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: CHBA request for meeting with MRK

Hi Indiana,

Do you know if the meeting CHBA requested with MRK occurred? We had an e-app 131-1054 and sent it to 2 other branches for input and it got stuck, now the meeting date has passed. We're not sure if the meeting occurred on Nov 28 as indicted in the e-app or if it got rescheduled. It's a broad set of concerns they want to discuss related to housing legislation, so I doubt they would have cancelled, (nor been satisfied with other building code related meetings that have since happened).

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: Ministers DAC and Housing updates

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>, Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>, Spence, Karen WLRS:EX <Karen.Spence@gov.bc.ca>
Sent: December 15, 2023 9:21:57 AM PST
Attachments: image001.png

Would like to have an ear in the UDI/CHBA discussion pls – many moving parts across all of our portfolios and they are quick to shift their advocacy focus.

Bindi Sawchuk, CPA (she/her)
Assistant Deputy Minister| Housing and Land Use Policy |Ministry of Housing
Email: Bindi.Sawchuk@gov.bc.ca | P: 250.216.0346

With respect and acknowledgement of the traditional territories of the W̱SÁNEĆ and Lekwungen-speaking peoples, specifically the Songhees and Esquimalt Nations, lands upon which, as a guest, I am grateful to live, work and play.

From: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: Friday, December 15, 2023 8:24 AM
To: Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; Spence, Karen WLRS:EX <Karen.Spence@gov.bc.ca>
Subject: RE: Ministers DAC and Housing updates

Hi Jen –

It does seem like a long time, so thanks for reaching out!

1. DAC – first meeting was Nov 15 1-2:30. We are doing follow-up meetings with all members, so we can bring you up to speed. We are planning the next meeting for February but no date set yet. (John/Zac on this piece)
2. I am not 100% sure to what this refers. We have an RFP that just closed to start work on a set of standardized designs (for local government's to pre-approve) for small-scale multi-unit housing in support of the new legislation. We are working with MOTI, Metro Van and BC Housing who are focussing on different elements of low-rise MURBs. Tied to the notion of pre-approved standardized designs, modules and panelized components is the question of how to promote off-site manufacturing. These are things we intend to dig into more after the holiday season. In case you mean overall standards, there is also the new Building Code which was released allowing tall mass timber province-wide (and a bunch of other things) and some early work underway looking into the idea of small, single-egress MURBs. (John/Zac/Bindi on different parts of this)
3. Yes please, we'd love to participate. Let me know when and we'll get the most appropriate person there.

I'll try and find some time for us to connect as there are a lot of moving parts and our Digital Permitting systems development work is starting to run into questions that touch the provincial permitting work.

John

From: Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>
Sent: Friday, December 15, 2023 7:07 AM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; Spence, Karen WLRS:EX <Karen.Spence@gov.bc.ca>
Subject: Ministers DAC and Housing updates

Hello Bindi, Zac and John,

It feels like a long time since we connected, which likely means we've all been very busy!

Few questions for you both before the holiday season is fully upon us:

1. Did MRK Digital Advisory council ever meet? If not, do we have a set next date?
2. What work is HOUS advancing on standards for housing developments?
3. The NRMs (MOTI/ENV/WLRS) are meeting with CHBA and UDI to bring forward a discussion on the many Housing related initiatives, policies and regulations and get a sense of how they all intersect. CHBA requested it and suggested it might be valuable to set up a 1 day session/workshop to talk through the many moving pieces.
   Can you pls let me know if you're interested in joining that meeting? Initially it will be to canvas approach/topics/opportunity of bringing a focus to that discussion.

Thanks and happy almost holidays! I'm around until end of next week if you want a quick connect as well!
Jen

Jennifer Anthony
Assistant Deputy Minister
Permitting Transformation
c. 250-889-1315

BRITISH COLUMBIA | Ministry of Water, Land and Resource Stewardship

With respect, I live, work and play on the beautiful territory of the K'omox First Nations (Puntlege, Lekson, Sathloot and Sasitla), the traditional keepers of this land

RE: REQUEST | Minister Digital Advisory Council Meeting

From: May, Zachary HOUS:EX
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: December 22, 2023 10:02:54 AM PST
Attachments: image001.jpg

If you have any questions about the meeting, or the Ministry of Housing's work on digital codes and permits, please reach out directly to our Digital Delivery team at digital.codes.permits@gov.bc.ca

---

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, December 22, 2023 9:57 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: REQUEST | Minister Digital Advisory Council Meeting

Anything you want to add? I didn't reference the meeting minutes.

Meeting Title: Calendar Hold: Digital Advisory Council Meeting #2
Required Invitees:

- Jazz Pabla, City of Kelowna, jpabla@kelowna.ca
- Tim Ryce, City of North Vancouver, tryce@cnv.org
- Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca
- Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org
- Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca
- Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca
- Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca
- Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org
- Anne McMullin, Urban Development Institute, amcmullin@udi.org
- Sue Paish, Digital, spaish@digitalsupercluster.ca
- Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca
- Michael Pistrin, BC Housing, mpistrin@bchousing.org
- Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org
- Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com
- Jill Tipping, BC Tech Association, jtipping@wearebctech.com
- Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca
- HOUS team: John Thomson, Zachary May, Nicole Vukosavljevic

Date and Time: February 13, 2024 from 10am to 12.
Location: In person in the Lower Mainland. Location TBD.

Body of Invite:

This is a calendar hold for the second meeting of the Digital Advisory Council. Please note that the meeting details will be confirmed early in the New Year.

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, December 22, 2023 9:43 AM
To: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>

Subject: RE: REQUEST | Minister Digital Advisory Council Meeting

Hi Lisa,

We're hoping to get this hold in the calendars of the attendees, today if possible. Nicole is pulling together the list of emails and drafting the message.

Are we able to get DMO to send out an outlook calendar invite to block this time in the calendars of the attendees?

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Sent: Wednesday, December 20, 2023 4:27 PM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: FW: REQUEST | Minister Digital Advisory Council Meeting

Hello,

We have Feb 13 from 10-12 pm as a HOLD in the minister's calendar for a 2 hour DAC meeting. We will need to confirm early January with Molly who manages the minsiter's calendar if this has to change.

Lisa – please send a hold the date invites from Teri's calendar to John and Zac. Please connect with Molly when she is back from vacation regarding confirming this time for the Minister and once that is done we can have invites sent out.

Thank you

Nikki Papadopoulos
A/Director, Executive Operatons
Deputy Minister's Office, Ministry of Housing

From: Maartman, William HOUS:EX <William.Maartman@gov.bc.ca>
Sent: Wednesday, December 20, 2023 11:13 AM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>; Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>; Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: RE: REQUEST | Minister Digital Advisory Council Meeting

Hi Nikki,

I've put a hold into calendar for Feb 13, 10am-12pm. Can we get this down to 2 hours please?

Molly can confirm in new year if anything changes with that timing but should be good to proceed for now.

Thanks,

Will Maartman (he/him)
Chief of Staff

Office of the Government House Leader, Minister Kahlon
Government of British Columbia
C: 778-679-4952

From: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Sent: Tuesday, December 19, 2023 4:26 PM
To: Dowler, Thea HOUS:EX <Thea.Dowler@gov.bc.ca>; Maartman, William HOUS:EX <William.Maartman@gov.bc.ca>; Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Cc: Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>; Warbeck, Caitlin HOUS:EX <Caitlin.Warbeck@gov.bc.ca>; Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: REQUEST | Minister Digital Advisory Council Meeting

Good Afternoon,

We are looking to secure a date/time in calendars for the next Minister's Digital Advisory Council meeting during the week of February 12th . The last meeting was on November 15th. Can you please provide some date/time options where the minister would be available for an in person 2.5 hour meeting or if this week does not work provide some alternate options. The meeting will include a generative discussion/workshopping.

The location will be Vancouver area, our program area will manage securing a site and the DMO will manage invitations.

CLIFF # | eApps #	**TBD**
Request submitted by:	*Deputy Minister's office*
Meeting/Briefing Title/Group:	**Minister of Housing's Digital Advisory Council (DAC)** *HOUS staff and leaders from the housing, construction, and technology sectors.*
Meeting/Briefing Purpose:	*DAC Meeting # 2 – update on key initiatives related to digital transformation in housing and workshop on a common vision about digital transformation in the sector.*
Requested Participants:	*Same contact list as meeting #1 (Nov 15, 2023)*
Timing Implications:	*Ideally week of Feb 12, 2024. House is in session the following week.* *Seeking Minister's availability for an in-person meeting in the Vancouver area.*
Meeting Duration:	**2.5 hrs**
Materials:	*Powerpoint presentation, annotated agenda, and background pre-meeting handouts to be finalized in January, 2024.* *Meeting materials will be available to participants one week prior to the meeting.*
Other Notes:	

Regards,

Nikki Papadopoulos
A/Director, Executive Operations
Deputy Minister's Office
Ministry of Housing
Office: 250 356-2115| Cell: 250 886-7982
Email: Nikki.Papadopoulos@gov.bc.ca
Pronouns: *she/her*

This is a calendar hold for the second meeting of the Digital Advisory Council. Please note that the meeting details will be confirmed early in the New Year.
If you have any questions about the meeting, or the Ministry of Housing's work on digital codes and permits, please reach out directly to our Digital Delivery team at Digital.codes.permits@gov.bc.ca<mailto:Digital.codes.permits@gov.bc.ca>.

Attendees:

* Jazz Pabla, City of Kelowna, jpabla@kelowna.ca<mailto:jpabla@kelowna.ca>
* Tim Ryce, City of North Vancouver, tryce@cnv.org<mailto:tryce@cnv.org>
* Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca<mailto:Rene.Cravioto@vancouver.ca>
* Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>
* Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca<mailto:hgoodland@scius.ca>
* Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca<mailto:Hyang@egbc.ca>
* Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca<mailto:MVernon@aibc.ca>
* Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org<mailto:Neilmoody@chbabc.org>
* Anne McMullin, Urban Development Institute, amcmullin@udi.org<mailto:amcmullin@udi.org>
* Sue Paish, Digital, spaish@digitalsupercluster.ca<mailto:spaish@digitalsupercluster.ca>
* Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca<mailto:ssf@civil.ubc.ca>
* Michael Pistrin, BC Housing, mpistrin@bchousing.org<mailto:mpistrin@bchousing.org>
* Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org<mailto:tmccurry@asttbc.org>
* Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com<mailto:duncan.wlod@gmail.com>
* Jill Tipping, BC Tech Association, jtipping@wearebctech.com<mailto:jtipping@wearebctech.com>
* Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca<mailto:Jennifer.Anthony@gov.bc.ca>

Ministry Staff:
Teri Collins, Deputy Minister
John Thomson, Executive Lead
Zachary May, Executive Director
Nicole Vukosavljevic, Director

Re: DAC Follow Up Meeting

From: Anne McMullin <AMcMullin@udi.org>
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Tracey Black <tblack@udi.org>
Sent: January 2, 2024 8:43:27 AM PST

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Happy new year, Nicole. We will find a time that works.
Anne

> On Jan 3, 2024, at 12:40 AM, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca> wrote:
>
> Good morning Anne,
>
> Happy New Year and I hope you enjoyed the holidays. I am looking to schedule a follow up call between you and our internal team to gain more of your insight on the first Digital Advisory Council's meeting content and discussion. The Council's second meeting is currently scheduled for early February, and we are hoping to connect with you before that.
>
> Can you please let me know if you have any availability to meet at the below times:
> - Monday January 8th anytime between 2 and 3:30pm
> - Tuesday January 9th anytime between 2 and 4pm
> - Wednesday January 10th at 10am
> - Thursday January 11th at 2pm
> - Friday January 12th 1130am, 3 or 3:30pm
> - Wednesday January 17th anytime between 230 and 4pm
> - Thursday January 18th at 230pm
>
> If none of those time work for you, we can look at other times that meeting your availability.
>
> Thank you,
> Nicole
>
> **Nicole Vukosavljevic** (she/her)
> Director, Digital Delivery
> Housing Innovations | Ministry of Housing
> UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca
>
> *I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.*
>
> ---
>
> **From:** Vukosavljevic, Nicole HOUS:EX
> **Sent:** Monday, November 20, 2023 10:33 AM
> **To:** 'amcmullin@udi.org' <amcmullin@udi.org>
> **Subject:** DAC Follow Up Meeting
>
> Good morning Anne,

Thank you for attending the first Digital Advisory Council meeting. I am reaching out in follow up to Minister Kahlon's commitment for the Digital Delivery team to connect with members individually to obtain additional insight on the meeting's content and discussion. Please let me know if any of the following dates/times work for a meeting with John, Zac, and I.

- Wednesday December 6 at 9am, 2pm or 4:30pm
- Thursday December 7 at 3pm
- Friday December 8 at 9, 9:30, 2, or 2:30pm
- Wednesday December 15 at 11am
- December 21 anytime between 1-3:30pm

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

FW: Follow up: January Pre-Brief and Connect

From: May, Zachary HOUS:EX
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: January 3, 2024 10:58:51 AM PST
Attachments: image001.png

From: Carmina Tupe <carmina@chbabc.org>
Sent: Monday, December 18, 2023 12:46 PM
To: Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>
Cc: Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; Stuart, Dillon T WLRS:EX <Dillon.Stuart@gov.bc.ca>; Spence, Karen WLRS:EX <Karen.Spence@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: Re: Follow up: January Pre-Brief and Connect

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Jennifer.

Zac, happy to discuss next steps with you. Our offices close on Wednesday, so maybe we can have a sidebar on when to connect.

Just as an FYI, CHBA BC and UDI did meet with Housing staff last week with a large group of members. There were a number of questions, many of which are captured in submissions (mine will be submitted this week). I want to be mindful of staffs time, so this might be the first step to getting clarity but again, we can discuss.

Happy Holidays everyone until then.

On Mon, Dec 18, 2023, 12:15 PM Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca> wrote:

> Hello Carmina,
>
> Thank you for the meeting last week. The WLRS housing team and I have had a chance to connect with our Ministry of Housing colleagues on pulling together a bit of a roundtable discussion on the various moving pieces supporting accelerating housing. The idea of meeting with yourself and UDI in a general discussion to surface some of the thinking/confusion/policy questions or clarity that the housing sector is looking for is supported by all.
>
> Zac has agreed to convene a meeting in January before the Ministers Digital Advisory Council meeting which is scheduled for mid-February I understand. This will give us a chance to better understand key points before DAC and determine if an additional workshop/session is necessary to do a deeper dive.
>
> Looking to you and Zac to take it from here in pulling together key themes/topics we want to bring into our call together.
>
> Many thanks and happy holidays!
> Jen
>
> ***Jennifer Anthony***
> **Assistant Deputy Minister**
> Permitting Transformation
> c. 250-889-1315

With respect, I live, work and play on the beautiful territory of the K'omox First Nations (Puntlege, Lekson, Sathloot and Sasitla), the traditional keepers of this land

FW: Demystifying Development Math

From: Ken Kunka <Ken.Kunka@penticton.ca>
To: Development Services <Development.Services@CITYHALL.CorporationoftheCityofPenticton.com>
Cc: Anthony Haddad <Anthony.Haddad@penticton.ca>, Cheryl Hardisty <Cheryl.Hardisty@penticton.ca>, info@chbaso.org, Clifford Kshyk - SICA <ckshyk@sicabc.ca>, hpark@udi.org, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Carl Isaak <carl@smallhousingbc.org>, Jane Tang <jane@chbabc.org>
Sent: January 4, 2024 9:08:01 AM PST
Attachments: image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi,
I came across this last week and thought it might interest some of you. It helps explain what developers review to make a project worthwhile to pursue (US model). Maybe something to keep in mind when we look at how to make our processes and bylaws more workable moving forward.

Take care,

Ken Kunka, AScT RBO
Pronouns: He/Him/His [Learn more here]
Building and Permitting Manager
City of Penticton | 171 Main Street | Penticton, BC | V2A 5A9
p: 250.490.2505 | f: 250.490.2502 | e: ken.kunka@penticton.ca
Submit a document by email : permits@penticton.ca



Lean more about Penticton's Energy Step Code requirments – click here Green Build
Penticton is moving to the cloud! Online Building Permits will be avaible this summer. Click here to learn more - https://cloudpermit.com/en-ca/
This e-mail (including any attachments) is for the intended recipient only and may contain information that is privileged and confidential. If the reader of this e-mail is not the intended recipient you are hereby notified that any dissemination, disclosure, distribution or copying of this e-mail or attachments is strictly prohibited and unlawful. If you received this communication in error, please notify the sender immediately and delete this e-mail without making a copy. Thank you.

From: Ken Kunka <ken.flywheel@gmail.com>
Sent: Saturday, December 30, 2023 5:07 PM
To: Ken Kunka <Ken.Kunka@penticton.ca>
Subject: development financing

Demystifying Development Math: Interactive Resource (ternercenter.app)

FW: UPDATE: Public review on mass timber code changes

From: Rotgans, Trudy JEDI:EX <Trudy.Rotgans@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: January 16, 2024 4:46:05 PM PST
Attachments: image001.jpg

Hi Zac, This email just went out to the Mass Timber Advisory Council (MTAC).

Best regards,
Trudy

From: Nicol, Lee A JEDI:EX <Lee.Nicol@gov.bc.ca>
Sent: Tuesday, January 16, 2024 4:43 PM
To: Andrew Harmsworth <ah@ghl.ca>; Anne McMullin <AMcMullin@udi.org>; XT:Hawrysh, Brian FOR:IN <bhawrysh@bcwood.com>; huxtable.claire s.22 >; derek.newby@perkinswill.com; guido_wimmers@bcit.ca; XT:Bromley, Jeff FOR:IN <jbromley@usw.ca>; coady@cofi.org; Michael Green <Michael@mg-architecture.ca>; Paul Fast <pfast@fastepp.com>; XT:Rasmussen, Paul FOR:IN <Paul.Rasmussen@ILMA.com>; skeyes@wood-works.ca; Robert Phillips <rphillips@fns.bc.ca>; regionalchief <regionalchief@bcafn.ca>; Tim Ryce <tryce@cnv.org>; mayormorrison@nelson.ca; betsya@pembina.org
Cc: anicholls@udi.org; Dawn Melody <Dawn@mg-architecture.ca>; XT:Braker, Colin FOR:IN <cbraker@fns.bc.ca>; XT:Sanchez, Jaime FOR:IN <jaime.sanchez@bcafn.ca>; glester@nelson.ca; Hutchinson, Jarrett JEDI:EX <Jarrett.Hutchinson@gov.bc.ca>; Bingham, Brittany JEDI:EX <Brittany.Bingham@gov.bc.ca>; Rotgans, Trudy JEDI:EX <Trudy.Rotgans@gov.bc.ca>; McDonald, Cameron JEDI:EX <Cameron.McDonald@gov.bc.ca>
Subject: UPDATE: Public review on mass timber code changes

Hello Mass Timber Advisory Council,

The public review has been extended until February 16th (from January 26th). Ontario has joined BC and Quebec in collaborating on a joint provincial task group that has developed proposed changes to further enable the use of Encapsulated Mass Timber Construction (EMTC) in Canada. This extension allows Ontario to have enough time for their stakeholders to respond. British Columbia, Ontario and Quebec seeking comments on province-led changes to Encapsulated Mass Timber Construction (cbhcc-cchcc.ca)

With best regards,

Lee

Lee Nicol | Director of Partnerships and Engagement
Office of Mass Timber Implementation
Ministry of Jobs, Economic Development and Innovation
Tel: 778 698-3405 | Cell: 250 213-7563

From: Nicol, Lee A JEDI:EX
Sent: Friday, December 22, 2023 12:26 PM
To: 'ah@ghl.ca' <ah@ghl.ca>; 'AMcMullin@udi.org' <AMcMullin@udi.org>; 'Brian Hawrysh' <bhawrysh@bcwood.com>; s.22 >; 'derek.newby@perkinswill.com' <derek.newby@perkinswill.com>; 'guido_wimmers@bcit.ca' <guido_wimmers@bcit.ca>; 'jbromley@usw.ca' <jbromley@usw.ca>; 'coady@cofi.org' <coady@cofi.org>; 'Michael@mg-architecture.ca' <Michael@mg-architecture.ca>; 'pfast@fastepp.com' <pfast@fastepp.com>; XT:Rasmussen, Paul FOR:IN <Paul.Rasmussen@ILMA.com>; 'skeyes@wood-works.ca' <skeyes@wood-works.ca>; 'rphillips@fns.bc.ca' <rphillips@fns.bc.ca>; 'regionalchief@bcafn.ca' <regionalchief@bcafn.ca>; 'tryce@cnv.org' <tryce@cnv.org>; 'mayormorrison@nelson.ca' <mayormorrison@nelson.ca>; 'betsya@pembina.org' <betsya@pembina.org>
Cc: 'anicholls@udi.org' <anicholls@udi.org>; 'dawn@mg-architecture.ca' <dawn@mg-architecture.ca>; XT:Braker, Colin FOR:IN <cbraker@fns.bc.ca>; XT:Sanchez, Jaime FOR:IN <jaime.sanchez@bcafn.ca>; 'glester@nelson.ca'

<glester@nelson.ca>; Hutchinson, Jarrett JEDI:EX <Jarrett.Hutchinson@gov.bc.ca>; Bingham, Brittany JEDI:EX <Brittany.Bingham@gov.bc.ca>
Subject: Public review on mass timber code changes

Greetings Mass Timber Advisory Council members,

I hope you are doing well and that you are managing to wind down for a little rest and relaxation over the holiday period.

You will have recently received an email from our colleagues in the Ministry of Housing about the public review on proposed code changes related to encapsulated mass timber construction (EMTC). The proposed code changes build on the 2020 National Model Code provisions for EMTC and would expand the use of mass timber to more building occupancies, enable taller buildings, and vary encapsulation requirements. This work represents a very exciting and important milestone in our shared goal of moving mass timber from niche to mainstream.

As noted in that email, the EMTC public review runs until January 26, 2024. Information to support your participation is available on the Canadian Board for Harmonized Construction Codes public review website: https://cbhcc-cchcc.ca/en/advancing-emtc-provisions/. Please note, there are 6 proposed code changes. You have an opportunity to express your opinion and provide comments on each one of them separately. For a plain language explanation of the proposed changes, please see the attached two-page summary or watch the YouTube video: Proposed Code Changes for Mass Timber Buildings - YouTube.

We strongly encourage you to circulate this news, respond, and ask your colleagues and professional associations to respond. Following the public review, the B.C. government will consider adoption as early as Spring 2024. You may also be interested in the announcement by the Minister of Housing (former MTAC chair, Minster Ravi Kahlon): B.C. expanding use of mass timber in buildings | BC Gov News.

As we wrap up 2023 and look ahead to 2024, on behalf of the Office of Mass Timber Implementation's I'd like to express our sincere gratitude and thanks for all the work you do to promote and advance mass timber in British Columbia.

With warm regards,

Lee

_____

Lee Nicol | Director, Partnerships and Engagement
Office of Mass Timber Implementation
Ministry of Jobs, Economic Development and Innovation
Tel: 778 698-3405
Cell: 250 213-7563

Learn about mass timber in B.C. www.gov.bc.ca/masstimber
Download the Mass Timber Action Plan

BRITISH COLUMBIA | Office of Mass Timber Implementation

RE: DAC Follow Up Meeting

From: Tracey Black <tblack@udi.org>
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: January 17, 2024 9:00:16 AM PST
Attachments: image002.jpg, image004.jpg, image005.jpg, image003.jpg, image006.jpg, image001.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Nicole,

Anne is available the following days/times:

Thurs, Jan 25th 11:30 – 2:30
Fri, Jan 26th 11:00 – 1:00
Mon, Jan 29th 10:00 – 1:00
Tues, Jan 30th 2:30 – 4:30

Thanks,
Tracey

Tracey Black
Direct:(604) 901-1579

URBAN DEVELOPMENT INSTITUTE

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Tuesday, January 16, 2024 10:54 PM
To: Tracey Black <tblack@udi.org>
Subject: RE: DAC Follow Up Meeting

Hi Tracey – Anne wasn't able to attend the meeting last week and I was hoping we would be able to reschedule. Are you able to share her updated availability for the next two weeks?

Nicole

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Vukosavljevic, Nicole HOUS:EX
Sent: Wednesday, January 3, 2024 9:43 AM
To: 'Tracey Black' <tblack@udi.org>
Cc: Anne McMullin <AMcMullin@udi.org>
Subject: RE: DAC Follow Up Meeting

Hi Tracey – Happy New Year! Thank you for getting back to me, I have sent an invite for the 12th at 3pm.

Nicole

Nicole Vukosavljevic (she/her)

Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Tracey Black <tblack@udi.org>
Sent: Wednesday, January 3, 2024 9:38 AM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Anne McMullin <AMcMullin@udi.org>
Subject: RE: DAC Follow Up Meeting

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Nicole,

Happy New Year. The only dates/times that work for Anne from the times suggested below are:

1. Friday January 12th 1130am, 3 or 3:30pm
2. Wednesday January 17th anytime between 230 and 4pm

Thanks,
Tracey

Tracey Black
Executive Assistant to the President & CEO
Direct:(604) 901-1579

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: Anne McMullin <AMcMullin@udi.org>
Sent: Tuesday, January 2, 2024 8:43 AM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Tracey Black <tblack@udi.org>
Subject: Re: DAC Follow Up Meeting

Happy new year, Nicole. We will find a time that works.
Anne

> On Jan 3, 2024, at 12:40 AM, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca> wrote:
>
> Good morning Anne,
>
> Happy New Year and I hope you enjoyed the holidays. I am looking to schedule a follow up call between you and our internal team to gain more of your insight on the first Digital Advisory Council's meeting

content and discussion. The Council's second meeting is currently scheduled for early February, and we are hoping to connect with you before that.

Can you please let me know if you have any availability to meet at the below times:

1. Monday January 8th anytime between 2 and 3:30pm
2. Tuesday January 9th anytime between 2 and 4pm
3. Wednesday January 10th at 10am
4. Thursday January 11th at 2pm
5. Friday January 12th 1130am, 3 or 3:30pm
6. Wednesday January 17th anytime between 230 and 4pm
7. Thursday January 18th at 230pm

If none of those time work for you, we can look at other times that meeting your availability.

Thank you,
Nicole

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Vukosavljevic, Nicole HOUS:EX
Sent: Monday, November 20, 2023 10:33 AM
To: 'amcmullin@udi.org' <amcmullin@udi.org>
Subject: DAC Follow Up Meeting

Good morning Anne,

Thank you for attending the first Digital Advisory Council meeting. I am reaching out in follow up to Minister Kahlon's commitment for the Digital Delivery team to connect with members individually to obtain additional insight on the meeting's content and discussion. Please let me know if any of the following dates/times work for a meeting with John, Zac, and I.

1. Wednesday December 6 at 9am, 2pm or 4:30pm
2. Thursday December 7 at 3pm
3. Friday December 8 at 9, 9:30, 2, or 2:30pm
4. Wednesday December 15 at 11am
5. December 21 anytime between 1-3:30pm

Thanks,
Nicole

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15; s.17

RE: REQUEST | Minister Digital Advisory Council Meeting

From: May, Zachary HOUS:EX
To: Scott, Cory HOUS:EX <Cory.Scott@gov.bc.ca>
Cc: Kaur, Kiran HOUS:EX <Kiran.Kaur@gov.bc.ca>, Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>, Peach, Laura HOUS:EX <Laura.Peach@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: January 18, 2024 11:39:46 AM PST
Attachments: image001.jpg
Thanks Cory.

From: Scott, Cory HOUS:EX <Cory.Scott@gov.bc.ca>
Sent: Thursday, January 18, 2024 11:25 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Kaur, Kiran HOUS:EX <Kiran.Kaur@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>; Peach, Laura HOUS:EX <Laura.Peach@gov.bc.ca>
Subject: FW: REQUEST | Minister Digital Advisory Council Meeting

Hi Zac, I hope you're well…

I'm in the DMO helping this week while Kiran and Lisa are away, and Jana asked me to request materials for the upcoming DAC meetings:

Jan 24 – DM briefing – mats due by Monday, January 22
Jan 30 – MRK briefing – mats due by Friday, January 26
Feb 13 – DAC meeting – mats due to DAC attendees by February 6

Materials: I'm guessing this is up to you, but the meeting request below mentions a *PowerPoint presentation, annotated agenda, and background pre-meeting handouts*.

Just a heads up!
Thank you,

Cory Scott | Correspondence Coordinator
Governance and Accountability Branch
Ministry of Housing
Ph: 778-405-3465 Email: Cory.Scott@gov.bc.ca

From: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Sent: Thursday, January 18, 2024 10:39 AM
To: Scott, Cory HOUS:EX <Cory.Scott@gov.bc.ca>
Subject: FW: REQUEST | Minister Digital Advisory Council Meeting

Ok these are the DAC meetings.
The emails are confusing but we have it sorted

The dates are:

Jan 24 – DM briefing
Jan 30 – MRK briefing
Feb 13 – DAC meeting

MATS:

Talked to Teri today and we need the mats for the 24th DM briefing no later than the 22.
Can you connect with Zac and get that ball rolling?

We need the MRK mats no later than the 26th
Can you check in with Zac on that as well?

Much appreciated!!!

Jana Sexton
Manager, Executive Operations
Deputy Minister's Office
Ministry of Housing
614 Humboldt St, Victoria, BC
T: 236.478.1562 C: 250.896.3587

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, January 11, 2024 4:32 PM
To: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Cc: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: REQUEST | Minister Digital Advisory Council Meeting

Hi Jana,

It looks like we have some scheduling confusion on this meeting. Hoping you can help us get to a solution here.

- MRK is the chair of this meeting and all scheduling decisions follow his availability.
- John confirmed to me that the Minister is NOT available on Feb 13, and the meeting was likely getting moved to Feb 12 in the morning (10-12?).
- We need to confirm that MRK is good for Feb 12 and that is secured in his calendar so we can update the meeting details with all the attendees (or some other date, we just need a date/time finalized).
- I also need a confirmed date and time so I can secure a venue and have other meeting logistics finalized.
- The MO communicated to Lisa that this is "our meeting," which has left us in an endless circle of indecision about the meeting date as they wait for us, we wait for them, and all our lovely participants are left in limbo.

My request:

- I respectfully request that the MO confirm what date/time the Minister is available for this meeting, in person, in Vancouver and we can make all other arrangements based on that.

Thank you!!!

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: Friday, December 22, 2023 10:08 AM
To: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: REQUEST | Minister Digital Advisory Council Meeting

Hi Lisa – please find the meeting details below. Let me know if you have any questions.

Meeting Title: Calendar Hold: Digital Advisory Council Meeting #2
Required Invitees:

- Jazz Pabla, City of Kelowna, jpabla@kelowna.ca
- Tim Ryce, City of North Vancouver, tryce@cnv.org
- Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca
- Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org
- Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca
- Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca
- Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca
- Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org
- Anne McMullin, Urban Development Institute, amcmullin@udi.org
- Sue Paish, Digital, spaish@digitalsupercluster.ca
- Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca
- Michael Pistrin, BC Housing, mpistrin@bchousing.org
- Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org
- Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com
- Jill Tipping, BC Tech Association, jtipping@wearebctech.com
- Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca
- HOUS team: John Thomson, Zachary May, Nicole Vukosavljevic

Date and Time: February 13, 2024 from 10am to 12pm.
Location: In person in the Lower Mainland. Location TBD.

Body of Invite:

This is a calendar hold for the second meeting of the Digital Advisory Council. Please note that the meeting details will be confirmed early in the New Year.
If you have any questions about the meeting, or the Ministry of Housing's work on digital codes and permits, please reach out directly to our Digital Delivery team at Digital.codes.permits@gov.bc.ca.

Nicole Vukosavljevic (she/her)
Director, Digital Delivery
Housing Innovations | Ministry of Housing
UC: 778-974-5044 | Email: nicole.vukosavljevic@gov.bc.ca

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia, on whose territories I am grateful to work, live and grow on.

From: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Sent: Friday, December 22, 2023 10:05 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: REQUEST | Minister Digital Advisory Council Meeting

Yes, I can get that done today.

Lisa

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, December 22, 2023 9:43 AM
To: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: REQUEST | Minister Digital Advisory Council Meeting

Hi Lisa,

We're hoping to get this hold in the calendars of the attendees, today if possible. Nicole is pulling together the list of emails and drafting the message.

Are we able to get DMO to send out an outlook calendar invite to block this time in the calendars of the attendees?

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Sent: Wednesday, December 20, 2023 4:27 PM
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: FW: REQUEST | Minister Digital Advisory Council Meeting

Hello,

We have Feb 13 from 10-12 pm as a HOLD in the minister's calendar for a 2 hour DAC meeting. We will need to confirm early January with Molly who manages the minsiter's calendar if this has to change.

Lisa – please send a hold the date invites from Teri's calendar to John and Zac. Please connect with Molly when she is back from vacation regarding confirming this time for the Minister and once that is done we can have invites sent out.

Thank you

Nikki Papadopoulos
A/Director, Executive Operatons
Deputy Minister's Office, Ministry of Housing

From: Maartman, William HOUS:EX <William.Maartman@gov.bc.ca>
Sent: Wednesday, December 20, 2023 11:13 AM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>; Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>; Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: RE: REQUEST | Minister Digital Advisory Council Meeting

Hi Nikki,

I've put a hold into calendar for Feb 13, 10am-12pm. Can we get this down to 2 hours please?

Molly can confirm in new year if anything changes with that timing but should be good to proceed for now.

Thanks,

Will Maartman (he/him)
Chief of Staff
Office of the Government House Leader, Minister Kahlon
Government of British Columbia
C: 778-679-4952

From: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Sent: Tuesday, December 19, 2023 4:26 PM
To: Dowler, Thea HOUS:EX <Thea.Dowler@gov.bc.ca>; Maartman, William HOUS:EX <William.Maartman@gov.bc.ca>; Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Cc: Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>; Warbeck, Caitlin HOUS:EX <Caitlin.Warbeck@gov.bc.ca>; Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: REQUEST | Minister Digital Advisory Council Meeting

Good Afternoon,

We are looking to secure a date/time in calendars for the next Minister's Digital Advisory Council meeting during the week of February 12th . The last meeting was on November 15th. Can you please provide some date/time options where the minister would be available for an in person 2.5 hour meeting or if this week does not work provide some alternate options. The meeting will include a generative discussion/workshopping.

The location will be Vancouver area, our program area will manage securing a site and the DMO will manage invitations.

CLIFF # | eApps #	**TBD**
Request submitted by:	*Deputy Minister's office*
Meeting/Briefing Title/Group:	**Minister of Housing's Digital Advisory Council (DAC)** *HOUS staff and leaders from the housing, construction, and technology sectors.*
Meeting/Briefing Purpose:	*DAC Meeting # 2 – update on key initiatives related to digital transformation in housing and workshop on a common vision about digital transformation in the sector.*
Requested Participants:	*Same contact list as meeting #1 (Nov 15, 2023)*
Timing Implications:	*Ideally week of Feb 12, 2024. House is in session the following week.* *Seeking Minister's availability for an in-person meeting in the Vancouver area.*
Meeting Duration:	**2.5 hrs**
Materials:	*Powerpoint presentation, annotated agenda, and background pre-meeting handouts to be finalized in January, 2024.* *Meeting materials will be available to participants one week prior to the meeting.*
Other Notes:	

Regards,

Nikki Papadopoulos
A/Director, Executive Operations
Deputy Minister's Office
Ministry of Housing
Office: 250 356-2115| Cell: 250 886-7982
Email: Nikki.Papadopoulos@gov.bc.ca
Pronouns: *she/her*



This is confirmed date and time for the second meeting of the Digital Advisory Council. This will be virtual, via Teams (please find the link below)
If you have any questions about the meeting, or the Ministry of Housing's work on digital codes and permits, please reach out directly to our Digital Delivery team at Digital.codes.permits@gov.bc.ca<mailto:Digital.codes.permits@gov.bc.ca>.

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15; s.17

Attendees:

* Jazz Pabla, City of Kelowna, jpabla@kelowna.ca<mailto:jpabla@kelowna.ca>
* Tim Ryce, City of North Vancouver, tryce@cnv.org<mailto:tryce@cnv.org>
* Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca<mailto:Rene.Cravioto@vancouver.ca>
* Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>
* Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca<mailto:hgoodland@scius.ca>
* Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca<mailto:Hyang@egbc.ca>
* Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca<mailto:MVernon@aibc.ca>
* Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org<mailto:Neilmoody@chbabc.org>
* Anne McMullin, Urban Development Institute, amcmullin@udi.org<mailto:amcmullin@udi.org>
* Sue Paish, Digital, spaish@digitalsupercluster.ca<mailto:spaish@digitalsupercluster.ca>
* Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca<mailto:ssf@civil.ubc.ca>
* Michael Pistrin, BC Housing, mpistrin@bchousing.org<mailto:mpistrin@bchousing.org>
* Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org<mailto:tmccurry@asttbc.org>
* Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com<mailto:duncan.wlod@gmail.com>
* Jill Tipping, BC Tech Association, jtipping@wearebctech.com<mailto:jtipping@wearebctech.com>
* Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca<mailto:Jennifer.Anthony@gov.bc.ca>

Ministry Staff:
Teri Collins, Deputy Minister

John Thomson, Executive Lead
Zachary May, Executive Director
Nicole Vukosavljevic, Director

Hi, all:

This was the most popular time.

Meeting materials, including a draft Local Government Best Practices Guide, to come via separate email

Agenda so far:

* Updated draft of Local Government Best Practices Guide
* Ministry of Housing updates
* Roundtable

Looking forward to it.
Hugo

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Join on your computer, mobile app or room device
s.15; s.17

RE: [External] Energy Step Code Council meeting

From: Bob Deeks <bdeeks@rdcfinehomes.com>
To: Wark, Robyn <Robyn.Wark@bchydro.com>, Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: January 25, 2024 4:27:45 PM PST
Attachments: image002.jpg, image003.jpg, image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi,
Sounds good, I am free 2-4 on Tuesday.
Cheers,

Bob Deeks
President – Certified Housing Professional

RDC FINE HOMES | Healthy Homes. Happy Families. PIQUE BEST OF WHISTLER 2018 PIQUE BEST OF WHISTLER 2019

Cell: 604.967.1142 **Office:** 604.932.3618 **Email:** bob@rdcfinehomes.com
203-1390 Alpha Lake Road, Whistler, BC V8E 0H9
www.rdcfinehomes.com

From: Wark, Robyn <Robyn.Wark@bchydro.com>
Sent: Thursday, January 25, 2024 2:29 PM
To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Bob Deeks <bdeeks@rdcfinehomes.com>
Subject: RE: [External] Energy Step Code Council meeting

Gents

Does it make sense to have a pre-meeting ahead of the Feb 5th meeting? It might be good to check in around agenda.

For example, I was thinking people would likely have questions around the 2024 levels (now we are in 2024). I understand that it is politically sensitive, and you are considering deferring the 2024 decision to post election (ie Nov), but it might be useful to at least float some ideas of levels being considered.

Below are some times that work for me next week, in case you guys are interested / available.

Mon 29th – any time
Tues 30th – any time after 1pm

Thx … Robyn

-----Original Appointment-----
From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Sent: 2024, January 24 4:29 PM
To: Wong, Hugo HOUS:EX; bea.bains@fortisbc.com; Berkhout, Tom; alexandre.bigonesse@canada.ca; Broid, Daniel EMLI:EX; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline HOUS:EX; bdeeks@rdcfinehomes.com; diana@havan.ca;

patrick.enright@vancouver.ca; catherine.ernst@boabc.org; jfisher@udi.org; MGatensby@aibc.ca; joe.iconhomes@gmail.com; nheap@richmond.ca; jjung@asttbc.org; Lau, Toby; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; lmak@communityenergy.ca; rmathews@cnv.org; May, Zachary HOUS:EX; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; Muncaster, Katherine EMLI:EX; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Wark, Robyn; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B HOUS:EX; XT:Wimmers, Guido CITZ:IN; Gill, Aman X HOUS:EX
Subject: [External] Energy Step Code Council meeting
When: 2024, February 05 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

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Hi, all:

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- Roundtable

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Hugo

Microsoft Teams meeting

Join on your computer, mobile app or room device
Click here to join the meeting

s.15; s.17

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prohibited. Please immediately delete this message and its attachments from your computer and servers. We would also appreciate if you would contact us by a collect call or return email to notify us of this error. Thank you for your cooperation.

RE: Orca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: JP Fraser <jp.fraser@orcalgs.com>, John Haibeck s.22 >, Robin Ramage <robin.ramage@orcalgs.com>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, pauline@chbabc.org, csmith@udi.org, Gunn, Meghan HOUS:EX <Meghan.Gunn@gov.bc.ca>
Sent: January 29, 2024 2:08:04 PM PST

Hi JP,

Yes, please feel free to set this up in a way that works for you. I suspect separate calls is good as each contact is coming with a different perspective. We'll leave it with you but please reach out if we can contribute from a technical/codes perspective. My impression was that ORCA has that part well in hand, but just in case we're needed, we're happy to help.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: JP Fraser <jp.fraser@orcalgs.com>
Sent: Monday, January 29, 2024 1:01 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; John Haibeck s.22 >; Robin Ramage <robin.ramage@orcalgs.com>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; pauline@chbabc.org; csmith@udi.org; Gunn, Meghan HOUS:EX <Meghan.Gunn@gov.bc.ca>
Subject: Re: Orca

You don't often get email from jp.fraser@orcalgs.com. Learn why this is important

[EXT
This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks or your patience everyone I'm now back from my trip. Perhaps it would be better to reach out to you all personally to seat setting up some team's calls. Jun'ichi happy with this ?

Best

Jp

Sent from my iPhone

> On 22 Jan 2024, at 10:31, JP Fraser <jp.fraser@orcalgs.com> wrote:
>
> Morning Jun'ichi,
>
> Thanks for connecting us up. Hi everyone I am travelling today but will reach out to you all in due course to set something up.
>
> Best
>
> John Paul Fraser
>
> Chairman



Email: jp.fraser@orcalgs.com
Mobile : +1 236 255 3416
Web: www.orcalgs.ca

ORCA LGS SOLUTIONS LTD
1355 Comox Rd
Courtenay B.C.
V9M3P8

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From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Date: Thursday, January 18, 2024 at 5:16 PM
To: JP Fraser <jp.fraser@orcalgs.com>, John Haibeck <s.22 , Robin Ramage <robin.ramage@orcalgs.com>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, pauline@chbabc.org <pauline@chbabc.org>, 'csmith@udi.org' <csmith@udi.org>, Gunn, Meghan HOUS:EX <Meghan.Gunn@gov.bc.ca>
Subject: RE: Orca

Hello again folks,

As discussed, I've reached out to a few key contacts on behalf of Orca. They all have interest in learning more about your company and products, and have allowed me to share their contact information via CC in this email.

From an industry perspective:
Pauline Rupp: Director, Technical & Building Innovation, Canadian Home Builders Association BC (pauline@chbabc.org)
Cassandra Smith, Director, Policy and Public Affairs, Urban Development Institute (csmith@udi.org)

As well, our partner branch in the Ministry of Housing, Housing Innovations is interested in new technologies that may enable more new housing. I've copied Meghan Gunn, Senior Policy Analyst. (Meghan.Gunn@gov.bc.ca)

I hope this helps.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: JP Fraser <jp.fraser@orcalgs.com>
Sent: Friday, January 12, 2024 4:16 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>

Cc: Robin Ramage <robin.ramage@orcalgs.com>; John Haibeck <s.22 >; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: Re: Orca

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

No problem. Thank you for you time and effort to point us in the right direction.

Best

Jp
Sent from my iPhone

> On 12 Jan 2024, at 14:54, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca> wrote:
>
> Hi Folks,
>
> It was a pleasure to meet you all today and hear about your product and methods, and how they can help with fast delivery of housing. A slight adjustment to what I conveyed- I would like to reach out first to a few contacts and make sure they are the right ones, before passing them along. I'll get back to you ASAP.
>
> Jun'ichi Jensen
> Acting Executive Director
> Building and Safety Standards Branch
> Ministry of Housing
> 250 858 1325
>
> -----Original Appointment-----
> **From:** JP Fraser <jp.fraser@orcalgs.com>
> **Sent:** Wednesday, January 10, 2024 8:12 PM
> **To:** JP Fraser; Jensen, Jun'ichi HOUS:EX; Chase, Andy HOUS:EX; Robin Ramage; John Haibeck
> **Subject:** Orca
> **When:** Friday, January 12, 2024 2:00 PM-2:30 PM (UTC-08:00) Pacific Time (US & Canada).
> **Where:** Microsoft Teams Meeting
>
> You don't often get email from jp.fraser@orcalgs.com. Learn why this is important
>
> [EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**
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> ---
>
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>
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Learn More | Meeting options

FW: Lunch n Learn - Digital building permit tool and BCBC

From: Leggett, Julia HOUS:EX
To: policy@udi.org
Cc: Jeff Fisher <jfisher@udi.org>
Sent: January 30, 2024 2:20:12 PM PST

Forwarding email as per Jenny Scott's out of office email. Please see message below

Kind regards,
Julie Leggett
Senior Policy Analyst
Housing Innovations | Ministry of Housing
UC: 250-856-0964 | Email: Julia.leggett@gov.bc.ca

I extend my gratitude to the Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.

From: Leggett, Julia HOUS:EX
Sent: Tuesday, January 30, 2024 2:14 PM
To: Jeff Fisher <jfisher@udi.org>; 'Jenny Scott' <jscott@udi.org>
Cc: 'Vukosavljevic, Nicole HOUS:EX' <Nicole.Vukosavljevic@gov.bc.ca>
Subject: Lunch n Learn - Digital building permit tool and BCBC

Hi Jeff and Jenny,

Hope this email finds you well. I'm reaching out on behalf of our Ministry of Housing's Digital Delivery Team to see if we can organize a 1-to-1.5-hour Lunch and Learn session or other type of presentation for your membership in late February/early March to discuss our work underway on digitizing the BC Building Code and building a digital building permit tool?

These important initiatives are key parts of our ongoing work with partners from across the housing construction sector to improve the permitting experience for new housing and encourage the use of tools and practices that will position British Columbia as a North American leader in digital permitting and construction.

Let me know if your organization has other options for us to connect with your membership.

I look forward to hearing from you.
Julie

Kind regards,
Julie Leggett
Senior Policy Analyst
Housing Innovations | Ministry of Housing
UC: 250-856-0964 | Email: Julia.leggett@gov.bc.ca

I extend my gratitude to the Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.

RE: [External] Energy Step Code Council meeting

From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Wark, Robyn <Robyn.Wark@bchydro.com>, Bob Deeks <bdeeks@rdcfinehomes.com>
Sent: January 30, 2024 2:46:52 PM PST

Yes, happy to reschedule.

We could do:

Wed. Jan 31 (tmrw) from 3:00-3:30
Thurs. Feb. 1 from 1-2 p.m. (pick a 30-minute slot)
Fri. Feb. 2 from 11-12 p.m. or 1:30-2 p.m. (pick a 30-minute slot).

Hugo

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Tuesday, January 30, 2024 2:31 PM
To: Wark, Robyn <Robyn.Wark@bchydro.com>; Bob Deeks <bdeeks@rdcfinehomes.com>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Subject: Re: [External] Energy Step Code Council meeting

I'm in a conference, so happy to reschedule.

s.22

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Wark, Robyn <Robyn.Wark@bchydro.com>
Sent: Tuesday, January 30, 2024 2:11:47 PM
To: Bob Deeks <bdeeks@rdcfinehomes.com>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>
Subject: Re: [External] Energy Step Code Council meeting

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Gents

Apologies, s.22 I could make tmrrw afto, or Thursday morning if others are free.

Or feel free to proceed without me.

Thx … Robyn

On Jan 25, 2024, at 4:27 PM, Bob Deeks <bdeeks@rdcfinehomes.com> wrote:

Don't click on links or open attachments unless you trust the sender and are expecting the link or attachment. If you suspect this message to be phishing, please report it by clicking the Report Message button in the Outlook toolbar and select "Phishing."

Hi,
Sounds good, I am free 2-4 on Tuesday.
Cheers,

Bob Deeks
President – Certified Housing Professional

<image001.png>

<image002.jpg>

<image003.jpg>

Cell: 604.967.1142 **Office:** 604.932.3618 **Email:** bob@rdcfinehomes.com
203-1390 Alpha Lake Road, Whistler, BC V8E 0H9
www.rdcfinehomes.com

From: Wark, Robyn <Robyn.Wark@bchydro.com>
Sent: Thursday, January 25, 2024 2:29 PM
To: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; May, Zachary OHCS:EX <Zachary.May@gov.bc.ca>; Bob Deeks <bdeeks@rdcfinehomes.com>
Subject: RE: [External] Energy Step Code Council meeting

Gents

Does it make sense to have a pre-meeting ahead of the Feb 5th meeting? It might be good to check in around agenda.

For example, I was thinking people would likely have questions around the 2024 levels (now we are in 2024). I understand that it is politically sensitive, and you are considering deferring the 2024 decision to post election (ie Nov), but it might be useful to at least float some ideas of levels being considered.

Below are some times that work for me next week, in case you guys are interested / available.

Mon 29th – any time
Tues 30th – any time after 1pm

Thx … Robyn

-----Original Appointment-----
From: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>
Sent: 2024, January 24 4:29 PM
To: Wong, Hugo HOUS:EX; bea.bains@fortisbc.com; Berkhout, Tom; alexandre.bigonesse@canada.ca; Broid, Daniel EMLI:EX; pcaraher@ahma-bc.org; GCarignan@communityenergy.bc.ca; mchorobik@communityenergy.bc.ca; NConnolly@richmond.ca; Dams, Madeline HOUS:EX; bdeeks@rdcfinehomes.com; diana@havan.ca; patrick.enright@vancouver.ca; catherine.ernst@boabc.org;

jfisher@udi.org; MGatensby@aibc.ca; joe.iconhomes@gmail.com; nheap@richmond.ca; jjung@asttbc.org; Lau, Toby; wileung@bchousing.org; mlohmann@communityenergy.bc.ca; J.Madden@ubc.ca; lmak@communityenergy.ca; rmathews@cnv.org; May, Zachary HOUS:EX; cmccurry@communityenergy.bc.ca; christopher.mclellan@canada.ca; mmcwilliam3@bcit.ca; Mohareb, Adrian ENV:EX; Muncaster, Katherine EMLI:EX; jowen@surrey.ca; sean.pander@vancouver.ca; roberto@zebx.org; hradhakrishnan@egbc.ca; ron@havan.ca; kelly@hkrbuilders.com; trothery@communityenergy.bc.ca; pauline@chbabc.org; lsampliner@portmoody.ca; zsegal@boma.bc.ca; dstathonikos@boma.bc.ca; lise.townsend@surrey.ca; Wark, Robyn; ralph.wells@ubc.ca; tyler.wightman@boabc.org; Williams, Scott B HOUS:EX; XT:Wimmers, Guido CITZ:IN; Gill, Aman X HOUS:EX
Subject: [External] Energy Step Code Council meeting
When: 2024, February 05 9:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

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- Roundtable

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Hugo

Microsoft Teams meeting

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FW: Digital Advisory Council Meeting #2

From: May, Zachary HOUS:EX
To: Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Sent: February 1, 2024 4:14:22 PM PST
FYI

From: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Sent: Thursday, February 1, 2024 4:05 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Digital Advisory Council Meeting #2

Hi Zac,

Invite has been sent.

Lisa

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, February 1, 2024 3:46 PM
To: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Subject: RE: Digital Advisory Council Meeting #2

Hi Lisa,

Please forward this meeting invite to Karen Spence and Meghan Williams. We briefed MRK and Teri today and they confirmed we're ok to add those two staff members from WLRS.

Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; Spence, Karen WLRS:EX <Karen.Spence@gov.bc.ca>

Cheers!
Zac

-----Original Appointment-----
From: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Sent: Thursday, December 21, 2023 8:34 AM
To: Collins, Teri HOUS:EX; Thomson, John HOUS:EX; May, Zachary HOUS:EX; Vukosavljevic, Nicole HOUS:EX; jpabla@kelowna.ca; tryce@cnv.org; Rene.Cravioto@vancouver.ca; tyler.wightman@boabc.org; hgoodland@scius.ca; Hyang@egbc.ca; MVernon@aibc.ca; Neilmoody@chbabc.org; amcmullin@udi.org; spaish@digitalsupercluster.ca; ssf@civil.ubc.ca; XT:McCurry, Theresa GCPE:IN; duncan.wlod@gmail.com; jtipping@wearebctech.com; Anthony, Jennifer WLRS:EX; mpistrin@bchousing.org
Cc: Vincent Tong; Carla Trevisi
Subject: Digital Advisory Council Meeting #2
When: February 12, 2024 9:30 AM-11:30 AM (UTC-08:00) Pacific Time (US & Canada).
Where: Virtual - via Teams

This is confirmed date and time for the second meeting of the Digital Advisory Council. This will be virtual, via Teams (please find the link below)
If you have any questions about the meeting, or the Ministry of Housing's work on digital codes and permits, please reach out directly to our Digital Delivery team at Digital.codes.permits@gov.bc.ca.

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15; s.17

Attendees:

- Jazz Pabla, City of Kelowna, jpabla@kelowna.ca
- Tim Ryce, City of North Vancouver, tryce@cnv.org
- Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca
- Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org
- Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca
- Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca
- Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca
- Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org
- Anne McMullin, Urban Development Institute, amcmullin@udi.org
- Sue Paish, Digital, spaish@digitalsupercluster.ca
- Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca
- Michael Pistrin, BC Housing, mpistrin@bchousing.org
- Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org
- Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com
- Jill Tipping, BC Tech Association, jtipping@wearebctech.com
- Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca

Ministry Staff:

Teri Collins, Deputy Minister
John Thomson, Executive Lead
Zachary May, Executive Director
Nicole Vukosavljevic, Director

RE: 2024 BCBC Measures

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Sent: February 5, 2024 8:05:20 AM PST
Attachments: image003.png, image005.jpg, image007.jpg, image008.jpg, image006.jpg, image004.jpg, image001.jpg, image002.jpg

Thank you for the information and opportunity to begin to think about this.

I am very open and appreciative of your thoughts on types of solutions in addition to floor space exemptions.

Kindly,
Shannon

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Friday, February 2, 2024 4:11 PM
To: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: FW: 2024 BCBC Measures

FYI on mitigation measures.

Shannon – embedded in this is a strategy that I think may be beneficial to Accessibility, alongside what Andy has been describing as 'design guidance.'

s.13

You did a good environmental scan of what current local governments do – may be worth some pre-emptive thinking on what the range of solutions may be. That same approach could be applied to seismic.

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, February 2, 2024 2:36 PM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: 2024 BCBC Measures

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Kevin,

That's helpful direction, we'll work with our members on this.

Thanks,
Cassandra

Cassandra Smith
Direct:(604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>

Sent: Thursday, February 1, 2024 1:52 PM
To: Cassandra Smith <csmith@udi.org>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: 2024 BCBC Measures

Hi Cassandra –

Re timing, absolutely understand. We're doing what we can to speed our work through this to try to generate ideas early so that we can signal where we may be going.

Re info needed – we have your earlier submissions and some of the ideas UDI submitted, in particular around floor area ratios, are ones we're very interested in exploring more. The info that we need is a picture as to the quantifiable impact of both accessibility and seismic provisions. s.13

s.13

s.13 we need to have some evidence-based info that tells us what the amount is.

As an example, NRC's analysis says that the impact may be between 2-5% of a project cost in total. I know that some industry leaders have pointed about structural requirements changing in some building components – such as concrete cores – that have a larger number in terms of change required (some suggestion that the depth of concrete cores may need to increase up to 30%), but we need to know how that one building component factors into a broader consideration – does it push the overall impact towards 8%? Etc. s.13

s.13

We'd also certainly be open to hearing about any other ways to look at the impacts or mitigation measures your members may suggest, along with why they think that the measures may help us mitigate the impacts of the codes.

Looking forward,

Kevin

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, February 1, 2024 1:04 PM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: 2024 BCBC Measures

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Kevin,

That approach makes sense to us. The only feedback I have is that builders will need time to determine if the final mitigation measures will work for their projects prior to the implementation date of next March, and they are already be thinking about project designs. So as much time as can be provided would be helpful.

I trust you've received our previous correspondence on the seismic and accessibility provisions from last year? We described the impacts at a high level there, but it sounds like you're looking for something more detailed?

I will ask my members to pull together estimates of the impact to floor area/density, unit counts, and cost. Is there any other metric that you would be considering?

I'll also see if my members have seen mitigation measures or flexibility in other jurisdictions that could be applied here.

Once your work plan is approved, and you have approximate timelines for engagement please let me know and I can help organize a session with builders and consultants.

Thanks for the connection Jun'ichi, and looking forward to working with you both on this.

Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: January 31, 2024 11:28 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Subject: RE: 2024 BCBC Measures

Hi Cassandra,

Thanks for the connection, Juni. Cassandra – we're rapidly developing our work plan and anticipate doing a couple levels of outreach this year.

First, hopefully in the first half of the year, we're planning to reach out to hear from you better the impacts that you're anticipating from the new code and in particular the adaptability and seismic provisions next year. Getting better understanding of the numbers gives us a better metric to understand what we actually need to mitigate.

Following from that, we're going to do a lot of work on seeing what levers we can pull to help mitigate the impacts.
s.13

I really appreciate the offer of your Codes Committee's time. To try to help make our engagement as productive as possible on both sides – I'd ask if you could encourage them to start thinking about measuring the impacts they anticipate.

We're working on finalizing our workplan and getting it approved, so what I've written above is subject to change, but it's how we intend to do this work, and I'd certainly welcome any initial comments you may have on what we could do to improve it.

Best,

Kevin Harding | Director, Safety Policy

Building and Safety Standards Branch, Housing and Land Use Policy Division
Ministry of Housing
Email: kevin.harding@gov.bc.ca
Telephone: 250-213-5461 (direct)

BRITISH COLUMBIA

I acknowledge with gratitude that I live and work on the lands of the Musqueam, Squamish, and Tsleil-Waututh peoples, and the lands of the Lekwungen people, traditional keepers of their lands.

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, January 31, 2024 9:50 AM
To: 'Cassandra Smith' <csmith@udi.org>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Subject: RE: 2024 BCBC Measures

Hi Cassandra,

I know the team is developing a draft plan to consult on – Kevin Harding is copied and can likely give an idea of when the team will be reaching out. Thank you for your offer of assistance.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Wednesday, January 31, 2024 9:47 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: 2024 BCBC Measures

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I thought I'd just send a quick note to seem if you had any updates on the timeline for engagement on offsets/additional measures to address the costs of implementing the 2024 BCBC changes. Our Codes Committee is happy to participate once the process gets underway.

Thanks,
Cassandra

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

RE: Lunch n Learn - Digital building permit tool and BCBC

From: Leggett, Julia HOUS:EX
To: Cassandra Smith <csmith@udi.org>
Sent: February 6, 2024 9:04:39 AM PST
Attachments: image001.jpg

Perfect thanks Cassandra. I just sent meeting invite
Julie

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, February 5, 2024 3:27 PM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Lunch n Learn - Digital building permit tool and BCBC

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[EXT
This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Julia,

That works well. How about Monday?

Thanks,
Cassandra

Cassandra Smith
Direct:(604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Monday, February 5, 2024 2:13 PM
To: Cassandra Smith <csmith@udi.org>
Cc: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Lunch n Learn - Digital building permit tool and BCBC

Hi Cassandra,
Are you available for a quick 20 minute or so call to discuss planning details with our team?

Checking calendars, it looks like Nicole and Zac have some time **Thursday, February 8 @ 11:00 – 11:20am or Monday February 12@ 2:00-2:20pm.**

Let me know and I'll send a meeting invite.
Much appreciated,
Julie

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, February 2, 2024 3:25 PM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Lunch n Learn - Digital building permit tool and BCBC

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This

Hi Julia,

Thanks for reaching out, and this sounds like a great opportunity to share the digitization work being done. Can you explain in more detail what you had in mind, how we could support you in getting this message out? For example, is this something that you will be hosting that we can help promote or are you looking to collaborate on an event? Presuming that this would be virtual?

Thanks and looking forward to hearing from you,
Cassandra

Cassandra Smith
Direct:(604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Tuesday, January 30, 2024 2:14 PM
To: Jeff Fisher <jfisher@udi.org>; Jenny Scott <jscott@udi.org>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: Lunch n Learn - Digital building permit tool and BCBC

Hi Jeff and Jenny,

Hope this email finds you well. I'm reaching out on behalf of our Ministry of Housing's Digital Delivery Team to see if we can organize a 1-to-1.5-hour Lunch and Learn session or other type of presentation for your membership in late February/early March to discuss our work underway on digitizing the BC Building Code and building a digital building permit tool?

These important initiatives are key parts of our ongoing work with partners from across the housing construction sector to improve the permitting experience for new housing and encourage the use of tools and practices that will position British Columbia as a North American leader in digital permitting and construction.

Let me know if your organization has other options for us to connect with your membership.

I look forward to hearing from you.
Julie

Kind regards,
Julie Leggett
Senior Policy Analyst
Housing Innovations | Ministry of Housing
UC: 250-856-0964| Email: Julia.leggett@gov.bc.ca

*I extend my gratitude to the **Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples** on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.*

Documents for Digital Advisory Council Meeting #2 Monday Feb, 12th

From:	Kaur, Kiran HOUS:EX <Kiran.Kaur@gov.bc.ca>
To:	Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>, May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, jpabla@kelowna.ca, tryce@cnv.org, Rene.Cravioto@vancouver.ca, tyler.wightman@boabc.org, hgoodland@scius.ca, Hyang@egbc.ca, MVernon@aibc.ca, Neilmoody@chbabc.org, amcmullin@udi.org, spaish@digitalsupercluster.ca, ssf@civil.ubc.ca, XT:McCurry, Theresa GCPE:IN <tmccurry@asttbc.org>, duncan.wlod@gmail.com, jtipping@wearebctech.com, Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>, mpistrin@bchousing.org, Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>, Spence, Karen WLRS:EX <Karen.Spence@gov.bc.ca>, BCH Meeting Calendar (ministrymeetings@bchousing.org) <ministrymeetings@bchousing.org>, Vincent Tong <vtong@bchousing.org>, Carla Trevisi <ctrevisi@digitalsupercluster.ca>
Cc:	Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>, Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Sent:	February 7, 2024 11:16:19 AM PST
Attachments:	MINUTES -DAC 2023.11.15.pdf, PRIMER - DAC Meeting 2.pdf, AGENDA -DAC Meeting 2.pdf, PPT SLIDES - DAC 2.pdf

Good Morning Everyone,

Please find attached documents for Digital Advisory Council Meeting #2 coming up on Monday, Feb 12th at 9:30 am, feel free to reach out if there are any queries.

Sincerely,

Kiran Kaur | Documents Coordinator
Deputy Minister's Office
Ministry of Housing
PH - 7784056439

Ministry of Housing

MINISTER'S DIGITAL ADVISORY COUNCIL
Meeting # 1

Date & Time:	November 15th, 2023 1:00PM - 2:30PM
Location:	Microsoft Teams
Attendees:	**Chair:** Minister Ravi Kahlon Anne McMullin, President & CEO, *Urban Development Institute* Duncan Wlodarczak, Chair, *Urban Land Institute* Helen Goodland, Principal, Head of Research and Innovation, *SCIUS Advisory Inc* Jazz Pabla, Director of Information Services, *City of Kelowna* Jill Tipping, CEO, *BC Tech Association* Michael Pistrin, *BC Housing (In place of Vincent Tong, CEO)* Neil Moody, CEO, *Canadian Home Builders' Association* Rene Cravioto, Program Manager, Innovation & Service Delivery, *City of Vancouver* Sue Paish, CEO, *Digital* Theresa McCurry, CEO, *Applied Science Technologists and Technicians of British Columbia* Tim Ryce, Chief Building Official, *City of North Vancouver* Tyler Wightman, Exec. Director, *Building Officials' Association of BC*
Regrets:	Dr. Sheryl Staub-French, Director of BIM TOPiCS Lab, *University of British Columbia* Heidi Yang, CEO, *Engineers and Geoscientists BC* Jennifer Anthony, Exec. Lead Permitting Solutions Office*, Ministry of Water, Land, and Resource Stewardship* Mark Vernon, CEO, *Architectural Institute of BC*
Ministry Attendees:	John Thomson, Exec. Lead Housing Innovation, *Ministry of Housing* Mark Hosak, Senior Advisor, *Ministry of Housing* Nicole Vukosavljevic, Director Digital Delivery, *Ministry of Housing* Teri Collins, Deputy Minister, *Ministry of Housing*
KPMG Attendees:	Nathan Stewart, Facilitator, *KPMG* Aadim Rajan, *KPMG* Dana Fallis, *KPMG* Phil Duffy, *KPMG*
Invited Guests:	Opreet Kang, *Urban Land Institute*

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Ministry of Housing

Meeting Minutes

Topic	Discussion
1. Welcoming & Opening Remarks	Members shared what success looks like for the digital transformation of the housing development system. Key themes that were raised include: • To establish BC as a leader in digital innovations for the housing and construction sectors. • To make building processes (permitting & design) more efficient and deliver more housing to BC communities faster. • To build processes and tools that can be implemented across communities in BC. • To share learning from local government experiences and leverage existing tools. • To seek buy-in from members, broader industry and all levels of government while continuing to iterate and implement quickly (not getting stuck moving at the pace of the slowest actors). • To focus on outcomes and set clear and measurable targets (grounding efforts in progress towards improving KPI's). • To foster an environment that embraces the Agile methodology: building small transformations, developing forward-thinking solutions, and failing fast.
2. Provincial Vision & Streams of Work	***1. Digitizing Construction Codes*** • Clarity was sought on what is meant by an interactive Code. The interactive Code will be a step towards a more sophisticated BIM-enabled Code. This will mean that users can hover over words for key definitions, clickable links, cross-references, etc. It will not address compliance; this will come with the BIM-enabled Code. • Consideration should be given to how to address current challenges with the interpretation of the Code within the interactive Code product. ***2. Streamlining Housing Approvals*** • Members discussed the impact of the Ministry of Housing's work on the approval timelines. • Consideration should be given to the scope and strategic lens being applied to the project and priority setting. There would be a benefit in a series of workshops to ensure the focus is on impact and capitalizing on low-hanging fruit.

Topic	Discussion

	• Several members agreed with the notion that it would be possible and good to standardize most requirements across local governments.
	  ○ Standardization across local governments would be a benefit for engineering technologists. Currently, some local governments accept digital signatures and others do not. While a small item, it can halt an entire process.
	
	• The Ministry shared the 18 jurisdictions that will be piloting the digital building permit submission.
	  ○ Tsleil-Waututh Nation
	  ○ Musqueam Indian Band
	  ○ District of Saanich
	  ○ City of Burnaby
	  ○ City of Campbell River
	  ○ City of Coquitlam
	  ○ City of Kamloops
	  ○ City of Kelowna
	  ○ City of Langley
	  ○ City of Maple Ridge
	  ○ City of Nanaimo
	  ○ City of North Vancouver
	  ○ City of Surrey
	  ○ City of Terrace
	  ○ City of Victoria
	  ○ City of Vancouver
	  ○ Cowichan Valley Regional District
	  ○ Town of Qualicum Beach
	
	• Several members suggested that construction sector KPIs do not always reflect the metrics that matter to this initiative, nor does the sector always have transparency around performance management.

Accelerating Industry Innovation	Nil.
Key Milestones Overview	• The timeline of reaching a digital permitting by 2025/26 it too long. Leveraging existing local government successes can help bring an MVP together more quickly. • The proposed timeframe has been built from the perspective of required effort. Consider reframing the timeline with the view of what is mission critical and build the timeline based on the desired outcome.

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Topic	Discussion
	• **Action:** The Ministry of Housing will schedule one-on-one meetings with all members to ensure members can provide more comprehensive feedback.
Follow-up Actions & Update on Next Meeting:	
Our next meeting will be in February 2024. A member from the Ministry of Housing will reach out to members following this meeting for feedback on the proposed approach.	

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Ministry of Housing

Minister's Digital Advisory Council

Meeting #2 Primer

PURPOSE OF THE DIGITAL ADVISORY COUNCIL

The purpose of the Digital Advisory Council is to advise the Province on becoming a North American leader in digital permitting and construction. Through discussion members will:

- Advise on the Province's vision for a housing construction sector that is faster, more collaborative, and delivers better outcomes;
- Support an understanding of how a digital transformation in the construction sector can support positive outcomes for their organization's membership and everyone who is involved in the construction sector;
- Identify opportunities for further development and adoption of new digital collaboration technologies;
- Identify and advise on roadblocks to innovation and sector needs to support successful adoption of new digital collaboration technologies;
- Identify and advise on strategic issues, trends, and emerging priorities related to digital innovation in the housing construction sector;
- Review and inform priorities, key objectives, and plans; and
- Champion innovation and digital collaboration technologies within their organizations and sector.

The Advisory Council is not a decision-making body and operates through consensus, with the opportunity to engage and receive input from all participating members, to provide recommendations that align with Provincial policies and priorities.

MEMBER REFLECTIONS

Following our first meeting, members of the Ministry of Housing connected with Council members individually to gather additional input on the Ministry's approach to the digital transformation program and understand each organization's priorities.

Through the follow up discussions, the following themes emerged:

- **Collaboration and Coordination:** effective partnerships and coordination are key to innovation and the long-term digital transformation's success. Improved digital permitting systems and digital advances in the construction sector will have the greatest impact on delivering more housing if they are developed in coordination.

- **Balancing Objectives:** speed, quality and cost are often viewed as tradeoffs when establishing new processes. A faster permitting or construction process is only an improvement if it maintains quality and minimizes additional costs.

- **Providing a Clear Value Proposition:** there must be a clear value proposition for the different parties throughout the housing development system to get individuals to change the way they have always operated. Individuals involved in developing housing need to have confidence that new processes will provide cost savings, time savings, or increased certainty, and regulators need to have confidence that new processes will improve their ability to provide effective and efficient oversight.

- **Change Management Support:** there is a need to support digital readiness and adoption over the long term. This requires committed resources. Digital transformation activities should amplify what is already done well, tackling known pain points, and focus on process over digital solutions. Non-financial mechanisms play an important role in supporting different parties to move quickly. Supporting the different parties requires clear communication, education, awareness building, and knowledge mobilization.

- **Strategic Standardization:** can deliver a more efficient design, construction, and oversight process by reducing the confusion of navigating similar permitting processes in different jurisdictions or at different points in the housing development process. This includes standardization of how permits are submitted, use of technologies like digital signatures, or some standardization of designs to allow for more automated approvals. At the same time, standardized processes should not limit the ability of industry or regulators to continue to innovate and be flexible.

- **Building a Common Digital Environment:** Today information about regulations, bylaws, permitting systems, and individual projects exist without a way to easily gather or share information and in every conceivable format. Coordinating the way we digitize regulations, permit processes, and share information between project teams and with regulators is essential to realizing the full potential of current and emerging technologies. A common approach can also help reinforce the benefits of collaboration across organizations and avoid every organization having to resource the change independently. This work may not deliver instant results, so tracking progress on this foundational work is critical to ensure continued support.

ESTABLISHING OUR SHARED VISION

The Ministry of Housing is working with partners across all levels of government and industry to position British Columbia as a **North American leader in digital permitting and construction**, resulting in a housing construction sector that is **fast, collaborative, & delivers better outcomes.**

During the first Digital Advisory Council meeting, members articulated the importance of being guided by clearly defined outcomes for a modern housing development system that is fast, collaborative, and delivers better outcomes.

The National Research Council of Canada, in coordination with BC's Ministry of Housing, is hiring a consultant to work with the Digital Advisory Council to:

- Develop an end-state vision for what a modern housing development system looks like,
- Develop a roadmap for achieving the end-state vision, and
- Propose industry-level KPIs against which to benchmark and report on progress.

The roadmap will consolidate Council discussions and provide a central focus for aligning the actions of all regulatory authorities, industry organizations, and private companies in a manner that effectively supports the achievement of the vision. The final report package is anticipated to be delivered by May 31, 2024.

This meeting will be used to discuss and establish consensus on the key outcomes driving the digital transformation of the system. As a starting point for discussion, the following objectives are proposed.

1. A Housing System Built for Digital Collaboration: A coordinated approach to digitizing codes, regulations, and permitting systems to provide a seamless experience for everyone involved in delivering housing and to realize the full potential of digital tools.

2. A Housing Construction Sector with the Capacity to Deliver More Housing: Focus on innovation in the housing construction sector that makes a measurable impact on labour productivity and the sector's ability to deliver more housing, faster.

3. A Digital Transformation for All Communities and Organizations of All Sizes: Ensuring that digital processes and tools enhance the capacity of small and medium sized communities and organizations.

ONGOING HOUSING DEVELOPMENT SYSTEM INITATIVES

In the effort to deliver more homes for people faster, there are many initiatives underway that touch on improving the housing development system. Council members expressed an interest in having relevant programs and initiatives consolidated into a single reference, which is provided in Tables 1, 2, and 3 below. Tables 1 and 2 are an initial depiction of the initiatives that are currently underway by a range of organizations within the regulatory system. The initial tables are populated primarily with Provincial initiatives and the Ministry will continue to add initiatives underway by local governments, industry, or research organizations over time.

This overview provides a starting point for understanding existing initiatives and supports discussions on how these initiatives are connected and identify gaps in action. Table 3 outlines relevant funding programs to a modern housing development system and highlight opportunities where organizations can align funding to maximize investment.

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Table 1

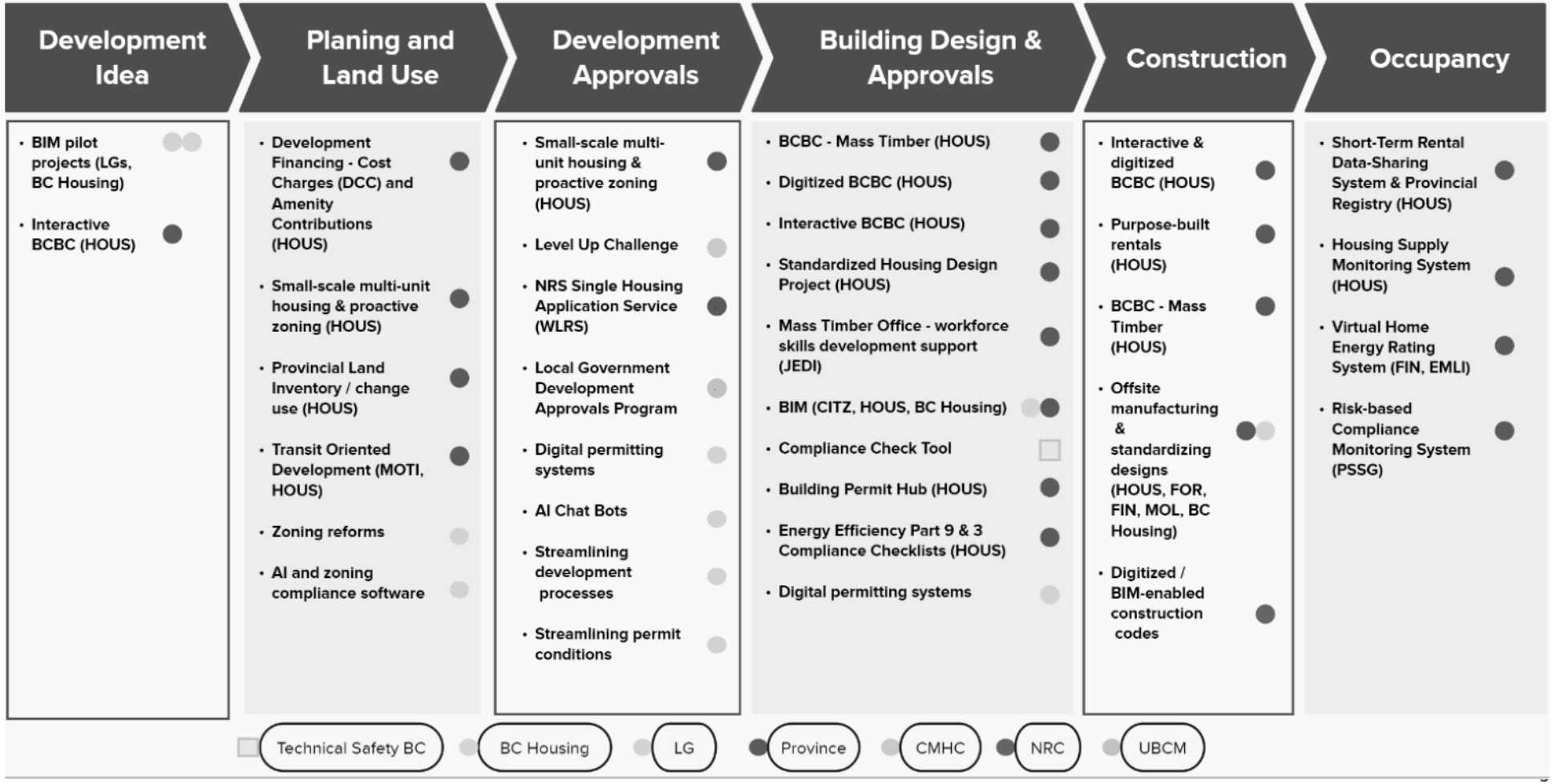

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Table 2

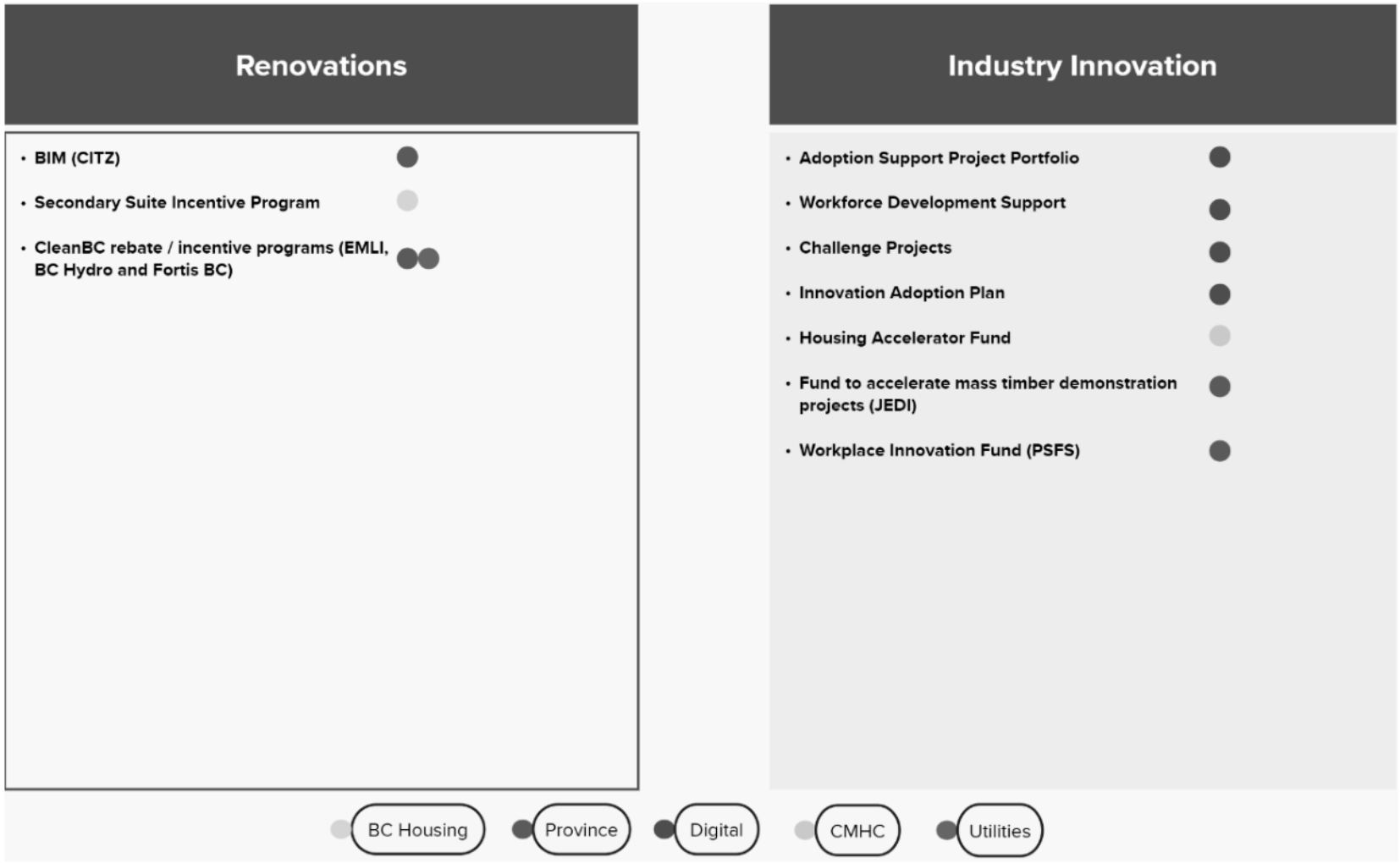

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Table 3

Funding Programs

Workforce Development Support
- Funding for projects to provide skilling, reskilling, or upskilling related to the digital workforce

• **TBA 2024/25**

Adoption Project Portfolio
- Funding to 30 to 60 organizations to support associated training and planning an innovation adoption project

• **TBA 2024/25**

Challenge Projects
- DIGITAL is leveraging a $9M investment from the Government of British Columbia to harness data-driven digital innovation to help grow housing production capacity

• **Accepting EOIs - reviewed weekly**

Housing Accelerator Fund
- Provides incentive funding to local governments encouraging initiatives aimed at increasing housing supply

• **Currently closed for applications**

Fund to accelerate mass timber demonstration projects (JEDI)
- Funding costs associated with the design and construction of buildings that demonstrate mass timber building systems and construction processes.

• **Currently closed for applications**

Codes Acceleration Fund (NRC)
- Supports LG/FN government efforts to accelerate code adoption, and to address gaps in code compliance and enforcement in their jurisdiction

• **Open to Indigenous applicants until March 2025**

Workplace Innovation Fund (PSFS)
- Supports labour supply and inclusion, along with new ways of improving productivity and employee retention

• **First intake closed**

Local Government Development Approvals Program
- Supports the implementation of established best practices and to test innovative approaches to improve development approvals

• **March 8, 2024**

Incentive program for secondary suites
- Provides money to help homeowners create a new secondary suite on their property to be rented out for below market value

• **Open April 1, 2024 - until funding is gone**

Level-Up Challenge
- Supports the adoption of transformative, system-level solutions that enable the quicker delivery of both community and market housing

• **Starting March 2024**

CleanBC rebate / incentive programs (EMLI, BC Hydro and Fortis BC)
- Provides rebates for improving a home's energy efficiency through select upgrades

• **Ongoing; within 6 months of invoice date**

Affordable Housing Innovation Fund
- Supports innovative housing providers driving innovation across the housing continuum

• **Ongoing**

GCWood Program
- Funding the demonstration of schematic designs, innovative building systems for wood construction, and the use of advanced building bio-products in new and existing buildings

• **June 30, 2024**

NRCan | NRC | BC Housing | Province | Digital | CMHC | Utilities | UBCM

Ministry of Housing

Minister's Digital Advisory Council
Meeting #2 Agenda

Location: Virtual

Date: Monday, February 12th, 2024

Time: 9:30-11:30am

Time	Topic	Lead
9:30- 9:40 (10 mins)	**Welcome & Discussion of the Agenda**	**Minister Ravi Kahlon**
9:40-10:05 (25 mins)	**Provincial Updates on Programs and Product Development**	**HOUS/WLRS**
10:05-11:05 (60 mins)	**Vision of Digital Transformation Discussion** **Activity:** Facilitated discussion to validate guiding outcomes for the sector and success metrics.	**HOUS**
11:05- 11:25 (20 mins)	**Roundtable Reflections**	**HOUS**
11:25-11:30 (5 mins)	**Closing Remarks** Next Meeting: May 2024	**Minister Ravi Kahlon**

DRAFT



Minister's Digital Advisory Council

Meeting #2

February 13, 2024

Land Acknowledgement

We acknowledge the we are attending this meeting from the traditional, ancestral, and unceded territories of First Nations covering all regions of British Columbia.





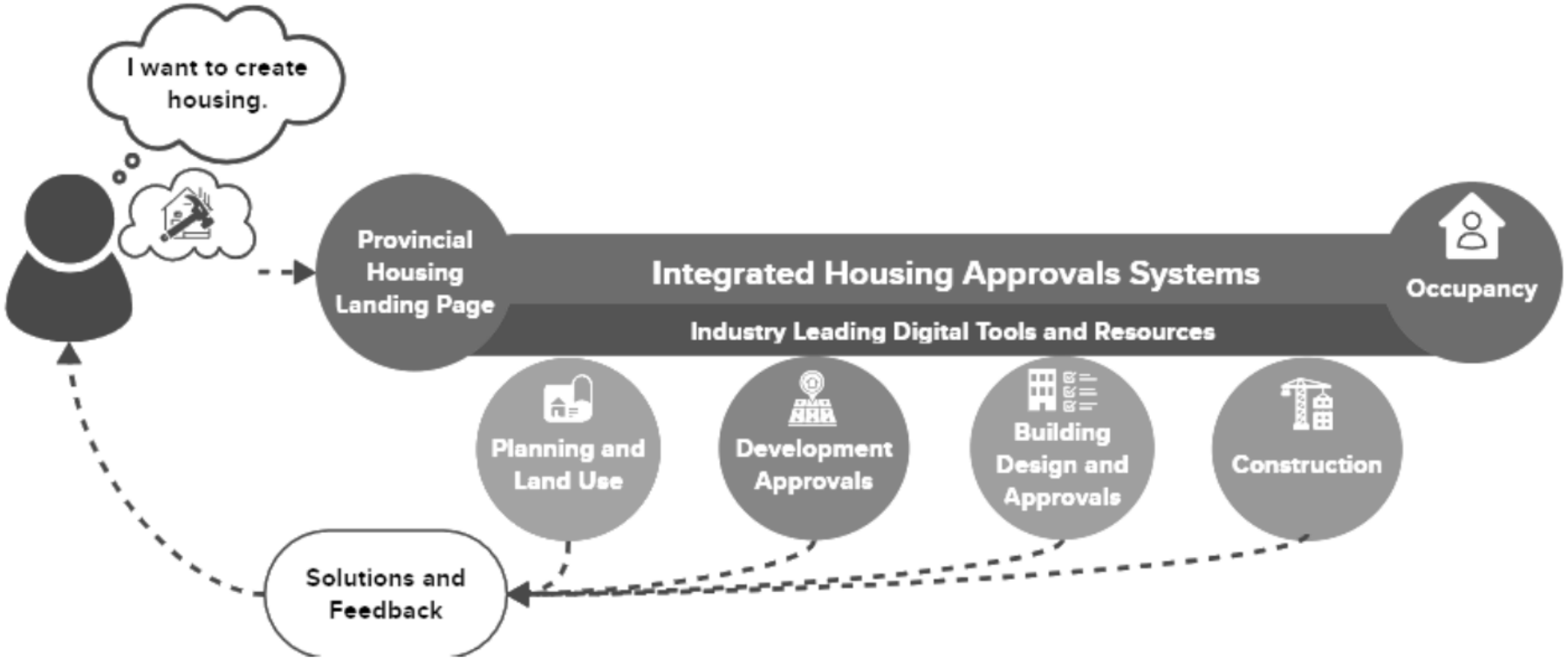
BRITISH COLUMBIA | Ministry of Housing

AGENDA

01	Welcome & Discussion of Agenda
02	Provincial Updates on Programs and Product Development
03	Vision of Digital Transformation Discussion
04	Roundtable Reflections
05	Closing Remarks and Next Steps


BRITISH COLUMBIA
Ministry of Housing
Provincial Updates on Programs & Product Development

An integrated housing approvals system built for collaboration



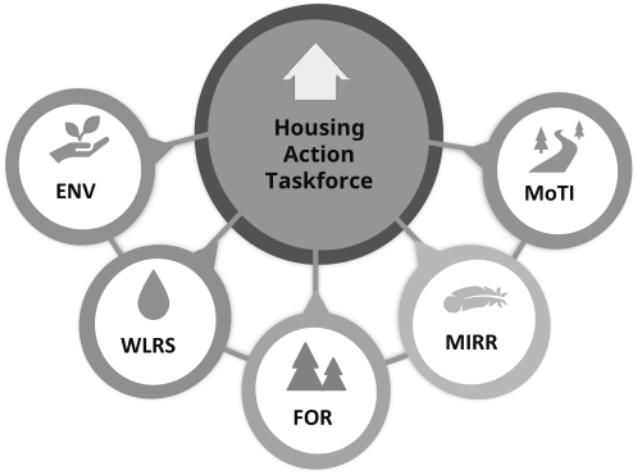
Water, Land and Resource Stewardship (WLRS)

Responsible for authorizations that support housing developments under the Land Act, Water Sustainability Act, Wildlife Act and Riparian Areas Protection Regulation

- Lead cross-government work to improve timing and transparency of permitting processes to support sustainable economic development, housing and electrification while maintaining high levels of environmental protection
- Coordinate Natural Resource Ministries to advance an integrated approach to housing projects
- Find new solutions to BC's permitting and authorizations system to improve timelines and reduce caseloads.

Housing Action Taskforce (HAT)

Provides dedicated and coordinated oversight and solutions for provincial natural resource housing authorizations.



- Established March 2023 - additional 85 staff focused on housing applications
- Identified and prioritized housing applications across NRM
- Of 914 applications identified March 2023, 75% have been resolved
- Overall NRM housing-related application process times have been reduced by 44-days

Permit Connect BC

- One-stop shop for all needed NRM provincial information
- Gateway to Single Housing Application Service and Housing Navigators.
- Important to share with homebuilders.



- Contaminated sites
- Archaeology
- Zoning, preliminary subdivision, highway use
- Riparian area protection, water license, Crown Land tenures (lease, license, right-of-way)
- Licenses for cutting/removing timber



https://permitconnectbc.gov.bc.ca/

Housing: Single Housing Application Service & Enhanced Navigator Service



Single Housing Application Service (SHAS)

- **SHAS Launch**: Launched September 18, 2023.
- **Purpose**: SHAS identifies NRM applications for a housing project, streamlining processes.
- **Usage Statistics**: 30 SHAS submissions received as of December 31, 2023.
- **Ministry Collaboration**: Integration underway, expanding throughout Natural Resource Ministries.

https://permitconnectbc.gov.bc.ca/



Enhanced Navigator Service (ENS)

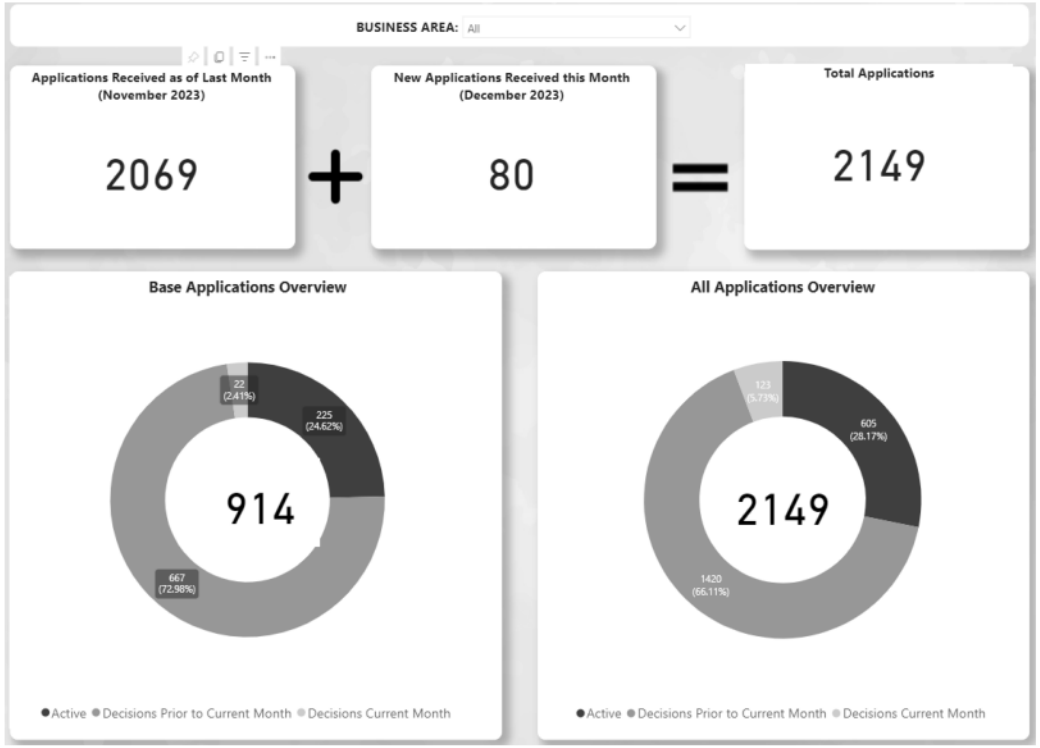
- **Services Provided**: Interfaces directly with homebuilders to navigate provincial requirements.
- **Government Interaction**: Direct communication and accessible government experts to help homebuilders.
- **Enquiry Focus**: Received 85 housing-related inquiries since March 2023.
- **Collaboration**: Works across NRMs, HOUS and MUNI.

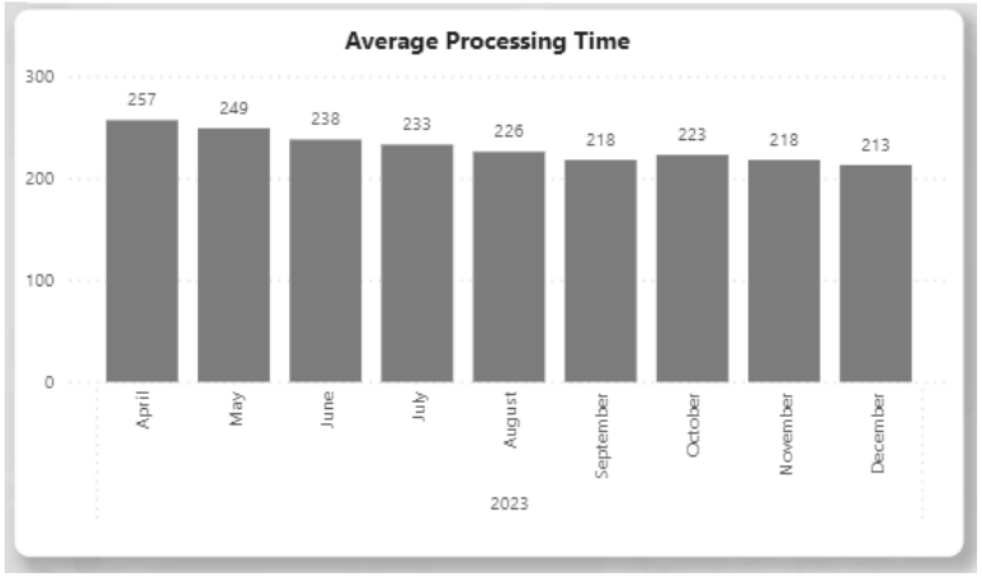
Navigators

Housing.Authorizations@gov.bc.ca or 1-844-687-4644

Applications & Authorizations Insights Tool (AAI)

Dec 2023





Looking to the Future

Where are we going?

- Proposed Legislation/Regulation/Policy changes
- Transformation in business processes/systems – integration, data collection, reporting across NRMs
- Integration with Ministry of Housing- Digital Transformation
- Alignment with local government processes
  - Permitting queue information-sharing for
  - ✓ Alignment (minimize impediments)
  - ✓ Ideal process flow
  - ✓ Shared ownership of goals and results

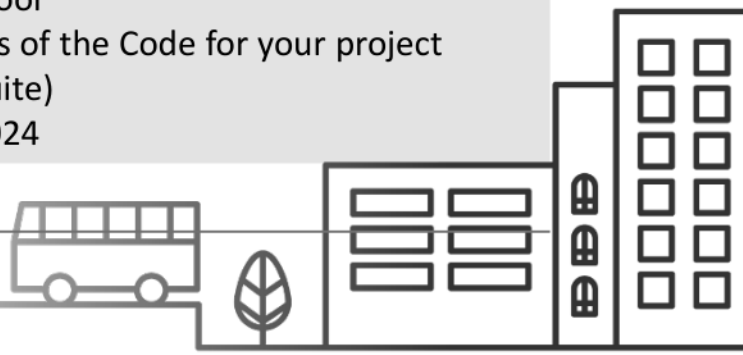
Regulatory System: Digitizing Construction Codes

The BC Building Code is a helpful resource to builders making it easier to design and build new homes

- Easier and faster to navigate
- Easier to understand
- Supports more detailed design and code compliance

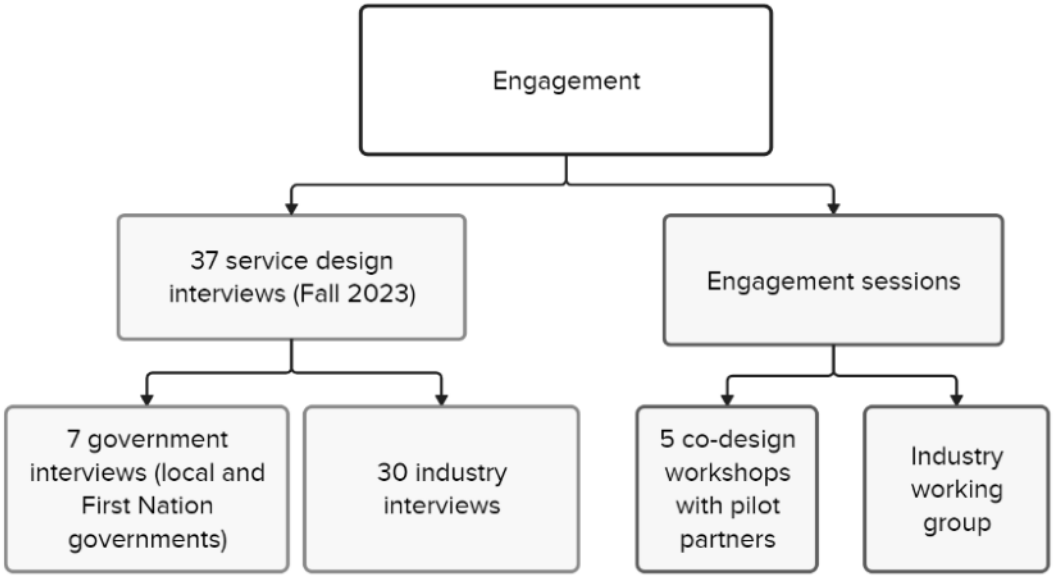
Work Near Completion (March 2024)	Work In Progress

A more interactive Building Code:
• Single PDF version of the Code with highly requested improvements
  ○ Improved navigation tabs
  ○ Improvements to satisfy web accessibility standards
  ○ Embedded links in the document
	For experienced Building Code users:
	• BIM-enabled Code with NRC
	  ○ Roadmap in June 2024 and BIM-enabled Code in 2026
	• Ongoing improvements to interactive Building Code features
	
	For less experienced Building Code users:
	• Automated code consolidation tool
	  ○ Identify only relevant pages of the Code for your project (e.g. adding a secondary suite)
	  ○ Proof of concept for Fall 2024



Building Permit Hub Updates

(a.k.a. the online building permit submission tool)





What We Have Done

Software development team onboarded

User research

Initial technical framework established

Confirmed housing scope: Part 9 low density housing (1-4 units)

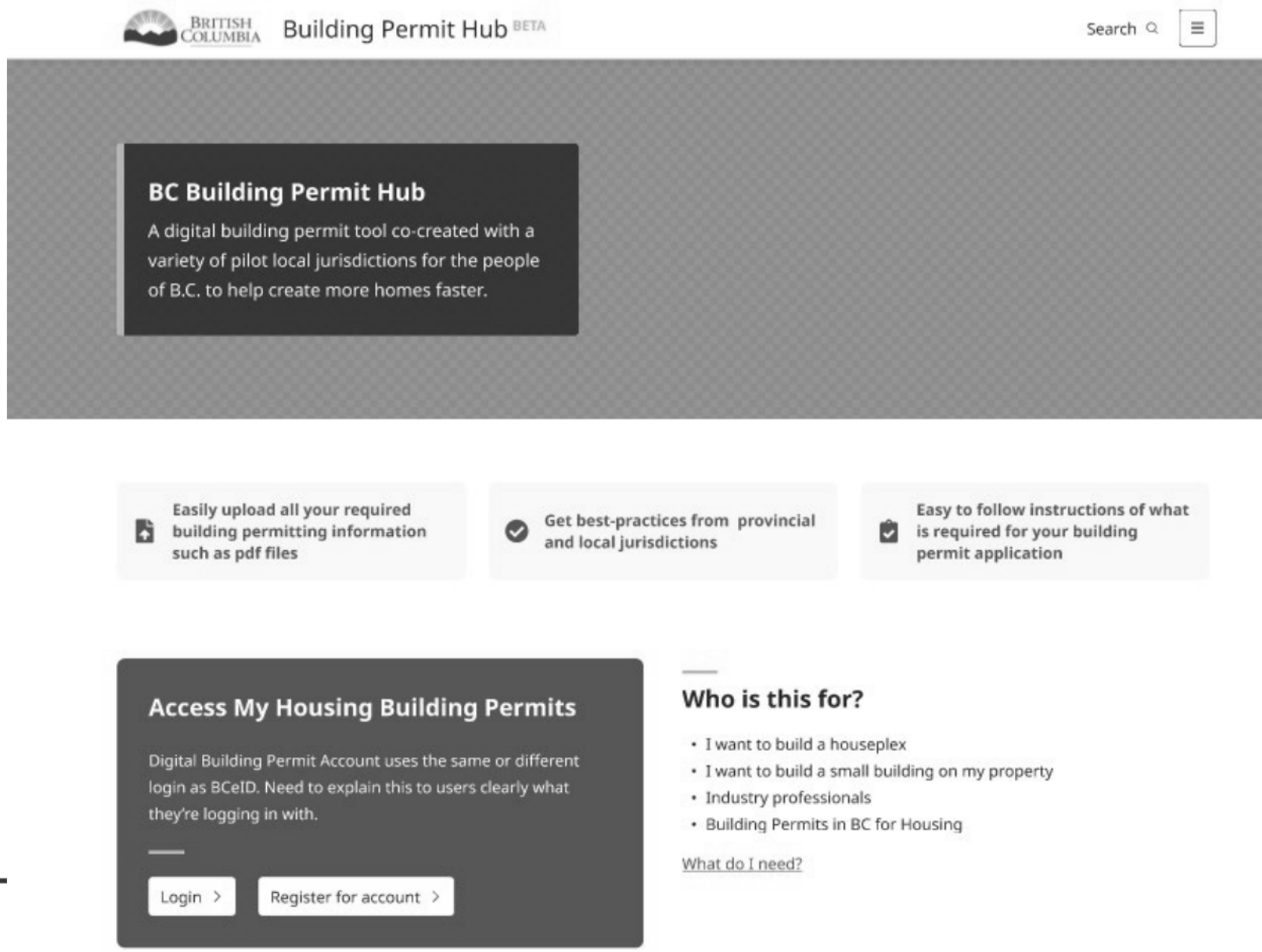
Initial success metrics

- Satisfaction
- Uptake
- Completeness

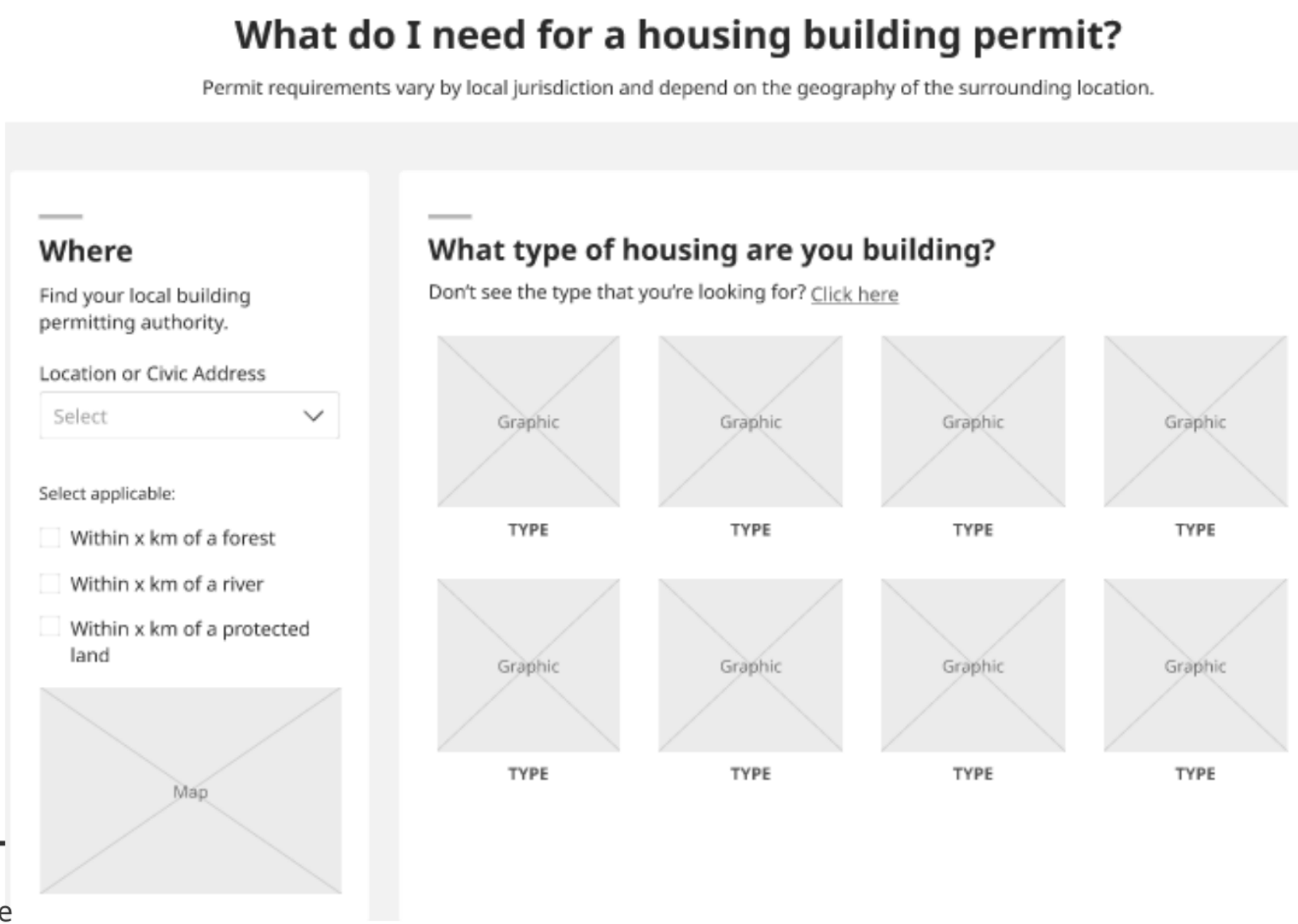
Prototype of standardized permit checklist

Building Permit Hub: Platform Wireframes

Wireframes are a work in progress and subject to change



Building Permit Hub: Platform Wireframes

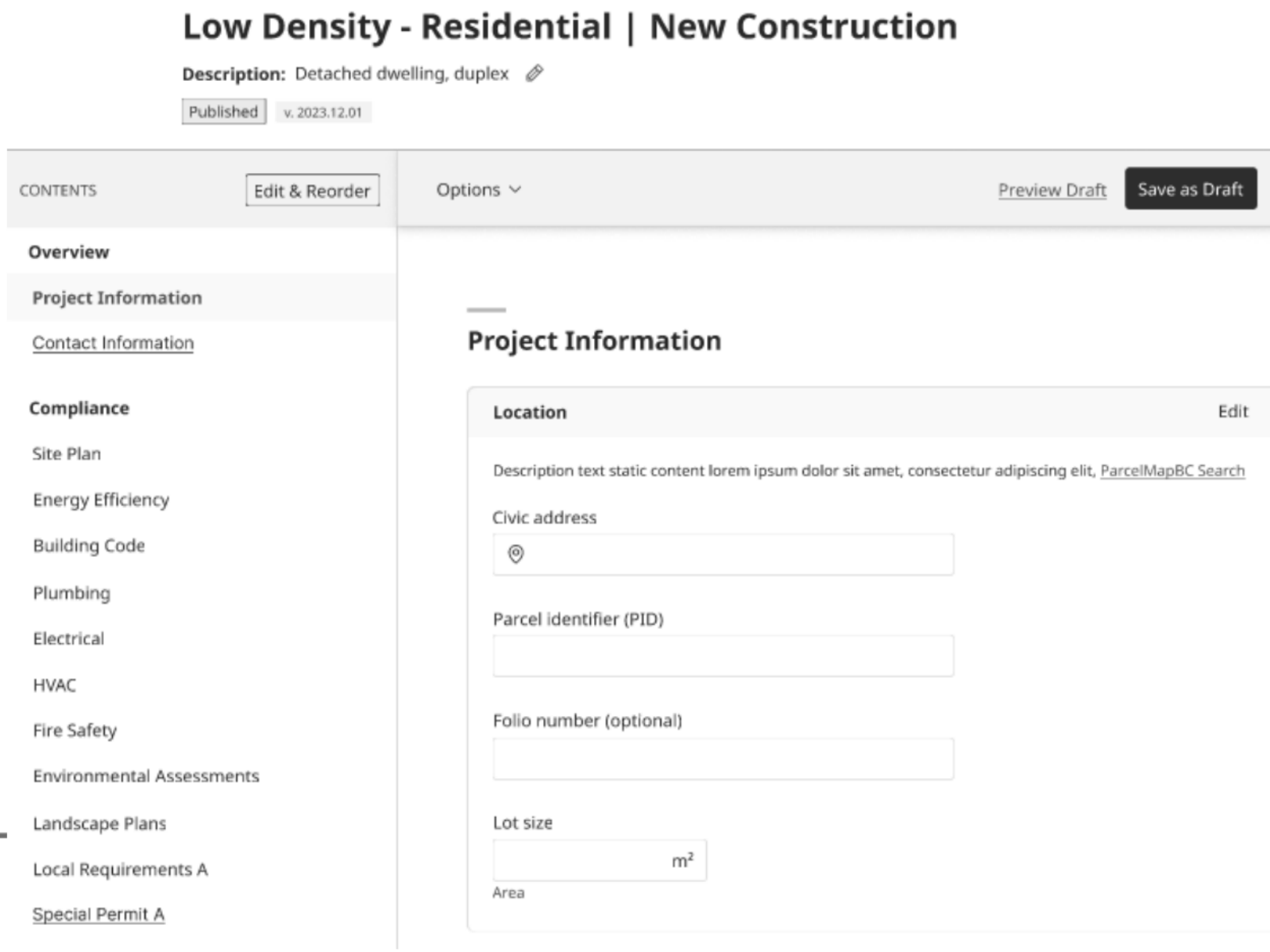


Wireframes are a work in progress and subject to change

Building Permit Hub: Checklist Prototype



Wireframes are a work in progress and subject to change




BRITISH COLUMBIA
Ministry of Housing
Envisioning Digital Transformation

High-Level Vision

The Ministry of Housing is working with partners across all levels of government and industry to position British Columbia as a **North American leader in digital permits and construction**, resulting in a housing construction sector that is **fast, collaborative, and delivers better outcomes.**



Complementary Visioning Work

DIGITAL is working with partners to collaboratively develop a mission map to develop a vision of an innovative construction industry. Focusing on what kind of innovations need to happen and how to stimulate the creation of collaborative projects. This work complements the Ministry's initiatives within the regulatory system.

Scius Advisory has been engaged by the National Research Council to develop an end-state vision and roadmap for a modern housing development system that is fast, collaborative, and delivers better outcomes. This will include proposing industry level KPIs which will support benchmarking and progress reporting.



What We Heard: Individual Meetings

- Collaboration and Coordination
- Balancing Objectives
- Providing a Clear Value Proposition
- Change Management Support
- Strategic Standardization
- Building a Common Digital Environment



What We Heard: Objectives (Draft for Discussion)

1. **A Housing System Built for Digital Collaboration:** A coordinated approach to digitizing codes, regulations, and permitting systems to provide a seamless experience for everyone involved in delivering housing and to realize the full potential of digital tools.

2. **A Housing Construction Sector with the Capacity to Deliver More Housing:** Focus on innovation in the housing construction sector that makes a measurable impact on labour productivity and the sector's ability to deliver more housing, faster.

3. **A Digital Transformation for Communities and Organizations of All Sizes:** Ensuring that digital processes and tools enhance the capacity of small and medium sized communities and organizations.



Visioning Activity

BRITISH COLUMBIA | Ministry of Housing

Duration: 75 minutes

- Small Groups review the high-level statements (outlined in the pre-read)
  - Validate objectives and consider any that may be missing
- For each objective, use sticky notes to provide input on:
  - KPI's
  - Enablers
  - Milestones
- Think big and adopt a 'blue sky' mentality

Vision Activity: Objective 1

Objective: A Housing System Built for Digital Collaboration
A coordinated approach to digitizing codes, regulations, and permitting systems to provide a seamless experience for everyone involved in delivering housing and to realize the full potential of digital tools.

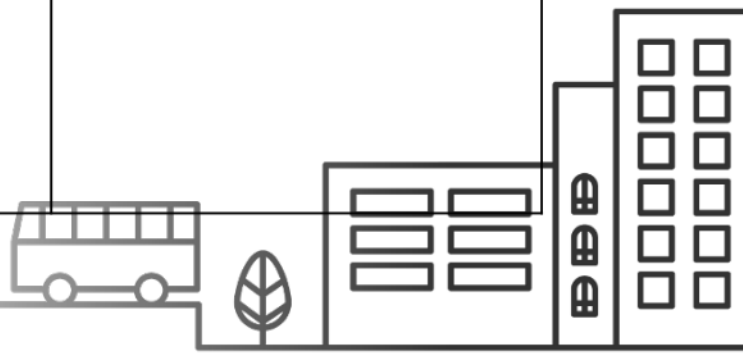
- What needs to be undertaken to make this possible?
- When can we expect to see changes?
- How can we measure progress?



Vision Activity: Objective 1

Objective: A Housing System Built for Digital Collaboration

Objective Components	**KPIs:** How can we measure our progress?	**Enablers:** What needs to be true to make this possible?	**Milestones:** When do we expect to see changes?
Widescale adoption of standard permitting technologies			
Development of a common data environment for codes and regulations			
Integration of permitting systems between points in the regulatory system			



Vision Activity: Objective 2

Objective: A Housing Construction Sector with the Capacity to Deliver More Housing
Focus on innovation in the housing construction sector that makes a measurable impact on labour productivity and the sector's ability to deliver more housing, faster.

- What needs to be undertaken to make this possible?
- When can we expect to see changes?
- How can we measure progress?



Vision Activity: Objective 2

Objective: A Housing Construction Sector with the Capacity to Deliver More Housing

Objective Components	**KPIs:** How can we measure our progress?	**Enablers:** What needs to be true to make this possible?	**Milestones:** When do we expect to see changes?
Increased adoption of labour productive processes (e.g. off-site manufacturing)			
Adoption of digital collaboration tools (e.g. BIM)			
Increased sector productivity			



Vision Activity: Objective 3

Objective: A Digital Transformation for All Communities and Organizations of All Sizes
Ensuring that digital processes and tools enhance the capacity of small and medium sized communities and organizations.

- What needs to be undertaken to make this possible?
- When can we expect to see changes?
- How can we measure progress?



Vision Activity: Objective 3

Objective: A Digital Transformation for All Communities and Organizations of All Sizes

Objective Components	**KPIs:** How can we measure our progress?	**Enablers:** What needs to be true to make this possible?	**Milestones:** When do we expect to see changes?
Adoption of digital permitting processes outside of urban centres			
Programs supporting innovation in small/medium sized businesses			



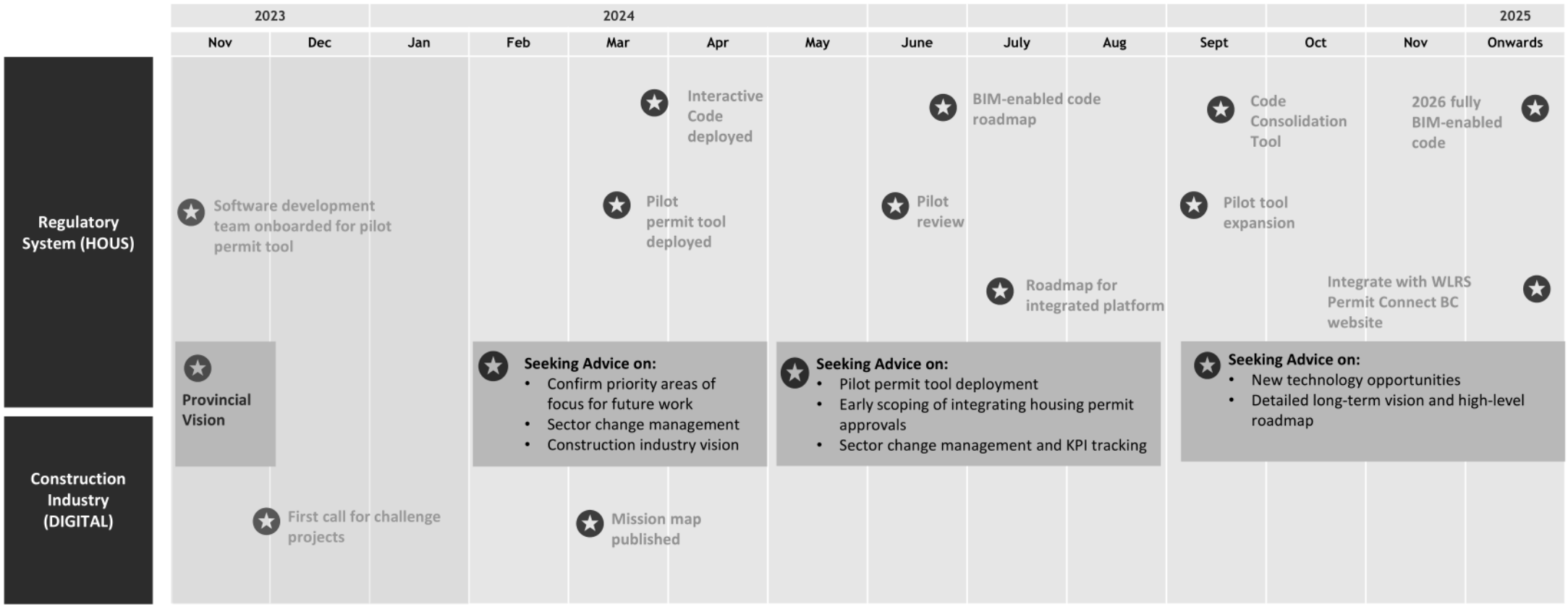

BRITISH COLUMBIA
Ministry of Housing
Small Group
Report Out

Visioning Reflection and Roundtable

BRITISH COLUMBIA | Ministry of Housing

- Are there any comments or questions that remain top of mind?
- Any topics that people would like to see for future meetings?

Milestones


Project Milestone
Anticipated Advisory Council Input
2023
2024
2025
Nov
Dec
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov
Onwards
Regulatory System (HOUS)
Construction Industry (DIGITAL)
Software development team onboarded for pilot permit tool
Interactive Code deployed
Pilot permit tool deployed
BIM-enabled code roadmap
Pilot review
Roadmap for integrated platform
Code Consolidation Tool
Pilot tool expansion
2026 fully BIM-enabled code
Integrate with WLRS Permit Connect BC website
Provincial Vision
Seeking Advice on:
• Confirm priority areas of focus for future work
• Sector change management
• Construction industry vision
Seeking Advice on:
• Pilot permit tool deployment
• Early scoping of integrating housing permit approvals
• Sector change management and KPI tracking
Seeking Advice on:
• New technology opportunities
• Detailed long-term vision and high-level roadmap
First call for challenge projects
Mission map published


BRITISH COLUMBIA
Ministry of Housing
Closing Remarks

FW: IN for UDI meeting

From: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
To: Kaur, Kiran HOUS:EX <Kiran.Kaur@gov.bc.ca>
Cc: Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>, Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>, Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>
Sent: February 7, 2024 3:58:05 PM PST
Attachments: Agenda Topics - UDI Executive Committee-Min. Ravi Kahlon Feb. 15 2024.pdf, image002.jpg, image004.jpg, image006.jpg, image007.jpg, image005.jpg, image003.jpg, image001.jpg

Hi Kiran,

The minister's office would like a **meeting briefing note** prepared for a UDI meeting next week. The topics for the meeting are in the attached agenda.

Molly, I have copied you on this for your awareness that this will come up to you via eapprovals for MRK's materials.

Request submitted by:	*Mark Hosak, Senior Advisor*
Type of Request: • **Priority** (2–5-day turnaround and/or as requested)	Meeting Materials. IN.
Date Information Needed By	By February 14th
Detailed Description of Request	*The Minister is meeting with the UDI executive in a private meeting prior to him taking part in a fire side chat with the President of UDI at an event the same day.* *UDI has provided a detailed agenda with topics they would like to discuss with MRK. He needs to have an IN to help him respond to their questions.* *The agenda is attached.*
Intended Use	**To support the Minister in a meeting with stakeholders.**

Thank you

Nikki Papadopoulos
Director, Executive Operatons
Deputy Minister's Office | Ministry of Housing

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Wednesday, February 7, 2024 3:39 PM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>
Subject: RE: IN for UDI meeting

Hi Nikki,

Thanks so much for clarifying. A meeting briefing note would be preferred here.

Thanks again and all the best,

Mark

From: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Sent: Wednesday, February 7, 2024 2:04 PM
To: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: RE: IN for UDI meeting

Hi Everyone,

If you could clarify what type of materials are needed

- Issues Notes and speaking notes for everts – these are prepared by GCPE
- Materials for a meeting - Information Briefing Note (IBN) or an Meeting Briefing Note (MBN), Bullets, speaking notes etc – these material requests are included in the meeting template Molly provides to the DMO when scheduling

Hope that helps clarify. The MO information inbox is not for material requests for meeting.

Thank you

Nikki Papadopoulos
Director, Executive Operatons
Deputy Minister's Office | Ministry of Housing

From: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Sent: Wednesday, February 7, 2024 1:27 PM
To: Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Cc: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Subject: RE: IN for UDI meeting

Hi folks, I wonder though because it is for a meeting I think it should through Molly – whether it's bullets, and IN, a BN etc.

I'm cc'ing Nikki to clarify.

Thanks,
Siân

From: Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>
Sent: Wednesday, February 7, 2024 1:19 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: RE: IN for UDI meeting

I don't ever* request IN's

From: Wilkins, Molly HOUS:EX
Sent: Wednesday, February 7, 2024 1:19 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: RE: IN for UDI meeting

Hi!

Yes, I believe so. I don't even request IN's!

M

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Wednesday, February 7, 2024 1:17 PM
To: Wilkins, Molly HOUS:EX <Molly.Wilkins@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: IN for UDI meeting

Hi Molly,

I hope you are well. We need DMO to produce an IN that addresses the agenda points for MRK's talk with UDI taking place on February 15th. MRK would need this by Feb 14th.

Is this considered an info request that is put through the new email address or is this still something you request for meetings?

Cheers,

Mark

From: Cassandra Smith <csmith@udi.org>
Sent: Wednesday, February 7, 2024 1:05 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>
Subject: RE: Slides

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Mark,

Here are the agenda topics for the meeting with UDI's Executive Committee and some notes for context. I've also provided a list of attendees.

Regarding the second agenda item (*Standardizing Density Calculations*), I've also attached a previous memo that includes commentary on the issue.

Lastly, I've attached the proposed question list for the luncheon event. We will also be taking questions from the audience via Slido, but we can screen these as they come in. Please share the brief with anyone else on your team that needs it, and if you have any questions, let us know! I've CC'd Verna as well.

We're sold out, and it looks like just over 500 people will be attending.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

UDI URBAN DEVELOPMENT INSTITUTE

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: February 7, 2024 9:57 AM
To: Cassandra Smith <csmith@udi.org>
Subject: RE: Slides

Hi Cassandra,

I hope you are well.

I am wondering if the questions and meeting agenda are ready for us to review?

Also, I heard you folks sold out the event! Congratulations. How many folks to you expect in the audience?

Cheers,

Mark

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, February 2, 2024 12:53 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: RE: Slides

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Mark,

That is good news, thanks for confirming! Looking forward to seeing that in the guidance document.

It might be helpful if that Minister clarified that during the luncheon as well. I can include a question to that effect.

Thanks,
Cassandra

Cassandra Smith
Direct:(604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Friday, February 2, 2024 12:02 PM
To: Cassandra Smith <csmith@udi.org>
Subject: RE: Slides

Hi Cassandra!

Good news! My interpretation was correct.

The slide refers to the fact that municipalities are NOT required to pre-zone minimum allowable densities when they designate TOAs this year. However, municipalities **will be required** to zone for these densities (at least) when they update their OCPs and then prezone for that new OCP by Jan 1st 2026.

A new guidance document will be provided for the prezone to OCP process in June/July that will spell all of this out for municipalities.

I hope this helps and all the best,

Mark

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, February 2, 2024 10:24 AM

To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: Slides

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Here is the presentation – Slide 19

Cassandra Smith
Director, Policy & Research
Direct:(604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7



UDI Executive Committee Meeting with Min. Ravi Kahlon
Agenda Topics
February 15, 2024 11:00-11:30am

Attendees (UDI)

Rick Ilich, Townline (UDI Chair)
Jon Stovell, Reliance Properties
Evan Allegretto, Intracorp
Rob Blackwell, Anthem
Cynthia Jagger, Goodman Commercial
Roque Hsieh, KPMG
Jordan Milne, GMC Projects
Mike Mackay, Strand Development
David Sander, Hollyburn Properties
Byron Chard, Chard Development
Anne McMullin, UDI
Jeff Fisher, UDI
Mike Drummond, UDI
Cassandra Smith, UDI

Agenda

1. **Chair's / Minister's opening comments**

2. **Standardizing Density Calculations**
   - Discussion on the need to standardize how municipalities calculate density (FSR/FAR).
   - Currently municipalities include/exclude various building components at their own discretion (e.g. amenity space counts toward a project's overall density in some municipalities, but not others).
   - We view the approaches taken in Esquimalt and Kelowna as best practices. They define density as net saleable/leasable space.
   - This could support mitigation measures for 2024 B.C. Building Code and implementing minimum densities in TOAs.

3. **Timing of Development Charge Payment**
   - There is an opportunity to establish this timeline for the new ACC created by Bill 46, however it would have broader applicability to other charges (DCCs, Density Bonus).
   - Payment could be a condition of receiving occupancy.

4. **Ensuring municipal policies and approaches align with the intent of the new housing legislation**
   - It would be helpful to understand what measures the Ministry is taking to ensure municipalities pass policies and bylaws that align with the objectives of the legislation.

UDI Executive Committee Meeting with Min. Ravi Kahlon
Agenda Topics
February 15, 2024 11:00-11:30am

Attendees (UDI)

Rick Ilich, Townline (UDI Chair)
Jon Stovell, Reliance Properties
Evan Allegretto, Intracorp
Rob Blackwell, Anthem
Cynthia Jagger, Goodman Commercial
Roque Hsieh, KPMG
Jordan Milne, GMC Projects
Mike Mackay, Strand Development
David Sander, Hollyburn Properties
Byron Chard, Chard Development
Anne McMullin, UDI
Jeff Fisher, UDI
Mike Drummond, UDI
Cassandra Smith, UDI

Agenda

1. **Chair's / Minister's opening comments**

2. **Standardizing Density Calculations**
   - Discussion on the need to standardize how municipalities calculate density (FSR/FAR).
   - Currently municipalities include/exclude various building components at their own discretion (e.g. amenity space counts toward a project's overall density in some municipalities, but not others).
   - We view the approaches taken in Esquimalt and Kelowna as best practices. They define density as net saleable/leasable space.
   - This could support mitigation measures for 2024 B.C. Building Code and implementing minimum densities in TOAs.

3. **Inclusionary Zoning in TOAs**
   - How will inclusionary zoning mechanisms being developed impact TOA minimum heights and densities?
   - If a portion of the specified heights and densities could be required to be below-market housing it will impact project viability and could result in more rezonings.

4. **Timing of Development Charge Payment**
   - There is an opportunity to establish this timeline for the new ACC created by Bill 46, however it would have broader applicability to other charges (DCCs, Density Bonus).
   - Payment could be a condition of receiving occupancy.

5. **Ensuring municipal policies and approaches align with the intent of the new housing legislation**
    - It would be helpful to understand what measures the Ministry is taking to ensure municipalities pass policies and bylaws that align with the objectives of the legislation.

RE: Digital Advisory Council Meeting #2

From: Ushtchenko, Melissa HOUS:EX <Melissa.Ushtchenko@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Sent: February 9, 2024 10:08:33 AM PST

Great! I will also need to be made co-organizer beforehand in the event meeting options, or made co-host right at the start of the Teams meeting.

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, February 9, 2024 10:02 AM
To: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Ushtchenko, Melissa HOUS:EX <Melissa.Ushtchenko@gov.bc.ca>
Subject: FW: Digital Advisory Council Meeting #2

FYI

From: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Sent: Friday, February 9, 2024 9:50 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: RE: Digital Advisory Council Meeting #2

Hi Zac,

The attendees below have been added to the invite.

Lisa

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, February 8, 2024 4:31 PM
To: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: RE: Digital Advisory Council Meeting #2

Hi Lisa and Jana,

Can you add the following people to this invite?

Please note we need Melissa Ushtchenko added as a mandatory participant so she's able to run breakout rooms during the meeting. We were planning on having the KPMG team do that, but they can't do breakout rooms in government meetings.

- Ushtchenko, Melissa HOUS:EX Melissa.Ushtchenko@gov.bc.ca
- Opreet Kang - opreet.kang@uli.org
- Karen Spence - Karen.Spence@gov.bc.ca
- Megan Williams - Megan.Williams@gov.bc.ca
- Nathan Stewart - nathanstewart1@kpmg.ca
- Melissa Ayers - melissaayers@kpmg.ca
- David Crossley - davidcrossley@kpmg.ca
- Philip Duffy - philipduffy@kpmg.ca
- Carolyn Bell - carolynbell@kpmg.ca

Thanks!

-----Original Appointment-----
From: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Sent: Thursday, December 21, 2023 8:34 AM

To: Collins, Teri HOUS:EX; Thomson, John HOUS:EX; May, Zachary HOUS:EX; Vukosavljevic, Nicole HOUS:EX; jpabla@kelowna.ca; tryce@cnv.org; Rene.Cravioto@vancouver.ca; tyler.wightman@boabc.org; hgoodland@scius.ca; Hyang@egbc.ca; MVernon@aibc.ca; Neilmoody@chbabc.org; amcmullin@udi.org; spaish@digitalsupercluster.ca; ssf@civil.ubc.ca; XT:McCurry, Theresa GCPE:IN; duncan.wlod@gmail.com; jtipping@wearebctech.com; Anthony, Jennifer WLRS:EX; mpistrin@bchousing.org
Cc: Vincent Tong; Carla Trevisi
Subject: Digital Advisory Council Meeting #2
When: February 12, 2024 9:30 AM-11:30 AM (UTC-08:00) Pacific Time (US & Canada).
Where: Virtual - via Teams

This is confirmed date and time for the second meeting of the Digital Advisory Council. This will be virtual, via Teams (please find the link below)
If you have any questions about the meeting, or the Ministry of Housing's work on digital codes and permits, please reach out directly to our Digital Delivery team at Digital.codes.permits@gov.bc.ca.

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15; s.17

Attendees:

- Jazz Pabla, City of Kelowna, jpabla@kelowna.ca
- Tim Ryce, City of North Vancouver, tryce@cnv.org
- Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca
- Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org
- Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca
- Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca
- Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca
- Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org
- Anne McMullin, Urban Development Institute, amcmullin@udi.org
- Sue Paish, Digital, spaish@digitalsupercluster.ca
- Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca
- Michael Pistrin, BC Housing, mpistrin@bchousing.org
- Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org
- Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com
- Jill Tipping, BC Tech Association, jtipping@wearebctech.com
- Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca

Ministry Staff:
Teri Collins, Deputy Minister
John Thomson, Executive Lead
Zachary May, Executive Director
Nicole Vukosavljevic, Director

RE: Digital Advisory Council Meeting #2

From: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>, Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Sent: February 9, 2024 3:26:48 PM PST

Hi Zac,

KPMG staff have been added to the invite.

Lisa

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Friday, February 9, 2024 3:16 PM
To: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: RE: Digital Advisory Council Meeting #2

Hi Lisa,

The facilitators from KPMG have asked for some additional support staff to be added to the invite so they can help with our breakout group discussion.

- Deniz Tuncbilek dtuncbilek@kpmg.ca
- Jarrod Bayne - jbayne@kpmg.ca
- Guatam Ahuja - gautamahuja@kpmg.ca
- Ashleigh Griffiths - ashleighgriffiths@kpmg.ca

Best,
Zachary D. May, MBA
Executive Director, Housing Innovations
Ministry of Housing
(he/him/his)

Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>
Sent: Friday, February 9, 2024 9:50 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: RE: Digital Advisory Council Meeting #2

Hi Zac,

The attendees below have been added to the invite.

Lisa

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Thursday, February 8, 2024 4:31 PM
To: Shepherd, Lisa HOUS:EX <Lisa.Shepherd@gov.bc.ca>; Sexton, Jana HOUS:EX <Jana.Sexton@gov.bc.ca>
Subject: RE: Digital Advisory Council Meeting #2

Hi Lisa and Jana,

Can you add the following people to this invite?

Please note we need Melissa Ushtchenko added as a mandatory participant so she's able to run breakout rooms during the meeting. We were planning on having the KPMG team do that, but they can't do breakout rooms in government meetings.

- Ushtchenko, Melissa HOUS:EX Melissa.Ushtchenko@gov.bc.ca
- Opreet Kang - opreet.kang@uli.org
- Karen Spence - Karen.Spence@gov.bc.ca
- Megan Williams - Megan.Williams@gov.bc.ca
- Nathan Stewart - nathanstewart1@kpmg.ca
- Melissa Ayers - melissaayers@kpmg.ca
- David Crossley - davidcrossley@kpmg.ca
- Philip Duffy - philipduffy@kpmg.ca
- Carolyn Bell - carolynbell@kpmg.ca

Thanks!

-----Original Appointment-----
From: Collins, Teri HOUS:EX <Teri.Collins@gov.bc.ca>
Sent: Thursday, December 21, 2023 8:34 AM
To: Collins, Teri HOUS:EX; Thomson, John HOUS:EX; May, Zachary HOUS:EX; Vukosavljevic, Nicole HOUS:EX; jpabla@kelowna.ca; tryce@cnv.org; Rene.Cravioto@vancouver.ca; tyler.wightman@boabc.org; hgoodland@scius.ca; Hyang@egbc.ca; MVernon@aibc.ca; Neilmoody@chbabc.org; amcmullin@udi.org; spaish@digitalsupercluster.ca; ssf@civil.ubc.ca; XT:McCurry, Theresa GCPE:IN; duncan.wlod@gmail.com; jtipping@wearebctech.com; Anthony, Jennifer WLRS:EX; mpistrin@bchousing.org
Cc: Vincent Tong; Carla Trevisi
Subject: Digital Advisory Council Meeting #2
When: February 12, 2024 9:30 AM-11:30 AM (UTC-08:00) Pacific Time (US & Canada).
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Microsoft Teams meeting

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s.15; s.17

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- Jazz Pabla, City of Kelowna, jpabla@kelowna.ca
- Tim Ryce, City of North Vancouver, tryce@cnv.org
- Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca
- Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org
- Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca
- Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca
- Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca
- Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org

- Anne McMullin, Urban Development Institute, amcmullin@udi.org
- Sue Paish, Digital, spaish@digitalsupercluster.ca
- Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca
- Michael Pistrin, BC Housing, mpistrin@bchousing.org
- Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org
- Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com
- Jill Tipping, BC Tech Association, jtipping@wearebctech.com
- Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca

Ministry Staff:
Teri Collins, Deputy Minister
John Thomson, Executive Lead
Zachary May, Executive Director
Nicole Vukosavljevic, Director

This is confirmed date and time for the second meeting of the Digital Advisory Council. This will be virtual, via Teams (please find the link below)
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Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15; s.17

Attendees:

* Jazz Pabla, City of Kelowna, jpabla@kelowna.ca<mailto:jpabla@kelowna.ca>
* Tim Ryce, City of North Vancouver, tryce@cnv.org<mailto:tryce@cnv.org>
* Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca<mailto:Rene.Cravioto@vancouver.ca>
* Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org<mailto:tyler.wightman@boabc.org>
* Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca<mailto:hgoodland@scius.ca>
* Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca<mailto:Hyang@egbc.ca>
* Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca<mailto:MVernon@aibc.ca>
* Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org<mailto:Neilmoody@chbabc.org>
* Anne McMullin, Urban Development Institute, amcmullin@udi.org<mailto:amcmullin@udi.org>
* Sue Paish, Digital, spaish@digitalsupercluster.ca<mailto:spaish@digitalsupercluster.ca>
* Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca<mailto:ssf@civil.ubc.ca>
* Michael Pistrin, BC Housing, mpistrin@bchousing.org<mailto:mpistrin@bchousing.org>
* Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org<mailto:tmccurry@asttbc.org>
* Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com<mailto:duncan.wlod@gmail.com>
* Jill Tipping, BC Tech Association, jtipping@wearebctech.com<mailto:jtipping@wearebctech.com>
* Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca<mailto:Jennifer.Anthony@gov.bc.ca>

Ministry Staff:
Teri Collins, Deputy Minister
John Thomson, Executive Lead
Zachary May, Executive Director
Nicole Vukosavljevic, Director

RE: QA for Minister's Luncheon

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
To: Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>, Gartner, Candice HOUS:EX <Candice.Gartner@gov.bc.ca>
Sent: February 12, 2024 12:42:57 PM PST
Attachments: image001.png, image003.png

Thank you Cim, and yes this will go by Matthew on its way through approvals.
Cheers

From: Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>
Sent: Monday, February 12, 2024 12:37 PM
To: Gartner, Candice HOUS:EX <Candice.Gartner@gov.bc.ca>; Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Subject: RE: QA for Minister's Luncheon

Hi Travis,

Apologies for the delay… I've been in calls all morning. The following is not approved language but should be sufficient for UDI. You may want to get Matthew's approval as ED.

s.13

Cimarron Corpé
Director Policy & Engagement

Housing Targets Branch | Ministry of Housing
Main: 778.974.3902
Mobile: 250.208.0242
Email: Cimarron.Corpe@gov.bc.ca

From: Gartner, Candice HOUS:EX <Candice.Gartner@gov.bc.ca>
Sent: Monday, February 12, 2024 10:25 AM
To: Corpe, Cimarron HOUS:EX <Cimarron.Corpe@gov.bc.ca>
Cc: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Subject: RE: QA for Minister's Luncheon
Importance: High

Good morning, Cim.

This request from GCPE came in this morning. Do you happen to have any approved language to address Travis' question below?

Thanks,

Candice Gartner
Director, Data Analytics & Performance | Housing Targets Branch | Housing and Land Use Policy | Ministry of Housing
Main: 778 974 4963 | Mobile: 250 818 2158 | Email: Candice.Gartner@gov.bc.ca

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Monday, February 12, 2024 7:37 AM
To: Gartner, Candice HOUS:EX <Candice.Gartner@gov.bc.ca>
Subject: QA for Minister's Luncheon

Hi Candice

Quick Q here – UDI asking about the intervention.

19. Does the Ministry have to wait the full five years to intervene?

And if there is anything else that stands out, but i think that's mostly it for housing targets.

Travis Paterson | Senior Public Affairs Officer
Government Communications and Public Engagement
Ministry of Housing
250-882-8105
he, him

RE: Lunch n Learn - Digital building permit tool and BCBC

From: Cassandra Smith <csmith@udi.org>
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>, Jeff Fisher <jfisher@udi.org>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>

Sent: February 12, 2024 2:27:34 PM PST
Attachments: image001.jpg, image005.jpg, image006.jpg

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Julia,

Thanks for reaching out to us about this webinar opportunity covering the digitization work that's underway.

Here is the section we included in our newsletter last July for reference.

Ministry of Housing's Digital Innovation in Housing Construction Workshop
Under the *2023 Homes for People Plan* noted in previous newsletters, the Province committed to "*Become a North American leader in digital permitting and construction*". The focus of this work over the next three years will include digitizing the *B.C. Building Code* (*BCBC*), advancing the adoption and integration of digital permitting and construction processes across the housing sector, and supporting industry adoption of new collaboration technologies that make it easier for project teams and regulators to work together.

On June 12, UDI participated in a Ministry of Housing *Digital Innovation in Housing Construction Workshop* with 67 other representatives from local governments, Indigenous communities, construction industry, academia, and independent partnering organizations. During the workshop, participants identified changes that could improve the current housing development process, as well as opportunities to leverage digital tools to further streamline the process, including:

- Improving to collaboration/communication across government departments and other approving bodies (e.g., provincial approvals and technical studies such as geotechnical);
- Increasing transparency of approval timelines and where applications are at in the permit process;
- Clearly defining what information is required in building and development permit applications, and what is considered a complete or acceptable submission;
- Providing more opportunities for automation and improved coordination and consistency of construction, inspections and industry professionals;
- Implementing more consistent building inspection standards and BCBC interpretations;
- Simplifying the process with fewer steps and more transparent and consistent permit requirements;
- Ensuring that software allows for the sharing of relevant information and data between partners;
- Enhancing pre-screening of applications to ensure they are complete;
- Developing "… *common alternative solutions* …" for the *BCBC*; and
- Supporting the use of certified professionals and other professional expertise reliance models for complex buildings.

Participants also saw a significant role for the Ministry of Housing to provide education, best practices, and guidance, provincial liability protection, stable innovation funding, information on legislation, and improvements to the Provincial approvals process.

A complete summary of the feedback received at the June 12 workshop can be found in the Ministry's recently released *What We Heard Summary Report*. Included in next steps, the Ministry will identify 15-20 jurisdictions as a pilot for the digital permitting tools that will be developed over the next few years.

Looking forward to working with you on this,

Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Cassandra Smith
Sent: February 5, 2024 3:27 PM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Lunch n Learn - Digital building permit tool and BCBC

Hi Julia,

That works well. How about Monday?

Thanks,
Cassandra

Cassandra Smith
Direct:(604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Monday, February 5, 2024 2:13 PM
To: Cassandra Smith <csmith@udi.org>
Cc: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Lunch n Learn - Digital building permit tool and BCBC

Hi Cassandra,
Are you available for a quick 20 minute or so call to discuss planning details with our team?

Checking calendars, it looks like Nicole and Zac have some time **Thursday, February 8 @ 11:00 – 11:20am or Monday February 12@ 2:00-2:20pm.**

Let me know and I'll send a meeting invite.
Much appreciated,
Julie

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, February 2, 2024 3:25 PM
To: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Cc: Verna Yu <vyu@udi.org>; Jeff Fisher <jfisher@udi.org>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: Lunch n Learn - Digital building permit tool and BCBC

You don't often get email from csmith@udi.org. Learn why this is important

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This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Julia,

Thanks for reaching out, and this sounds like a great opportunity to share the digitization work being done. Can you explain in more detail what you had in mind, how we could support you in getting this message out? For example, is this something that you will be hosting that we can help promote or are you looking to collaborate on an event? Presuming that this would be virtual?

Thanks and looking forward to hearing from you,
Cassandra

Cassandra Smith
Direct:(604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>
Sent: Tuesday, January 30, 2024 2:14 PM
To: Jeff Fisher <jfisher@udi.org>; Jenny Scott <jscott@udi.org>
Cc: Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: Lunch n Learn - Digital building permit tool and BCBC

Hi Jeff and Jenny,

Hope this email finds you well. I'm reaching out on behalf of our Ministry of Housing's Digital Delivery Team to see if we can organize a 1-to-1.5-hour Lunch and Learn session or other type of presentation for your membership in late February/early March to discuss our work underway on digitizing the BC Building Code and building a digital building permit tool?

These important initiatives are key parts of our ongoing work with partners from across the housing construction sector to improve the permitting experience for new housing and encourage the use of tools and practices that will position British Columbia as a North American leader in digital permitting and construction.

Let me know if your organization has other options for us to connect with your membership.

I look forward to hearing from you.
Julie

Kind regards,
Julie Leggett
Senior Policy Analyst
Housing Innovations | Ministry of Housing
UC: 250-856-0964 | Email: Julia.leggett@gov.bc.ca

*I extend my gratitude to the **Quw'utsun, Malahat, Ts'uubaa-asatx, Halalt, Stz'uminus, & Lyackson Peoples** on whose homelands I live, work and explore. I am grateful for the stewardship of the Indigenous peoples of these lands; and I commit to continued learning as we work toward reconciliation.*

RE: GHL Seminar Follow-up

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
To: Rob Whetter <raw@dhk.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Sent: February 12, 2024 3:54:37 PM PST

Thanks again, Rob. We are meeting with BC Housing again tomorrow so this is timely and helpful.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Rob Whetter <raw@dhk.ca>
Sent: Monday, February 12, 2024 11:22 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: Re: GHL Seminar Follow-up

You don't often get email from raw@dhk.ca. Learn why this is important

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This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Jun'ichi for the follow-up!

I have contacted my clients at Westhills so see if they can provide their studies, and will circulate to your group as soon as I receive them.

I also contacted Sadia Afrin at BC Housing, who is responsible for their *Design Guidelines and Construction Standards* manual. This is our "bible" for all our funded affordable housing projects. I believe next year's adaptability code changes will have major changes to this document and I'd like to get a head start on understanding this for our future projects.

https://www.bchousing.org/publications/BCH-Design-Guidelines-Construction-Standards.pdf

I think you mentioned much coordination has already happened with BC Housing and the changes and impacts may be well quantified. If not and there's any input I can provide I'd be happy to do so.

The analysis that I believe would be most insightful would be a comparative study of each of the standard BC Housing apartment types (350 sf studio, 525 sf One-bed, 725 sf two-bed, 925 sf three-bed). This would give a side-by side comparison of a prototypical floor plan for each of these as they are typically designed, and then under the new adaptability code.

If this has been done I'd love to see it, otherwise I know someone in my office will do it at some point and we can share with anyone who's interested.

Rob Whetter, Architect AIBC

raw@dhk.ca

_____

dHKarchitects

Victoria

977 Fort Street, BC V8V 3K3

250-658-3367

Nanaimo

102-5190 Dublin Way, BC V9T 0H2

250-585-5810

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Monday, February 12, 2024 10:27 AM
To: Rob Whetter <raw@dhk.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: GHL Seminar Follow-up

Hi Rob,

Thank you for following up. The Province did some analysis on impacts of adaptable units but we did not publish any formal reports. My team may be aware of the report you note, but we did not commission it. We are currently developing a comprehensive strategy to look at ways to support implementation of these requirements. I believe you mentioned you may have some contacts with folks doing analysis on real impacts to some current projects- we'd be interested in seeing those if they are available to you and you are able to share. We will also be reaching out proactively through UDI and CHBA to further discuss implementation strategies in the near future.

I've included a few folks on the team that are involved in this work for their reference.

Thank you again for sharing your perspectives. We will continue to consider these real world implications as we move forward.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Rob Whetter <raw@dhk.ca>
Sent: Friday, February 9, 2024 12:02 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: GHL Seminar Follow-up

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Hi Jun'ichi,

I'm the one that asked about adaptibility yesterday afternoon and then chatted with you at the end. Thank you for your time yesterday and giving me lots of insight into what's behind the code updates.

As you know many of us in the construction industry fear the impacts of the seismic and adaptability changes will have to our business, more than we did with the 2018 change; especially the shift to 100% adaptable suites in Part 3.

I question if truly thorough analysis has been done on the floor area impacts to units using on an apples-to-apples comparison. I think the developers can worry about marketability of the new layouts but we should at least have a crystal clear picture of the relative area differences.

I saw a comparative report by McAuley consultants for example which has some flaws in evaluation. Units with unusual shapes were used, which is mostly applicable to condo towers, but doesn't apply to 95% of Part 3 development, which is simple rectangular units separated by straight double shear walls. Area increases were given between units with different sized living and dining rooms. I think room spaces and furniture layouts need to be the same to properly reflect market value, usability etc.

Perhaps this has been done and I just haven't seen it. But either way I wanted to share my thoughts.

All the best,

Rob Whetter, Architect AIBC

raw@dhk.ca

_____

dHKarchitects

Victoria

977 Fort Street, BC V8V 3K3

250-658-3367

Nanaimo

102-5190 Dublin Way, BC V9T 0H2

250-585-5810

RE: For Approval: Updated QA for Minister's UDI Luncheon on Thursday

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Sent: February 13, 2024 1:16:38 PM PST

I think these are great an accomplish our goals – Juni, for your review.

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Tuesday, February 13, 2024 12:18 PM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: For Approval: Updated QA for Minister's UDI Luncheon on Thursday
Importance: High

Updated QA, as requested.

2024 B.C. Building Code Changes

1. **Will your Ministry be looking at density/cost offsets, and flexible implementation?**
   - The Ministry continues to support implementation by considering density and cost offsets. The Ministry examined historical requirements looking for opportunities to right-size requirements based on current evidence. The 2024 edition of the BC Building Code aims to offer design flexibility so that designers can make cost-effective decisions.
   - We will be working with industry to get an accurate picture of what the impacts are in terms of costs – there's a wide range that we're hearing and we need to better understand that to understand what we can do to support industry to implement the advancements in the codes.
   - We're open to hearing what ideas industry has, that may help address the code's changes. We've heard about density and offsets for increased demands on floor space, and we are looking forward to engaging more. We also know there is high demand for guidance and best practice materials which we are working on.
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- The housing crisis is even worse for people who need adaptable or accessible dwelling units, which is why we've made this change. The requirements will help make apartments and suites more easily renovated in the future to support changing needs.
- Industry has demonstrated their ability to work with new requirements even when transition periods are less than ideal, and the Ministry's work to support implementation will help adapt to the rest of the new requirements that come into force on March 8, 2024.

3. **100% adaptability is impacting suite sizes (e.g. larger bathrooms) and adding costs which ultimately is negatively impacting housing affordability. Does the Ministry understand this and are they reconsidering some of these code changes?**
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   - The 2024 BC Building Code reduces the accessible corridor width from 1 500 mm to 1 000 mm. The Ministry analyzed all requirements to ensure they were current with recent studies and justified. This change results in almost 33 square feet of space that can be reallocated per 20-foot-long corridor. This reallocation supports to offset these changes.
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   - The Ministry continues its work advancing the national model codes. The work B.C. has done helps to informs national development. The Ministry continues collaboration with fellow provinces and territories, the National Research Council, standards development organizations such as the Canadian Standards Association and Accessibility Standards Canada, as well as industry and advocacy groups.

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Tuesday, February 13, 2024 12:03 PM
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: Re: QA for Minister's UDI Luncheon on Thursday

Perfect.

From: Laboucane, Shannon HOUS:EX
Sent: Tuesday, February 13, 2024 12:02:28 PM
To: Harding, Kevin HOUS:EX; Jensen, Jun'ichi HOUS:EX; Chase, Andy HOUS:EX; McCrae, Aura HOUS:EX
Subject: RE: QA for Minister's UDI Luncheon on Thursday

Hi, I can support this now.

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Tuesday, February 13, 2024 11:59 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: Re: QA for Minister's UDI Luncheon on Thursday

Aura and Shannon - do either of you have time to merge Andy's comments with the first set of responses?

s.13

From: Jensen, Jun'ichi HOUS:EX
Sent: Tuesday, February 13, 2024 11:29:40 AM
To: Chase, Andy HOUS:EX; Harding, Kevin HOUS:EX; Laboucane, Shannon HOUS:EX; McCrae, Aura HOUS:EX
Subject: RE: QA for Minister's UDI Luncheon on Thursday

s.13

s.13 I note that at the GHL code presentation there were a lot of developers and I corrected one speaker that noted ADU was being reconsidered by saying I had no indication it was and that it is signed in to law for 2025. s.13

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: Tuesday, February 13, 2024 9:37 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: QA for Minister's UDI Luncheon on Thursday

Sorry for the late entry, s.13
s.13

s.13 and provide some reminders that may have been forgotten. I've included markups in green and red for consideration.

Andy

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Tuesday, February 13, 2024 9:20 AM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: QA for Minister's UDI Luncheon on Thursday

This looks great- s.13
s.13

Thank you

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Tuesday, February 13, 2024 8:11 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: QA for Minister's UDI Luncheon on Thursday

Hi Juni –

Shannon, Aura, and I prepared some As to the Qs here

2024 B.C. Building Code Changes

1. **Will your Ministry be looking at density/cost offsets, and flexible implementation?** s.13
   - The Ministry continues to support implementation by considering density and cost offsets, s.13 The Ministry examined historical requirements looking for opportunities to right-size requirements based on newest evidence. s.13 the 2024 edition of the BC Building Code offers design flexibility so that designers can make cost-effective decisions s.13
   - We will be working with industry to get an accurate s.13 picture of what the impacts are in terms of costs – there's a wide range that we're hearing and we need to better understand that to understand what we can s.13) do to support s.13 industry implement the advancements in the codes.
   - We're open to hearing what ideas industry has that may help address the code's changes. We've heard about density and offsets for increased demands on floor space, and we are looking forward to engaging more. We also know there is high demand for guidance and best practice materials which we are working on.

2. **Going to 100% adaptability so quickly was one of the development industry's biggest concerns – is your Ministry considering lowering or phasing that requirement in over time?**
   - For British Columbians who need accessible and adaptable living spaces, a lot of housing in the province is 100% inaccessible. Changing the code to require adaptable designs in certain dwelling units – those on ground floors or accessible by elevators – helps reduce costs of renovating an apartment later to be accessible as peoples' needs change as they age, have children, or as their mobility needs change.
   - s.13 In May of 2023, the Ministry invited comments from the public, including code users, Treaty Nations, Indigenous partners, local governments, building owners, construction industry professionals, and others on changes proposed. Based on feedback, the adaptable dwelling unit requirements, and seismic requirements, come into force a year later [March 10, 2025, versus March 8, 2024] than the rest of the code, indicating almost two-years since first notice. This s.13 allows time for education and training to support a smooth s.13 The Ministry will be busy during this time supporting industry on education and training and implementation.
   - We've heard from industry that they need time to understand how to change their design practices to meet the adaptability requirements, which is why we're implementing those requirements in 2025.
   - We're looking forward to working with industry to develop guidance and tools to help them design adaptable units.
   - The housing crisis is even worse for people who need adaptable or accessible dwelling units, which is why we've made this change. The requirements will help make apartments and suites more easily renovated in the future to support changing needs.

   - Industry has demonstrated over and over the ability to work with new requirements even when transition periods are less than idea, and the Ministry's work to support implementation will help adapt to the rest of the new requirements that do come into force on March 8, 2024.

3. **100% adaptability is impacting suite sizes (e.g. larger bathrooms) and adding costs which ultimately is negatively impacting housing affordability. Does the Ministry understand this and are they reconsidering some of these code changes?**

- The Ministry heard s.13 that we need adaptable housing and that adaptable dwelling units are affordable homes for people to age in place, and who have temporary or permanent disabilities because of the ability to cost-effectively furnish and finish a unit to their unique needs. Adaptable units also provide for people with temporary or permanent disabilities to visit their friends and families.
- We understand that without guidance on adaptable suite designs, there can be confusion on how best to implement them to make sure that all British Columbians can move around small suites no matter their ~~mobility~~ s.13
- We're working with partners to provide guidance on wise practices to implement adaptability rules in suites. This will help developers and designers better understand the s.13 changes that need to be made to make sure that British Columbians can access and continue to live in their homes as their needs change.
- We have heard that in certain circumstances with small suites there can be pressure on the size of certain parts of a suite, like making sure there's enough room in a bedroom to turn a wheelchair around so that someone can get into and out of the room, or be able to use all parts of a bathroom with a mobility aid. We're looking forward to working with industry to get an understanding of how much pressure there is on suite sizes – in terms of a number of square feet or a percentage of the unit size – and see if we can offer guidance on how that pressure can be offset.

- s.13 the 2024 BC Building Code reduced the accessible corridor width from 1 500 mm to 1 000 mm. s.13 the Ministry analyzed all requirements to ensure they were current with recent studies and justified. s.13 s.13 resulting in almost 33 square feet of space that can be reallocated per 20 foot long corridor. s.13 this reallocation s.13 supports these changes.

- We know that some people see these design rules as challenging, but we also know the deep challenge that British Columbians face when next to no suites or dwelling units on the market are accessible or adaptable to their needs. Adaptability requirements help address the housing crisis for some British Columbians who feel it most acutely, but they also help to reduce the cost of renovating suites or apartments to be able to support you when your needs change as you age, add family members, or need help getting around.
- The Ministry continues to work advancing the national model codes. The work B.C. has done informs national development and the Ministry continues collaboration with fellow provinces and territories, the National Research Council, standards development organizations such as the Canadian Standards Association and Accessibility Standards Canada, as well as industry and advocacy groups.

Adaptable designs help reduce the cost of future renovations and help you continue to live in your home when your needs change

---

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Monday, February 12, 2024 9:38 AM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: FW: QA for Minister's UDI Luncheon on Thursday

Hi Travis,

I'll ask the team to prepare responses to these. What is your deadline for our input?

The only other one I see where we might chime in is 25 but I suspect that response can be higher level from others like PLUM or Housing Policy.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Monday, February 12, 2024 7:38 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>

Subject: QA for Minister's UDI Luncheon on Thursday

Hi Jun'ichi

I am looking for some help populating answers for the questions UDI sent the MO for Thursday's event, a 40 minute QA.

I wonder if you can suggest who might answer these questions?

Building Code
Q's 14-16

And if there is anything else that stands out, but the rest is with other people.

Thanks
Travis

Travis Paterson | Senior Public Affairs Officer
Government Communications and Public Engagement
Ministry of Housing
250-882-8105
he, him

RE: QA for Minister's UDI Luncheon on Thursday

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Sent: February 13, 2024 2:53:11 PM PST

Thanks so much team!

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Tuesday, February 13, 2024 2:12 PM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: QA for Minister's UDI Luncheon on Thursday

Hi Travis –

The team has developed the below answers that are responsive to the three questions relating to adaptable dwelling units.

I think they're long but we're hard pressed to really be able to identify where to trim – can you take a look at it with an eye to shortening?

Juni has reviewed so if you can shorten it, it could go to ADM for review.

Thanks,

Kevin

2024 B.C. Building Code Changes

1. **Will your Ministry be looking at density/cost offsets, and flexible implementation?**
   - The Ministry continues to support implementation by considering density and cost offsets. The Ministry examined historical requirements looking for opportunities to right-size requirements based on current evidence. The 2024 edition of the BC Building Code aims to offer design flexibility so that designers can make cost-effective decisions.
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From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Tuesday, February 13, 2024 11:58 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: QA for Minister's UDI Luncheon on Thursday

Hi
If we can get it by 2 or 3, and send it up to ED and then ADM by EOD, that would be great.

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Tuesday, February 13, 2024 11:51 AM
To: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: QA for Minister's UDI Luncheon on Thursday

Hi Travis,

I forgot to copy you on my response yesterday. The team is actively preparing responses to these. What is your deadline for our input?

The only other one I see where we might chime in is 25 but I suspect that response can be higher level from others like PLUM or Housing Policy.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Paterson, Travis GCPE:EX <Travis.Paterson@gov.bc.ca>
Sent: Monday, February 12, 2024 7:38 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: QA for Minister's UDI Luncheon on Thursday

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I wonder if you can suggest who might answer these questions?

Building Code
Q's 14-16

And if there is anything else that stands out, but the rest is with other people.

Thanks
Travis

RE: BSSB - quickly checking in

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
To: pauline@chbabc.org
Cc: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>, Hunter, Christine HOUS:EX <Christine.Hunter@gov.bc.ca>
Sent: March 8, 2024 1:29:28 PM PST
Attachments: image002.png, image003.png

Thanks, Pauline – much appreciated.

I'll work with Shannon and Aura to find a time for us to talk about mitigation efforts – I really liked what I heard from Juni about your conversation and would love to hear more.

Re electrical code – are the interpretation challenges the kind of thing that could be clarified by a bulletin or do you think they rise to the zone of needing amendments to the codes? Happy to talk about this too – we're balancing the need to try to get the code updated with the pending election and our inability to do policy work for much of the second half of the year, so if we're lucky we may be able to get the new code in effect in 2025. If amendments are seen as necessary, our process will need to take a different path, but if it's something that a bulletin from TSBC could clarify, it may not be an issue. I think that the electrical industry is anxious to see the code adopted (they'd probably prefer it adopted now). Happy to set some time to chat on this one too.

I am definitely sorry to hear about the 3-view limitation. I haven't personally encountered this, but that's a major frustration.

Hope you have a great weekend,

Kevin

From: pauline@chbabc.org <pauline@chbabc.org>
Sent: Friday, March 8, 2024 1:08 PM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Cc: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Hunter, Christine HOUS:EX <Christine.Hunter@gov.bc.ca>
Subject: RE: BSSB - quickly checking in

You don't often get email from pauline@chbabc.org. Learn why this is important

[EXT
This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Kevin,

I can imagine schedules have been crazy, and really appreciate the follow-up!

Re. mitigation efforts, I floated an idea with Jun'ichi about industry possibly contracting a consultant to assess space impacts based on seismic and accessibility changes. Happy to have an informal conversation about this – let me know what days work best.

Re. 2024 CE Code, I see that the final version is now available for viewing. However, the draft version of 2024 CE Code was not available for viewing during the time of TSBC's consultation, so it hindered our ability to assess the changes. I was able to connect with our National staff and relay some comments on energy storage systems, but the issues stemmed from clarifying specific code language (we're supportive of the intent of allowing ESS to be located in dwelling units.) Based on the high level impact assessment document that TSBC issued for the consultation, there were some interpretation challenges for the electric vehicle charging requirements that UDI and CHBA BC submitted feedback on. In terms of 'view access', this was a just minor point that users are limited to 3 free 'views' only (I unfortunately discovered this after being timed out a few

times.) While there are workarounds available, it can be challenging for those who do not regularly need access to CE Codes.

Regards,

Pauline Rupp
Director, Technical & Building Innovation

CANADIAN HOME BUILDERS' ASSOCIATION BRITISH COLUMBIA
Leading Advocate of the Residential Construction Industry in BC

Canadian Home Builders' Association of BC
400-6400 Roberts Street, Burnaby, BC V5G 4C9
t. 604-432-7112 ext. 307
www.chbabc.org

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Friday, March 8, 2024 8:39 AM
To: Pauline Rupp <pauline@chbabc.org>
Cc: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Hunter, Christine HOUS:EX <Christine.Hunter@gov.bc.ca>
Subject: BSSB - quickly checking in

Hi Pauline,

I apologize for missing the check-in with you and Juni earlier this week! My calendar got a little bit too crazy.

Juni mentioned two items that I thought I ought to follow up on with you – one was a potential way that CHBA and UDI could help out in our work to understand the space impacts of the building code to work towards mitigation efforts, and another was a comment that you couldn't access the 2024 Electrical Code?

I'd love to chat with you about the space impacts question and I'm copying Shannon and Aura, senior policy analysts, because they're preparing our questions for consultation on mitigation efforts that we plan to start as soon as we have clearance from above. Perhaps an informal, preliminary conversation about what questions you may be able to seek to answer may help us direct efforts effectively?

With regard to the electrical code – you should be able to create a CSA Group website account and get "View Access" to the code. A draft version of the 2024 code was published a few months ago and the final version was published on March 4 and should be available. Technical Safety BC is also conducting their impact review, and I know that CHBA Canada participated in the technical committees. My understanding so far is that there are limited impacts to costs that can be justified through safety advances (like labelling of panelboards) and that the main issues around energy storage systems were addressed in an interim fashion until the NBC catches up (we may consider issuing a bulletin with TSBC to clarify application). While arc fault circuit interrupters are still there, I don't believe there are major cost drivers in other situations.

I'm copying Christine here as she's our senior policy analyst working on the Electrical Code this time around. If you have any comments about the Electrical Code that may be of value in our review we'd also love to hear them, though make sure you submit to TSBC as well. We're proceeding on the assumption that the electrical code would be adopted early in 2025, but have no confirmation on that of course as we haven't started the process yet.

Happy to set a time to chat more if that would be helpful,

Kevin Harding | Director, Safety Policy

Building and Safety Standards Branch, Housing and Land Use Policy Division
Ministry of Housing
Email: kevin.harding@gov.bc.ca

Telephone: 250-213-5461 (direct)

I acknowledge with gratitude that I live and work on the lands of the Musqueam, Squamish, and Tsleil-Waututh peoples, and the lands of the Lekwungen people, traditional keepers of their lands.

FW: Electrical Letters

From: Harding, Kevin HOUS:EX
To: Hunter, Christine HOUS:EX <Christine.Hunter@gov.bc.ca>, Baker, Jim B HOUS:EX <Jim.B.Baker@gov.bc.ca>
Sent: March 12, 2024 1:52:00 PM PDT
Attachments: CHBA BC Submission on CEC2024 1-Mar-2024 BKMP comments.pdf, 2024-03-01 UDI Letter on Canadian Electric Code Consultations.pdf, CHBA BC Submission on CEC2024 1-Mar-2024.pdf, 2024-03-01 UDI Letter on Canadian Electric Code Consultations BKMP comments.pdf

Hi both –

UDI and CHBA feedback on the electrical code. Jim – they're mostly around load calculations for EV charging systems. I've been part of CSA discussions on this one, so once you two have had a chance to digest, I'd be happy to connect with you.

Kevin

From: Sarah Griffiths <Sarah.Griffiths@technicalsafetybc.ca>
Sent: Tuesday, March 12, 2024 1:41 PM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Subject: FW: Electrical Letters

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Sarah Griffiths (she/her) | Leader, Regulatory Strategy

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From: Levana Huang <Levana.Huang@technicalsafetybc.ca>
Sent: Tuesday, March 12, 2024 1:13 PM
To: Sarah Griffiths <Sarah.Griffiths@technicalsafetybc.ca>
Subject: RE: Electrical Letters

Hi Sarah,

I've attached the two letters above.

I've also attached copies of the ones with the electrical team's comments for your reference.

Thanks,

Levana

Levana Huang | Regulatory Affairs Analyst

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From: Sarah Griffiths <Sarah.Griffiths@technicalsafetybc.ca>
Sent: Tuesday, March 12, 2024 1:11 PM
To: Levana Huang <Levana.Huang@technicalsafetybc.ca>
Subject: Electrical Letters

Hi Levana,

Kevin was asking about the letters we got on the electrical consultation. Do you have copies of the letters that you could share?

Sarah

Sarah Griffiths (she/her) | Leader, Regulatory Strategy

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CANADIAN
HOME BUILDERS' ASSOCIATION
BRITISH COLUMBIA

March 1, 2024

Hanna Rogoza
Advisor, Insights & Engagement
Technical Safety BC
Suite 600 - 2889 East 12th Avenue
Vancouver, BC V5M 4T5

Submitted via e-mail to: engage@technicalsafetybc.ca

Dear Ms. Rogoza:

Re: 2024 Canadian Electrical Code consultation

The Canadian Home Builders' Association of BC (CHBA BC) is the leading advocate for the residential construction industry, representing 2,350 member firms through our eight locally affiliated home building associations. Our members are small- and medium-sized businesses who are builders, renovators, tradespeople, service professionals, and suppliers. We are essential to supporting the province's housing, economic, and climate change efforts, such as those outlined in the CleanBC Roadmap to 2030. In 2022, as one of the largest sources of employment in the province, the residential construction industry provided 274,875 on- and off-site jobs, $19.9 billion in wages and $35.5 billion in built investment value in British Columbia.

CHBA BC appreciates the deadline extension to inform Technical Safety BC's (TSBC) public consultation on the impact of adopting the 2024 Canadian Electrical Code (CE Code).

'Pilot' approach to CE Code consultation process

While it remains unclear why the B.C. adoption of the 2024 CE Code is being expedited before the 2024 edition has been published, CHBA BC understands the desire for a streamlined consultation process and offers the following recommendations for future CE Code consultations to improve industry engagement.

- Provide online technical information sessions to review key impacts of the 2024 CE Code for B.C. as identified by TSBC. The sessions should occur prior to the three-week consultation period. Otherwise, the consultation period should be extended to allow industry sufficient time to consult with code users and technical experts.
- Provide CE Code language for each proposed change. The 2024 Canadian Electrical Code (CE Code) – Impact Assessment is a useful summary document, but by itself lacks adequate details that are necessary for industry to properly assess impacts and make informed decisions. For example, the public review of 2020 National Model Codes provides the problem statement, proposed code language, justification, and impact analysis with cost details. If the proposed code language cannot be presented at the time of consultation, the consultation should be delayed until this material is available.

The condensed consultation period for this pilot lacked sufficient preparatory materials to lay the groundwork for collecting comprehensive feedback. Consequently, CHBA BC's feedback reflects uncertainty and confusion around the proposed CE Code changes.

Section 8

Under TSBC's Section 8 analysis, it is unclear whether apartments and similar buildings must include electric vehicle supply equipment (EVSE) loads to the calculated load if EVSE is not actually installed for the project. As identified in TSBC's impact assessment, the proposed change may result in a larger calculated demand. This is problematic for both cost and local capacity constraints, particularly in grid-constrained high growth areas where EVSE are increasingly required by local government by-laws.

It is also unclear how the relaxation of 8-106 11) can still be applied to multi-unit residential buildings, provided the electric vehicle energy management system (EVEMS) monitors and controls the consumer's service, feeders, and branch circuits and control the EVSE loads in accordance with Rule 8-500. No justification has been provided on why Table 38 has been deleted, nor how often services have been overloaded as a result from applying demand factors below 100% under Table 38.

Section 64

Under Section 64, CHBA BC supports the intent to permit the installation of battery-based Energy Storage Systems (ESS) inside dwelling units. However, some additional language may be warranted for proper enforcement. Rule 64-1100 2) should explicitly state that the fire resistance rating of not less than 1 hour required for a dedicated room or utility room applies for ESS located "outside of a dwelling unit" in buildings containing multiple dwelling units. The proposed language creates confusion on when the fire resistance rating applies for a dedicated room containing ESS. It should also be made explicit that ESS can be located in a dedicated room or utility room "in a dwelling unit", which is different from in an attached garage, detached garage or exterior surface of a building.

Closing Remarks

We look forward to future industry engagements and sharing our members' experience with Code interpretation and implementation. If you have questions, or would like to have a follow up discussion, please contact the undersigned.

Regards,



Pauline Rupp
Director, Technical and Building Innovation

URBAN
DEVELOPMENT
INSTITUTE

SUITE 1100
1050 W PENDER STREET
VANCOUVER, BC V6E 3S7

March 1, 2024

Hanna Rogoza, BBA, MGB
Advisor, Insights & Engagement
TECHNICAL SAFETY BC (TSBC)
Suite 600 - 2889
East 12th Avenue
Vancouver, BC V5M 4T5

Dear Mrs. Rogoza:

Re: Canadian Electric Code (CEC) consultations

Thank for extending the timeframe for the Urban Development Institute (UDI) to submit its comments to Technical Safety BC regarding the adoption of the *2024 Canadian Electric Code* into British Columbia regulation as well as the "*pilot*" consultation approach TSBC used to streamline the adoption process.

It is difficult for us to respond to the proposed changes because there is inadequate information. While a summary document (the *2024 Canadian Electrical Code – Impact Assessment*) is linked on the TSBC website, the actual language of the proposals is not included in the summary – nor has a cost/benefit analysis of the changes been provided.

We are particularly confused about the first proposed change - "*Electric vehicle supply equipment demand rules*," in Section 8, which is a critical issue for our members; especially since some have been informed that this Section would mandate electrical vehicle charging (EVC) for all residential parking stalls.

From the *2024 Canadian Electrical Code – Impact Assessment*, it appears the amendment would mandate a 100% demand factor be applied to electric vehicle supply equipment in all buildings but single dwellings, which would increase the estimated loads for new buildings. However, "*This could be mitigated using EVEMS equipment that would see the reduction in the calculated load and potentially no increase in service size*."

It is not clear whether this applies only to circumstances when electric vehicle supply equipment (EVSE) is incorporated into a new building or if a builder must assume a 100% demand factor for EVSE even if they do plan to include EVC in a project – or only

have it for a small percentage of stalls. If it is the later, it is not clear how they could take advantage of mitigating the load impact by "… *using EVEMS equipment* …," without it being installed, which may require the EVSE to be installed as well. This is especially confusing for strata builders who will not retain ownership of the buildings after occupancy. They would not know what EVEMS equipment would be utilized when the strata corporation installs EVC equipment.

Mandating 100% EVC in parking stalls either directly or indirectly through the *Canadian Electrical Code* would be problematic. In areas of the Province where electrical vehicles are not prevalent, providing charging for every stall will make the Government's objective of providing housing more affordably even more challenging for builders, and it is not clear whether adoption rates for electric vehicles in these areas would substantially increase as a result of the change in the near term.

Increasing load factors for buildings could exacerbate another problem. Our members are already finding it difficult and costly to connect to the grid due to electrical distribution infrastructure in some areas reaching capacity, as well as an antiquated approach to funding electrical distribution upgrades that unevenly distributes the cost amongst builders. Some projects have been stalled because of the above problems. Adding substantial demand factors to account for EVSE (which may occur even with EVEMS mitigation) would worsen this issue.

UDI has been working with BC Hydro to address the local distribution capacity issues. There have been improvements, and more are planned such as changes to how BC Hydro charges for service upgrades and extensions. However, they will require approval from the BC Utilities Commission, and it is not clear what the implementation timeframes will be. ***We recommend that the adoption of Section 8 be delayed until these improvements have been implemented by BC Hydro (and FortisBC Electric).***

We are also concerned about the impact on instream projects – especially since TSBC is seeking to increase the speed of adoption of the *CE Code* in BC. This may result in projects that are instream in the planning review process (which can take several years) having to be redesigned to accommodate the changes to Section 8. This would result in substantial costs and delays for projects and undermine the delivery of new housing for British Columbians.

Although UDI represents builders and developers, some of our members own existing buildings and the implementation of Section 8 could potentially be problematic if the 100% demand factors applied when building owners begin to provide EVC in their rental, commercial and industrial buildings.

Regarding the other proposed *CEC* sections, we are unsure about many because no cost/benefit analysis (or even a cost analysis) has been provided, and it is stated in the

2024 Canadian Electrical Code – Impact Assessment that the "*Impact rating*" for each section is "*HIGH*".

However, we are supportive in principle of Section 64 ("*Energy storage and renewable energy systems requirements"*), although more clarity is needed regarding the required fire rating. Allowing energy storage will allow residents to better take advantage of future time-of-use BC Hydro rates, so the utility can peak shave to reduce infrastructure costs.

UDI is pleased with Section 2 ("*Marking of equipment*") and Section 10 ("*Equipotential bonding*") because both have a positive safety impact while reducing costs. We are also generally supportive of Section 6 ("*the use of bare neutral in consumer's services*") because of the positive safety impact with "… *no significant cost* …," impact.

We support Section 26 ("*Additional receptacles for the outside of dwelling units*"), although we are assuming that the increased number of receptacles will not be too high given the estimated "*Minor cost increase …*".

UDI also supports Section 56, that allows more flexibility when installing fibre optic cables that should result in "… *cost savings to industry …*" with no impacts to safety. Section 36 ("*New method for connecting high voltage equipment for temporary and portable power installations*") is also positive because of the added flexibility.

TSBC also requested comments on the "*pilot*" for the streamlined consultation. UDI has several concerns with it as outlined below.

- The timeframe for the consultation was too short (February 5th to February 27th), which does not provide industry associations with enough time to seek feedback from their members. Again, we thank TSBC for extending the comment period for UDI.
- However, one of the reasons we needed the extension was we were not informed about the consultation until much later in the process, so communications regarding these consultations need to expand in the future. TSBC may want to utilize BC Hydro, the Ministry of Energy Mines and Low Carbon Innovation, the Building and Safety Standards Branch and local governments to share information to their networks about future consultations.
- As noted above, it would be helpful to include the code language of the changes as well as cost/benefit analyses for them.
- TSBC should also consider holding webinars about proposals in the future should there be questions from stakeholders as UDI had for some of the sections of the *2024 CEC*. This would also clear up misunderstandings such as the confusion regarding Section 8.

Thank you again for extending the consultation period for UDI. If you have any questions regarding our comments and recommendations, please do not hesitate to contact us.

Yours sincerely,



Anne McMullin
President & CEO, Urban Development Institute

Mitigation E-app

From: Jensen, Jun'ichi HOUS:EX
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Sent: March 13, 2024 12:05:27 PM PDT
Attachments: Supporting_Building_Code_Implementation_For_ADM_Briefing_02_2024_1.1.docx, ADMO Briefing Feb 2024 - Revised AM.pptx

Hi Kevin and Aura,

Nikki asked if the ADM briefing materials need to go to MRK. Based on Bindi's previous comments (may or may not use them to brief MRK) I pulled them. They are here for your reference and hers if needed in future.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

Building Code Mitigation Project Engagement Plan

The Project:

- Effectively mitigate potential cost impacts with the implementation of adaptable dwelling unit and earthquake design provisions in the BC Codes 2024 with measures that seek to balance important health, safety, and accessibility improvements with the urgent need to provide more housing in BC.
- Effective mitigation means practical mitigation of actual costs in the building code and the perceived impact of costs amongst industry.

Project Challenge Statement:

- Changes in the BC Codes 2024 relating to increasing readiness for adaptable dwelling units and improving earthquake design safety have a cost or space impact on homes, challenging delivery of homes for people.

- Changes in the BC Codes 2024 may impact “in stream” developments.

How This Will Be Done:

- Engage with designers, builders, developers, local governments, and professionals to scope the costs of implementing the adaptable dwelling units and earthquake design provisions of the BC Building Code in 2025

- With interested parties, identify and analyze options to mitigate those costs that can be reasonably mitigated. Communicate intent clearly and early.

- Support the delivery of much-needed safe and accessible homes for people.

Audiences for Consultation

Development and Building Community	Local Governments	Professional Associations	Education and Regulator Partners
- Urban Development Institute - Canadian Homebuilders Association - HAVAN - Victoria Homebuilders' Association - Rick Hansen Foundation (adaptable dwelling units) - BSSB General Codes Bulletins List	- Targeted outreach to Vancouver, Burnaby, Coquitlam, Surrey, Victoria - Local Government Management Association - Treaty First Nations - Metro Vancouver planning and permitting working group - General outreach through BSSB and PLUM contacts to permitting and planning departments	- Engineers and Geoscientists of BC - Architectural Institute of BC - ASTTBC	- BC Housing (Research and Consumer Licensing groups) - Building Officials' Association of BC - National Research Council of Canada - Office of the Fire Commissioner - Accessibility Directorate (SDPR) - Accessibility Standards Canada -

Engagement Plan

Time	Phase	Key Work / Deliverables	Audience
Jan – Mar 2024	Planning	Requires: • problem statement Delivers: • Project charter • Work streams • Assign project team • ADM Briefing	Internal: • BSSB staff • PLUM (ongoing consultation) Professional Associations (regular scheduled meetings): • EGBC • AIBC • ASTTBC Key Construction Industry: • CHBA • UDI • Others selected from audience list above Education Partners and other external partners: • NRC • BCH

			• City of Vancouver • Office of the Fire Commissioner • Others selected from audiences above
March-May 2024	Initial Engagement	Requires: • ADM input into scope and project charter • Environmental and strategic scan of Ministry/Government work • Internal alignment on threshold for code changes (high bar) • Potential: may require external consultant contracts to conduct study or impact assessments for space from adaptability and seismic requirements Delivers: • Targeted consultation with industry (CHBA, UDI, smaller development associations, accessibility community, professional associations) • Grounded estimates on scope of challenge expressed as $, % of proforma budget, or square feet • Options on measures to mitigate cost increases from BCBC 2024	Local Governments • Vancouver • Burnaby • Coquitlam • Surrey • Victoria • Others interested Professional Associations (regular scheduled meetings): • EGBC • AIBC • ASTTBC Key Construction Industry: • CHBA • UDI Education Partners and other external partners: • NRC • BCH • City of Vancouver • Office of the Fire Commissioner
May-July 2024	Options and Analysis	Requires: • Grounded estimates on scope of challenge • Suggestions from targeted consutlations on measures that could support implementation • Potential: may require contract funding for consultation, consultant, or contractor to support work Delivers: • Analysis of options • Identification of options that can be implemented • Analysis on how options can be implemented (regulation, legislation, guidance, education, training, etc)	• Independent consultant • Local governments • Selected industry groups (those who provide options and related groups for targeted consultation)

July-August 2024	Validation Consultation	Requires: • Analysis of options • Collaboration with other branches in Ministry, including PLUM • Potential options for implementation • Background information • Resources and time for consultation Delivers: • Clear message of direction of Ministry on mitigation efforts • Timeline for implementation of mitigation measures • Statement on how in-stream projects will be protected	• Independent consultant • Local governments • Industry associations • Professional associations • Other HOUS branches
August-November 2024	Interregnum	No public facing policy work, consultation, engagement possible. Time used for drafting of implementation of options or further analysis of changes.	• None, policy work or consultation not possible.
November 2024 – January 2025	Implementation	Requires: • Finalized options • Implementable options Delivers: • Guidance on mitigation measures • Potential amendments to code • Potential regulatory amendments • Other measures to support implementation (education, training, guidance)	• Local governments • Industry associations • Professional associations

Re: Invitation to the Ministry of Housing's Industry Working Group

From:	Anne McMullin <AMcMullin@udi.org>
To:	HOUS Housing Innovations - Digital Delivery HOUS:EX <Digital.codes.permits@gov.bc.ca>
Cc:	Frei, Bethany HOUS:EX <Bethany.Frei@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>, John Macdonald <jkm@macdevcorp.com>
Sent:	March 13, 2024 12:26:40 PM PDT
Attachments:	image001.png, image003.jpg, image005.jpg, image006.jpg, image004.jpg, image002.jpg

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Dear Bethany,
Thank you for the invitation for UDI to participate in the testing of the Building Permit Hub. John Macdonald, COO, Vice President of Macdonald Development Corporation and the Chief Operating Officer for Macdonald Communities, is pleased to join the working group.
Thank you,
Anne McMullin
President & CEO
Email: amcmullin@udi.org

Urban Development Institute
650-1050 West Pender Street
Vancouver, BC V6E 3S7
Cell: 778.938.0408
Office: 604.669.9585
Web: udi.bc.ca

signature_1872017387

From: HOUS Housing Innovations - Digital Delivery HOUS:EX <Digital.codes.permits@gov.bc.ca>
Date: Friday, March 8, 2024 at 5:19PM
To: HOUS Housing Innovations - Digital Delivery HOUS:EX <Digital.codes.permits@gov.bc.ca>
Cc: Frei, Bethany HOUS:EX <Bethany.Frei@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: Invitation to the Ministry of Housing's Industry Working Group

Good afternoon,

I hope this email finds you well. The Ministry of Housing (the Ministry) is excited to invite you to join a working group dedicated to developing and testing phase two of the new Building Permit Hub. The Ministry has a mandate through the Homes for People action plan to become a North American leader in digital permitting and construction.

The Building Permit Hub will standardize building permit submission requirements across B.C. for new housing, and automatically check for completeness and compliance with key parts of the building code, making the building permit submission processes quicker, more collaborative, and more consistent.

The Ministry is launching phase one of the pilot tool at the end of March 2024. We are looking to create a working group of industry users who are directly involved in submitting building permit applications for the second phase of this project to provide feedback as new features are developed. Your experience

and insights will be invaluable in helping us achieve our mandate and delivering a product that is valuable to users in the construction industry.

Working Group Details:

Purpose: The working group's primary objective is to foster innovation within industry by bringing together experts like yourself to exchange ideas, share best practices, and tackle critical challenges related to submitting building permit applications.

Members: The working group will be comprised of 15-20 members. We are seeking a combination of builders, developers, registered professionals (such as engineers and architects), energy advisors and designers.

Meeting Frequency: We hold bi-weekly virtual meetings (sprint demos), with occasional 1:1 user research interviews throughout phase two of our pilot period (April 2024 – August 2024). We anticipate the monthly time commitment to be about 2-5 hours.

Next Steps:

If you are interested in participating in our working group, please confirm your availability and willingness to join by **March 20th**.

More information about the Building Permit Hub can be found on our Teams Channel. If you have any questions or require further information, please do not hesitate to reach out to me at Bethany.Frei@gov.bc.ca. I will be setting up a virtual intro call for interested parties to answer any questions you might have.

Thank you for your consideration, and we look forward to your participation in our working group and user research.

Respectfully,

Bethany Frei
Senior Product Manager, Housing Innovations
Ministry of Housing | Phone: 778-698-2180
Pronouns: *she/any*
I gratefully acknowledge the Lək̓ʷəŋən people of the Esquimalt and Songhees Nations on whose unceded territories I am sending this email from.

BRITISH COLUMBIA
BC Public Service
Where ideas work

RE: Electrical Letters

From: Harding, Kevin HOUS:EX
To: Sarah Griffiths <Sarah.Griffiths@technicalsafetybc.ca>
Sent: March 15, 2024 1:12:50 PM PDT

Hi Sarah,

Does your team plan to meet with CHBA or UDI based on these letters? The Branch would have some opinions on a couple of the items, and we may be reaching out to CHBA and UDI separately where this may come up.

Kevin

From: Sarah Griffiths <Sarah.Griffiths@technicalsafetybc.ca>
Sent: Tuesday, March 12, 2024 1:41 PM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Subject: FW: Electrical Letters

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Sarah Griffiths (she/her) | Leader, Regulatory Strategy

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From: Levana Huang <Levana.Huang@technicalsafetybc.ca>
Sent: Tuesday, March 12, 2024 1:13 PM
To: Sarah Griffiths <Sarah.Griffiths@technicalsafetybc.ca>
Subject: RE: Electrical Letters

Hi Sarah,

I've attached the two letters above.

I've also attached copies of the ones with the electrical team's comments for your reference.

Thanks,

Levana

Levana Huang | Regulatory Affairs Analyst

TECHNICAL SAFETY BC | Safe technical systems. Everywhere.

Toll-free: 1 866 566 7233
Suite 600 - 2889 East 12th Avenue, Vancouver, BC V5M 4T5
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From: Sarah Griffiths <Sarah.Griffiths@technicalsafetybc.ca>
Sent: Tuesday, March 12, 2024 1:11 PM
To: Levana Huang <Levana.Huang@technicalsafetybc.ca>
Subject: Electrical Letters

Hi Levana,

Kevin was asking about the letters we got on the electrical consultation. Do you have copies of the letters that you could share?

Sarah

Sarah Griffiths (she/her) | Leader, Regulatory Strategy

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Mitigation - good to go on consultations

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Sent: March 15, 2024 3:56:21 PM PDT
Attachments: image001.png

Hi both,

We're good to go on planning and engagement for mitigation. If we're able to reach out to Cassandra Smith at UDI and Pauline at CHBA for an initial, informal, pre-consult meeting in the next couple of weeks, that would be amazing.

Thanks,

Kevin Harding | Director, Safety Policy

Building and Safety Standards Branch, Housing and Land Use Policy Division
Ministry of Housing
Email: kevin.harding@gov.bc.ca
Telephone: 250-213-5461 (direct)

I acknowledge with gratitude that I live and work on the lands of the Musqueam, Squamish, and Tsleil-Waututh peoples, and the lands of the Lekwungen people, traditional keepers of their lands.

RE: Informal Pre-engagement on BC Codes 2024 Rollout

From: Cassandra Smith <csmith@udi.org>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Heather Park <hpark@udi.org>
Sent: March 18, 2024 12:34:02 PM PDT
Attachments: image001.jpg

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Hi Shannon,

Thanks for reaching out on this. Could we schedule a call for 3pm on Tuesday, March 26?

Thanks,
Cassandra

Cassandra Smith, (she/her)
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: March 18, 2024 8:18 AM
To: Cassandra Smith <csmith@udi.org>
Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Subject: Informal Pre-engagement on BC Codes 2024 Rollout

Good morning, Cassandra.

The Ministry is beginning to plan Spring engagement sessions with industry and local governments to better understand the space impacts related to the new adaptable dwelling and earthquake design requirements in the BC Codes 2024.

As a first step, we would like to meet with you, one-on-one, to discuss our plan and seek your input to help inform our approach.

Please let me know if any of the following dates might work for you to meet:

1. Friday, March 22 from 1:00 – 2:00 or 2:00 -3:00 pm

2. Monday, March 25 from 2:30 – 3:30 pm

3. Tuesday, March 26 from 3:00 – 4:00 pm

We look forward to connecting with you soon.

Kind regards,

Shannon Laboucane
Senior Policy Analyst
Building and Safety Standards Branch
Ministry of Housing
Phone: 778-974-3912 | Email: Shannon.Laboucane@gov.bc.ca

With gratitude, I respectfully acknowledge the Coast Salish Peoples, specifically of the Lək̓ʷəŋən (Songhees and Esquimalt/Xwsepsum Nations) and WSÁNEĆ Peoples, on whose territories I am grateful to work, live, and continuously learn on.

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15; s.17

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

RE: [External] CEC 2024 changes

From: Henderson, Elyse <Elyse.Henderson@bchydro.com>
To: Hunter, Christine HOUS:EX <Christine.Hunter@gov.bc.ca>, King, Katherine <katherine.king@bchydro.com>, Berkhout, Tom <Tom.Berkhout@bchydro.com>
Cc: Stelzer, Bertine <Bertine.Stelzer@bchydro.com>, Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Sent: March 19, 2024 3:48:12 PM PDT

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Christine,

Thanks for the summary of the CEC issues from UDI.

@Berkhout, Tom will this be covered by the work that you are scoping with the consultant for the utility consortium? Any other insights you can provide regarding what is being done versus where there are still gaps?

-Elyse

Elyse Henderson | Policy Specialist
BC Hydro, Market Transformation

M 604 368 0538
E elyse.henderson@bchydro.com

From: Hunter, Christine HOUS:EX <Christine.Hunter@gov.bc.ca>
Sent: 2024, March 19 3:33 PM
To: Henderson, Elyse <Elyse.Henderson@bchydro.com>; King, Katherine <katherine.king@bchydro.com>
Cc: Stelzer, Bertine <Bertine.Stelzer@bchydro.com>; Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Subject: [External] CEC 2024 changes

You don't often get email from christine.hunter@gov.bc.ca. Learn why this is important

Don't click on links or open attachments unless you trust the sender and are expecting the link or attachment. If you suspect this message to be phishing, please report it by clicking the Report Message button in the Outlook toolbar and select "Phishing."

Hi Elyse and Katherine,

Just following up on my question from yesterday's biweekly regarding local distribution capacity issues raised by the Urban Development Institute (UDI) with the 2024 Canadian Electrical Code changes.

Among other things, the upcoming changes will require electric vehicle supply equipment (EVSE) and Electrical Vehicle Energy Management System (EVEMS) demand factors be considered in load calculations for all buildings assuming a 100% load capacity to avoid overloading services and causing power outages.

UDI have raised some concerns about increasing load factors for buildings citing the potential to exacerbate existing issues with local distribution capacity in some regions and antiquated funding models for electrical distribution upgrades. UDI mentions working with you folks to address these local distribution capacity challenges and that there are implementation timeframes to consider. I'm interested in your thoughts on this feedback and would really like to learn more about this and any other relevant work underway both to inform my general understanding and to field and potential questions we may receive on the topic.

You mentioned Tom might be doing some work with CSA and hyrdro Quebec in this area and I would be interested in connecting and hearing anything your team might be able to share regarding initiatives underway.

Katherine- I may have missed someone else that you wanted included from the local government angle- hoping you can forward.

Look forward to connecting and learning more about this.

Thank you,

Christine Hunter
hear name
Pronouns: She/her
Senior Policy Analyst
UC (778) 974-3881
Christine.hunter@gov.bc.ca
Building and Safety Standards Branch
Housing and Land Use Policy Division
Ministry of Housing

I respectfully acknowledge the traditional unceded territory of the Coast Salish Peoples, and the traditional territory of the Quw'utsun (Cowichan) Tribes on which I am privileged to live, work and play.

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Adaptable Dwelling Units

From: Jensen, Jun'ichi HOUS:EX
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Sent: March 21, 2024 9:36:50 AM PDT

Hi Kevin and Shannon,

I got a call from Kevin Lau at CoV about ADU's. As they work on their code s.16 s.16 they are also hearing a lot of feedback on ADU's clashing with affordability. I gave him the update on the "mitigation" project and promised to keep him very up to date- in particular after my meeting on the 25th with MRK (for mass timber but apparently he wants to talk ADU as well) and after consultation with UDI and CHBA. s.16 s.16 Kevin is going to share one analysis he received s.16 s.16

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

communications following codes announcement

From: Rotgans, Trudy JEDI:EX <Trudy.Rotgans@gov.bc.ca>
To: Gill, Aman X HOUS:EX <Aman.X.Gill@gov.bc.ca>
Cc: McDonald, Cameron JEDI:EX <Cameron.McDonald@gov.bc.ca>
Sent: March 21, 2024 12:54:19 PM PDT
Attachments: EMTC Code Handout FINAL (updated).pdf

Hi Aman, We've been turning our minds to any support materials that would be useful once the code changes are finalized and announced. We're going to update the attached bulletin.

I know you and Cam will be at BOABC in late May. Is your team preparing a mail out and/or bulletin? How will you handle requests for presentations? I'm wondering if UDI and local chapters of CHBA and BOABC and others might send you requests.

FII and CWC are keen to support and amplify any messages. CWC may hold some seminars as well.

They know that we're moving towards an announcement but, of course, don't know when. Your thoughts?

Best regards,
Trudy

BRITISH COLUMBIA | Office of Mass Timber Implementation

ADVANCING MASS TIMBER IN BUILDING CODES



PUBLIC REVIEW FOR PROPOSED CHANGES TO THE NATIONAL BUILDING CODE OF CANADA RELATED TO ENCAPSULATED MASS TIMBER CONSTRUCTION (EMTC) OPEN UNTIL FEBRUARY 16, 2024

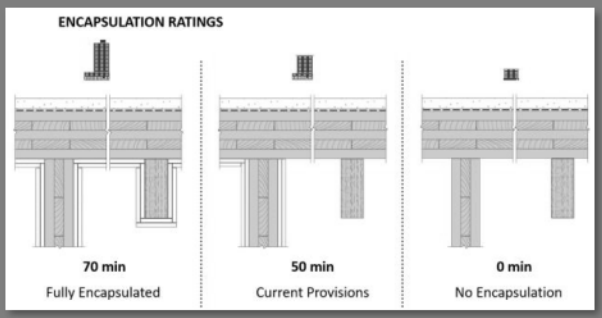
- B.C., in cooperation with Quebec, Ontario and other provincial partners, is working to expand building code permissions for Encapsulated Mass Timber Construction (EMTC) in Canada.
- The process is happening in parallel with the national code development system, with the intent of eventual adoption into the National Building Code of Canada. Interested provincial partners may adopt the code provisions sooner.
- This will expand the permitted applications for EMTC to new occupancy types and greater heights than is currently allowed.
- A brief explanation of the code proposal's content can be found on the following page.

To submit comments during the public review period, please visit the link below:
https://cbhcc-cchcc.ca/en/advancing-emtc-provisions/

SCOPE OF PROPOSAL

- New occupancy types and greater heights than previously permitted
- Portion of code content summarizing these provisions (Table 3.2.2.93.) below:

MAJOR OCCUPANCY	MAX. BUILDING HEIGHT, STOREYS	MAX. HEIGHT, m	MAX. BUILDING AREA, m^2	MINIMUM ENCAPSULATION RATING, min
A-2	18	76	7200	70
	12	51		50
	6	26		0
B-3	10	42	8000	70
	6	26		50
	4	17		0
C	18	76	6000	70
	8	34		0
D	18	76	7200	70
	9	38		0
E	12	51	6000	70
	8	34		50
	6	26		0
F-2	10	42	4500	70
	7	30		50
	5	21		0
F-3	12	51	7200	70
	8	34		50
	5	21		0



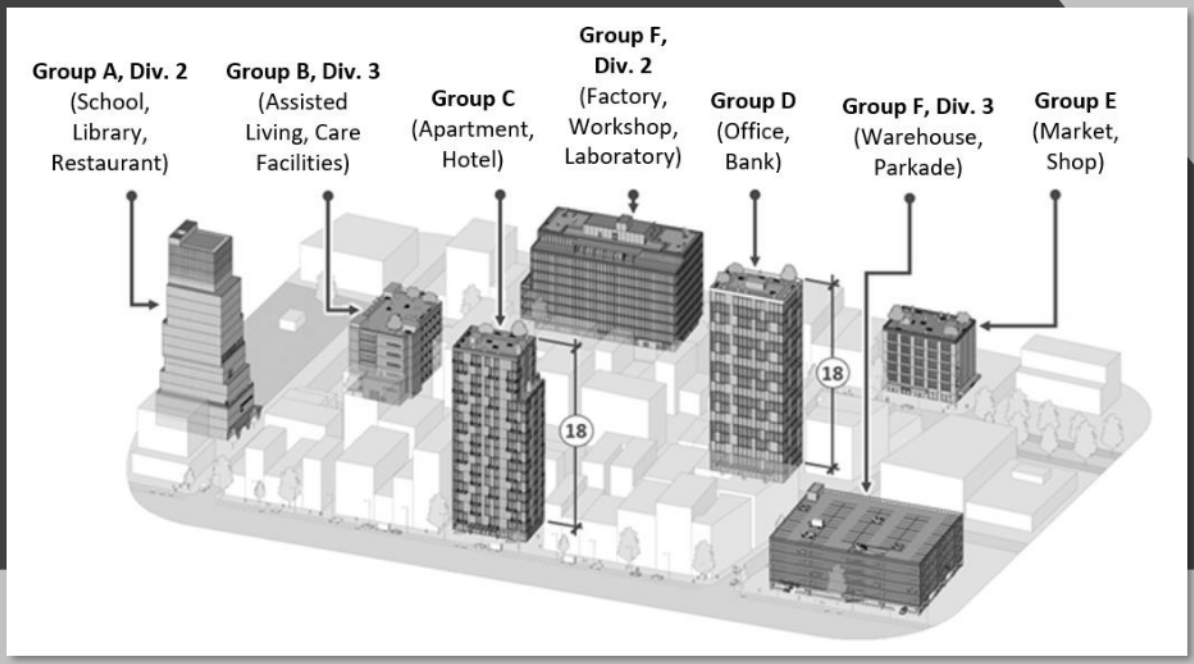
New encapsulation requirements tailored to scale of the building:

70-minute (2 layers 5/8" Type-X GWB) requires full encapsulation

50-minute (2 layers ½" Type-X GWB) permitted wood exposure as per existing requirements

0-minute permitted full exposure except in select, critical areas (exits, vertical shafts, public corridors)

Depiction of proposed newly permitted buildings:



For a digital version of this handout, please e-mail masstimberimplementation@gov.bc.ca

Agenda

Informal Pre-engagement BC Codes 2024

Urban Design Institute

Engagement Plan Overview

Timing:

- March to May 2024 - Engage development industry and local governments

Objectives:

- scope the space impact of implementing the adaptable dwelling units and earthquake design provisions in 2025
- analyze options to offset impacts

Materials:

Seeking input on the questions we pose to industry.

- Can you provide real-life examples of space impacts on implementing adaptable dwellings and earthquake design provisions that you have seen in your projects?
- What are the specific limitations with design options s.13
- Do you have proposed solutions that would address the pressures that were raised?

s.13

Items for discussion:

- Are we going in the right direction?
- Do we have the right objectives?
- Potential 3rd party advice

L:\\Building_Safety\\7 BUILDING POLICY (56000)\\50 Policy Analysis\\2024 Codes Rollout\\Engagement\\Pre-Consult Agenda UDI.docx<file://sfp.idir.bcgov/S128/S28005/Building_Safety/7%20BUILDING%20POLICY%20(56000)/50%20Policy%20Analysis/2024%20Codes%20Rollout/Engagement/Pre-Consult%20Agenda%20UDI.docx>

RE: Emailing: Space Study - BCBC 2024 Adaptable Dwelling Units.pdf

From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>, Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: March 22, 2024 1:26:25 PM PDT

s.13

Kevin

-----Original Message-----
From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Sent: Friday, March 22, 2024 11:59 AM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: Emailing: Space Study - BCBC 2024 Adaptable Dwelling Units.pdf

s.13

I've added this for your consideration to the pre-engagement agendas for discussion with UDI and CHBA BC.

-----Original Message-----
From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, March 22, 2024 11:36 AM
To: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: Emailing: Space Study - BCBC 2024 Adaptable Dwelling Units.pdf

Right- I will not I didn't look for accuracy of code compliance- I assumed it was correct.

Jun’ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

-----Original Message-----
From: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>
Sent: Friday, March 22, 2024 11:31 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: Emailing: Space Study - BCBC 2024 Adaptable Dwelling Units.pdf

s.13

s.13 . The footnotes suggest that a lot could be done to minimize space, and I think there are a number of assumptions that may be incorrect (850mm around all sides of a theoretical bed, or only one side, as an example)

kh

-----Original Message-----
From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, March 22, 2024 11:29 AM
To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: FW: Emailing: Space Study - BCBC 2024 Adaptable Dwelling Units.pdf

A quick review seems to confirm they looked at space impacts isolated to the unit- they acknowledge the smaller highway, but don't seem to acknowledge it can be used to offset the increased space in the unit. They also seem to demonstrate that some bathroom designs will be more impactful than others WRT space overlap, or lack thereof, but then use the more impactful one in some cases for comparison? s.13
s.13

Jun’ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

-----Original Message-----
From: Lau, Kevin (DBL) <Kevin.Lau@vancouver.ca>
Sent: Thursday, March 21, 2024 9:55 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: Emailing: Space Study - BCBC 2024 Adaptable Dwelling Units.pdf

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Here's an early space usage study by one consultant in industry to understand what the space and design implications of the new BCBC adaptability. The author indicated that I was welcome to share this with those directing policy in this area, but didn't want it publicly distributed.

s.16

Regards,
KEVIN LAU, P.Eng., CP - Tel. (604) 871-6085 Manager, Building Policy Team - City of Vancouver - Development, Building, and Licenses Services

2019 Vancouver Building Bylaw information:
s.15; s.17

The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xmkym (Musqueam), Swxwú7mesh (Squamish) and slilwta (Tsleil-Waututh) peoples.
Please consider the environment before you print.

Project Status Updates Shannon Laboucane March 22, 2024

Project	Tasks	Status	Notes
Single Egress Stairs	Connect with NRC	• Meeting held March 22 to provide SES plan overview and identify synergies • Added to Advisory Committee Invite	
	Project Initiation Meeting with Jensen Hughes	• Agenda drafted • Meeting date secured and calendar invite sent	
	Advisory Committee Formation	• Email drafted • Distribution list prepared • TOR drafted • NDA drafted	eApp with attachments sent to Kevin for review and routing for ED approval to distribute week of March 25
	Contract Task List in Teams	• Regret letters sent • March 27 draft options report due to BSSB • Action: BSSB review draft report March 27-Apr 3 • Action: JH to arrange meeting with BSSB by Apr 3	Monitor for report and JH mtg request
BCBC 2024 Rollout	Pre-engagement	• Meeting with UDI and CHBA BC booked • Agendas Prepared	
	Engagement Planning	• Communications plan in draft • 3 engagement dates holding in calendars with ADM availability confirmed Resume upon return: • Action: Draft Invites • Action: Draft one-page backgrounder • Action: Draft PPT Outline	April 25 9-10 am May 3 11-12 pm
Adaptable Dwellings	Decision Briefing Note	• MIN DBN in progress • ED Bullets	
	Guide	On hold pending budget confirmation In progress: • ADM IBN • Project charter	

Project	Tasks	Status	Notes
s.13			
	s.13		
TSBC AA	Finalizing Admin Agreement	In progress: • MIN IBN with AA for approval Upon approval send final AA to TSBC for signature and then re-route to MRK	

Shannon - Project Status Summary

From: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: March 22, 2024 3:58:36 PM PDT
Attachments: Project Status Updates - Shannon March 2024.docx

Hi there,

As you know, I'll be off enjoying some time s.22

I prepared the attached project status summary so you can easily see and track where priority items are at.

I hope it is helpful and I didn't miss anything.

Wishing you a wonderful week and a special long weekend!

Kindly,

Shannon Laboucane
Senior Policy Analyst
Building and Safety Standards Branch
Ministry of Housing
Phone: 778-974-3912 | Email: Shannon.Laboucane@gov.bc.ca

With gratitude, I respectfully acknowledge the Coast Salish Peoples, specifically of the Lək̓ʷəŋən (Songhees and Esquimalt/Xwsepsum Nations) and WSÁNEĆ Peoples, on whose territories I am grateful to work, live, and continuously learn on.

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Christine and Aman,

Robyn Webb on our team will share her experience with addressing UDI concerns with local governments.

Thanks,
k

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15; s.17

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-BCHydroDisclaimerID5.2.8.1541

Summary of Housing Targets Methodology Stakeholder Briefings

October 3, 2023

Key Themes

- Targets are too low, especially for Vancouver
- Targets do not sufficiently address housing precarity/homelessness
- Targets do not sufficiently address affordability
- Methodology does not sufficiently account for unmet need/pent up demand
- Purpose/goal of the Targets Program is unclear

Context: criticisms were in relation to CMHC Housing Gaps Report: BC needs to deliver much higher housing supply to meet forecast demand and affordability 2006-level (BC was 43% gross income).

MO Coordinated Meeting - Invitees (Siân)

	ORGANIZATION	Name	Surname	EMAIL
1	UBC, Generation Squeeze	Paul	Kershaw	paul.kershaw@ubc.ca
2	UBC Centre Urban Economics	Tom	Davidoff	thomas.davidoff@sauder.ubc.ca
3	SFU City Program	Andy	Yan	ayan@sfu.ca
4	SFU Renewable Cities	Leanne	Sawatzky	leanne_sawatzky@sfu.ca
5	Mountain Math	Jens	von Bergmann	jens@mountainmath.ca
6	Ivey Business School at Western University	Mike	Moffatt	mmoffatt@ivey.uwo.ca
7	Urban Lands Institute	Duncan	Wlodarczak	duncan.wlod@gmail.com
8	UDI	Cassandra	Smith	csmith@udi.org
9	Urbanarium	Amy	Nugent	amy@urbanarium.org
10	Abundant Housing	Owen	Brady	owen@abundanthousingvancouver.com
11	CCPA	Alex	Hemingway	alex@policyalternatives.ca
12	Rennie	Andrew	Ramlo	aramlo@rennie.com
13	Small Housing	Akua	Shatz	akua@smallhousingbc.org
14	CHBA	Carmina	Tupe	carmina@chbabc.org
15		Max	Fawcett	

Actual Participants

1. Peter Waldkirch: Abundant Housing (Lawyer – Appellant Advocacy)
2. Owen Brady: Director, Abundant Housing

Summary of Housing Targets Methodology Stakeholder Briefings

3. Thomas Davidoff, UBC Sauder School of Business
4. Jens von Bergman: Mountain Math
5. Andy Yan, SFU City Program
6. Andrew Ramlo, Rennie Consulting
7. Alex Hemingway: Canadian Centre for Policy Initiatives
8. Mark Sakai: Advocacy Projects Manager, BC Real Estate Association
9. Anderson: Greater Vancouver Board of Trade
10. Casey Edge: Executive Director, Victoria Residential Builders
11. Lindsay Fernandes: Greater Vancouver Board of Trade
12. Anne McMullin: CEO, UDI
13. Cassandra Smith: Director of Policy and Research, UDI
14. Greg Gillespie: Director at UDI, Capital Region
15. Carmina Tupe (CHBA BC)
16. Ron Rapp: CEO: Homebuilders Association Vancouver (HAVAN)
17. Leo Spalteholz, Homes for Living
18. Andrés Peñaloza: BC Non-Profit Housing Association
19. Duncan Wlodarczak: Onni Group of Companies (real estate developer)
20. Russil Wvong: Software Engineer (Vancouver Needs More Housing)
21. David Gregory: No information

November 22, 2023

HOUS

- Bindi
- Matthew
- Candice
- Susan
- Eric
- Matt Thomson (Urban Matters)

Stakeholders

1. Thomas Davidoff
2. Jens von Bergman
3. Peter Waldkirch
4. Owen Brady
5. Mark Sakai
6. Alex Hemingway

Links
Experts Briefings
MRK Responses Targets Critique 2023 10 13 ADM Comments.docx

UDI

Thursday, August 4, 2022 9:47 AM

s.13

UDI Meeting Notes Oct 3 2022

Friday, May 10, 2024 10:52 AM

Meeting Subject: Meeting | OHCS/UDI RE: Follow up to Oct 3 Mtg
Meeting Date: 2022-10-28 11:00 AM
Location: Microsoft Teams Meeting
Link to Outlook Item: *click here*
Invitation Message
Participants
Ruscheinski, Bonnie OHCS:EX (Meeting Organizer)
'jfisher@udi.org' (Accepted in Outlook)
May, Zachary OHCS:EX (Accepted in Outlook)
Cassandra Smith (Accepted in Outlook)
	• Tech changes not as concerned but more about how it gets implemented and timelines
	• Effective date 6 mos? And then focus on working with everyone with step code council to come up with clear best practice guidelines to assist loc gov'ts
	• Open to taking feedback today on timelines and effective and with the team, and specific consultation
	• Technical concerns, keep working with the team for solutions
	• HAS - we will need to understand
			Bullets below pulled from Meghan's notes (attached) - reason for the follow up meeting:
			
			• BSSB roll-out of carbon reduction tools through BC Energy Step Code
			  • UDI is on the energy step code council - flagged previous with spring roll-out. Looking at regulations closer to Dec so municipalities could implement carbon targets in new buildings shortly after.
			  • Will there be adequate guidance to do it phased/staged?
			  • TC - not just guidance they want but phased
			  • Unclear if natural gas can be used to meet GHG targets? Ex. If a new bldg has a contract with Fortis, they meet their GHG targets, if the strata a few years around the line want to switch - there's nothing stopping them from doing so.
			  • Jeff Fisher is engaged with Juni/BSSB. See it being a speed bump to the new housing legislation.
			ACTION – OHCS to set a dedicated mtg with Juni, Jeff and OHCS ADM (Bonnie) to explore further.
			
			Oct 28 Notes
			• Targets coming according to Eby public
			• UDI thinks a separation of sustainability folks talking to housing in LG and need to be linked
			• Michael - s.13
			s.13
			• Renewable natural gas - s.13
			Having BCUC decision would be helpful, need clarity on what can be done now before the BCUC decision (should be in place before it is implemented).
			• Slow down of applications if not clear.
			• Fortis trying to future proof their infrastructure
			  • Nothing under the building act

UDI Exec meeting and notes Mar 10 2022

Friday, May 10, 2024 11:45 AM

Meeting Subject: UDI Executive Meeting - MDE attending **Meeting Date:** 2022-03-10 8:30 AM **Location:** Details Pending **Link to Outlook Item:** *click here* **Invitation Message** **Content** FW UDI Executive ... Added by AG Associate DM HCSM Correspondence AG:EX Attachment from Outlook **Participants** AG Associate DM HCSM Correspondence AG:EX (Meeting Organizer) Cooke, Angela AG:EX Collins, Teri OHCS:EX Salter, Shannon CRT:EX	Agenda and Memos - ...		FW UDI Executive ... Presentation on data etc. Recommendations on performance based appraoch Link targets and municipal activity to Housing Needs Assessments Regoinal breakdown of polling is available and shows higher support for density around transit on Vancouver Island. UDI recommends municipalities be allowed to move density between transit stops if they get to the total Province should track rezonings, and approvals as well as Building Permits Issued Ontario ministerial zoning orders; california; tortonit goes farther Need to incent increased density Culture change needed s.13	Add to weekly housing update for MDE and seek his interest in follow up work related to this. s.13

UDI Exec Meeting April 13, 2022

Friday, May 10, 2024 11:47 AM

Meeting Subject: UDI Executive Meeting - AG Attending **Meeting Date:** 2022-04-13 8:30 AM **Location:** Details Pending **Link to Outlook Item:** *click here* **Invitation Message** **Participants**	Agenda and Memos - ...		Hong Kong Model, transit density - Setting expectations and having clear guidance. MDE - First step target based approach. Role of FN in transit oriented development. MST separate table etc. SPAs - include CACs etc in these agreements. s.13 UBCM Paper - s.16 . Some things that we agreed with - Alignment on areas of identifying supply chain issues and capacity shortages constraint in industry - in order to deliver. As well, building in rural/remote is a different set of challenges, will need different lens where development industry isn't present. s.16 Interesting - energy step code - energy efficiency requirements under building code - we were aware Municipality's were pushing for it - s.16 s.16 - did they talk to their members? s.16 BCH recommends drywall airtight system - which doesn't meet step code. (Neil Crystal). Testing requirements are expensive for large townhouse projects etc., MDE - interplay with federal rules, Building Code reuqirements. **MDE will bring back to next meeting to understand better. Additional costs to get to step 3/4.** CMHC requirements getting heavier and heavier. Step 4 on rentals, can't accommodate step 4. is p;olicy going to stick with policy or can we increase rents? Yes, CPI and inflation rents. **ENV and processing. Follow up with ENV for next meeting.** **Funding PSIs on VI have wait lists and can't fund positions could we explore?** s.16 s.16 **. Follow up (? Which facility?)** **BCIT - gov funded, ensure if that is expanding, facility running at full capacity. (? Building here?)** CMHC Rental report - Vancouver/Burnaby - digging into answer the Q from MDE before. Into the paper they sent. Analysis of rental units in Vancouver - Vancouver showed above cities - caught us offguard as well. Report only accounts for MARKET rental activity - Burnaby North Van - a lot of the rental is below market - incentive programs etc., Redevelopments - that WERE market rental, and are redeveloped to below market, show a deficit. s.16 This problem above is indicative of this. mismatch with CMHC and municipal programs. MDE - BCH works closely with CMHC (by request). Coordination of HAF and streamlined muni approvals, will be coordinated. Protections for tenants on redevelopment - between developer and municipality.

UDI Exec Meeting May 19 2022

Friday, May 10, 2024 11:48 AM

Meeting Subject: UDI Executive Meeting (AG Attending) **Meeting Date:** 2022-05-19 8:30 AM **Location:** Details Pending **Link to Outlook Item:** *click here* **Invitation Message** **Participants**	Agenda and Memos - ... Oak Bay Housing ... Large and Co Log_A...		

This is confirmed date and time for the second meeting of the Digital Advisory Council. This will be virtual, via Teams (please find the link below)

If you have any questions about the meeting, or the Ministry of Housing's work on digital codes and permits, please reach out directly to our Digital Delivery team at Digital.codes.permits@gov.bc.ca <mailto:Digital.codes.permits@gov.bc.ca> .

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15; s.17

Attendees:

* Jazz Pabla, City of Kelowna, jpabla@kelowna.ca <mailto:jpabla@kelowna.ca>
* Tim Ryce, City of North Vancouver, tryce@cnv.org <mailto:tryce@cnv.org>
* Rene Cravioto, City of Vancouver, Rene.Cravioto@vancouver.ca <mailto:Rene.Cravioto@vancouver.ca>
* Tyler Wightman, Building Officials' Association of BC, tyler.wightman@boabc.org <mailto:tyler.wightman@boabc.org>

* Helen Goodland, Scius Advisory Inc., hgoodland@scius.ca <mailto:hgoodland@scius.ca>
* Heidi Yang, Engineers and Geoscientists of BC, Hyang@egbc.ca <mailto:Hyang@egbc.ca>
* Mark Vernon, Architectural Institute of British Columbia, MVernon@aibc.ca <mailto:MVernon@aibc.ca>
* Neil Moody, Canadian Home Builders Association of BC, Neilmoody@chbabc.org <mailto:Neilmoody@chbabc.org>
* Anne McMullin, Urban Development Institute, amcmullin@udi.org <mailto:amcmullin@udi.org>
* Sue Paish, Digital, spaish@digitalsupercluster.ca <mailto:spaish@digitalsupercluster.ca>
* Dr. Sheryl Staub-French, University of British Columbia, ssf@civil.ubc.ca <mailto:ssf@civil.ubc.ca>
* Michael Pistrin, BC Housing, mpistrin@bchousing.org <mailto:mpistrin@bchousing.org>
* Theresa McCurry, Applied Science Technologists & Technicians of BC, tmccurry@asttbc.org <mailto:tmccurry@asttbc.org>
* Duncan Wlodarczak, Uban Land Institute, duncan.wlod@gmail.com <mailto:duncan.wlod@gmail.com>
* Jill Tipping, BC Tech Association, jtipping@wearebctech.com <mailto:jtipping@wearebctech.com>
* Jennifer Anthony, WLRS, Jennifer.Anthony@gov.bc.ca <mailto:Jennifer.Anthony@gov.bc.ca>

Ministry Staff:

Teri Collins, Deputy Minister

John Thomson, Executive Lead

Zachary May, Executive Director

Nicole Vukosavljevic, Director

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Withheld pursuant to/removed as

s.15 ; s.17

FW: UDI Meeting - April 13, 2022

Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>
Fri 4/29/2022 3:02 PM
To:Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>

1 attachments (3 MB)
Agenda and Memos - April 13, 2022 UDI Meeting.pdf;

Susan (Sue) Low
Pronouns: (she/her)
Manager, Strategic Housing Policy
Housing Policy Branch, Office of Housing and Construction Standards
Minister of Attorney General and Minister responsible for Housing
Phone: 778 698-1690

From: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>
Sent: Tuesday, April 12, 2022 8:49 AM
To: Low, Susan OHCS:EX <Susan.Low@gov.bc.ca>; Lis, Andrew OHCS:EX <Andrew.Lis@gov.bc.ca>
Cc: Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: FW: UDI Meeting - April 13, 2022

More on targets, labour and supply chain issues, and provincial approvals.

From: Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>
Sent: Monday, April 11, 2022 9:23 PM
To: Page, Doug OHCS:EX <Doug.Page@gov.bc.ca>; Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>
Subject: FW: UDI Meeting - April 13, 2022

For info etc.

From: Cassandra McColman <cmccolman@udi.org>
Sent: Monday, April 11, 2022 9:28 AM
To: Minister, AG AG:EX <AG.Minister@gov.bc.ca>
Cc: LynesFord, Adam AG:EX <Adam.LynesFord@gov.bc.ca>; Cooke, Angela AG:EX <Angela.Cooke@gov.bc.ca>; Collins, Teri OHCS:EX <Teri.Collins@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Michael Drummond <mdrummond@udi.org>; Jeff Fisher <jfisher@udi.org>
Subject: UDI Meeting - April 13, 2022

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hello Minister Eby,

Ahead of the meeting with UDI's Executive Committee on Wednesday, please find attached our suggested agenda and materials.

If there are any questions, please let us know.

Warm regards,
Cassandra

Cassandra McColman
Director, Policy and Public Affairs
Direct: 604.661.3032
Email: cmccolman@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



FW: Follow-up from recent mtg w MRK

Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>

Fri 1/19/2024 9:38 AM

To:Teekah, Alyssa HOUS:EX <Alyssa.Teekah@gov.bc.ca>;Cramer, Leslie HOUS:EX <Leslie.Cramer@gov.bc.ca>;Greenup, Erica HOUS:EX <Erica.Greenup@gov.bc.ca>

4 attachments (2 MB)

UDI Memo - Follow- up to September 28 Meeting .pdf; UDI Memo on Metro Vancouver DCC Increases_September 28, 2023.pdf; 2023-08-30 UDI Letter to Ministry of Housing on Annual Allowable Rent Increase 2024.pdf; UDI Memo- Right of First Refusal_Feb. 2023.pdf;

FYI – UDI materials sent to MRK Fall 2023. Several relate to rentals and RTA related impacts on PBR.

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, January 18, 2024 4:54 PM
To: Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Cc: Ashbourne, Jade HOUS:EX <Jade.Ashbourne@gov.bc.ca>; Jeff Fisher <jfisher@udi.org>
Subject: RE: Follow-up from recent mtg w MRK

You don't often get email from csmith@udi.org. Learn why this is important

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Hannah,

Thanks for reaching out, and my sincere apologies for how long it has taken to respond. We are still catching up after some extended vacations in December/January.

I've attached a follow-up letter that we sent to the Minister after our last meeting in September. This covers a range of issues including PBR. I've also attached some older materials related to PBR that we shared with over the last year.

We'd be happy to set up a call if you would like to discuss any of the materials further or have a specific issues that you'd like to explore.

Thanks,
Cassandra

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From: Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Sent: Thursday, December 21, 2023 12:02 PM
To: Jeff Fisher <jfisher@UrbDevIns.onmicrosoft.com>
Cc: Ashbourne, Jade HOUS:EX <Jade.Ashbourne@gov.bc.ca>
Subject: Follow-up from recent mtg w MRK

Hi Jeff,
My name is Hannah Rabinvitch and I'm a Director in the Housing Policy Branch. We heard from ADM Sawchuk that UDI recently met with Minister Kahlon and discussed your current thoughts / suggestions on purpose-built rental (PBR) developments. My team is doing some work on PBRs at the moment. Could you share any materials that were presented to the minister: a presentation, recommendations etc? My team may schedule a follow-up in the new year to learn more about what UDI is proposing.
Many thanks,
Hannah

Hannah Rabinovitch (she/her)
Director, Housing Policy Branch
Housing and Land Use Policy
Ministry of Housing
cell: 250-883-7457 **|e:** hannah.rabinovitch@gov.bc.ca
I acknowledge with gratitude and respect the lək^{w}əŋən peoples on whose traditional territory I live, work and play.

UDI notes to summarize for Teri with key takeaways

Ruscheinski, Bonnie OHCS:EX <Bonnie.Ruscheinski@gov.bc.ca>

Thu 8/4/2022 11:26 AM

To:Corpe, Cimarron OHCS:EX <Cimarron.Corpe@gov.bc.ca>;Teekah, Alyssa OHCS:EX <Alyssa.Teekah@gov.bc.ca>

UDI response (Jon Stovell)

- HNR could understate HNRs
- Building permit target - it is the last step and is an expensive, and LG could approve unviable projects
- What about funding LG want for schools, hospitals, transit but don't provide needed housing
- HNR - Teri - other jurisdictions, methodology didn't exist (Cal, UK), we want to continue the LG accountability and recognize there is a requirement to the HNR and then nothing happens but our team will do our own analysis and look at immigration, homelessness, to see if they have adequate projections, so there will be a feedback mechanism that may set higher target than a HNR and will be iterative and
- Rick Ilich - future topic, half of cities are receptive to working with the province and places like Victoria responding favourably, but some don't and infrastructure discussions come up (workforce, etc) they say that its not a LG problem but a provincial problem. Gives time to fail and not address the problem so for the immediate housing concerns, there are still lots of loops and for a little while be a bit heavy handed. i.e. Affordable housing - lack of support bc LG feel province's problem. Feels that the province can afford to be heavy handed. BCH social housing projects and the question is always about BCH can put in and the non profit has to go find money while the cities have done nothing. Richmond an example. HNR and a soft stick for them to do their job in meeting all the demographics in their municipalities but they will point finger to province. More of the cities are following the inclusionary zoning where they ask the developer to deed the final product to them. Included density to be transferred offsite. i.e. church can develop smaller centre and work with developers so let the developer transfer the affordable housing not on the market site but to a social housing site with subsidized rentals. Richmond does not want to see this scenario. One stick about infrastructure - cities are getting 1% money for bridges and school busses and feds are doing the Accelerator fund and could give to the Canadian Infrastructure Bank low interest (could we block access to municipalities accessing this funding source if they don't meet targets?)
- Cynthia Jagger - when would the earliest intervention be? Teri, annual targets built on HNR which are done every 5 years. Ways out still before enforcement actions but the legislation itself might motivate. How did we choose the 2 year and 60 days timelines.
- Rob Blackwell - starting to see even from LG that are housing friendly pushing back, Coquitlam, that they are upset that they are not doing anything. Could be election coming. Getting to catch up with elections, and to head off the common Council objections that investments in schools, parks, and traffic and if the legislation can head off the contributions from the Prov needed with housing development, need to communicate and how do we as a province build on this. Get ahead of this and temper the resistance.
- Teri - we are consulting with UBCM under NDA. Introduced after the elections
- Urban Mayors and UBCM - disconnect, Urban Mayors give us money and give us targets.
- Anne McMullin - timelines once targets set, but if it takes years to implement, Teri (don't have an answer on this yet but talking to UBCM in particular - like how did they intend to monitor themselves)
- Jon Stovell - concern how the LG could argue. Construction costs etc. and there will inevitable slow down bc of the economic conditions, so implicit in the target, LG should give a report on what they have changed to try to meet targets so we know. So they need to encourage development. Teri (we are building this out as part of the reporting). Make sure HNR are not over representative of one housing class so they should be balanced (social, condo, workforce, market). What about the legal challenge assessment? Teri (And we are looking to mitigate that at the front end. And intent is not to battle this out in the courts and desire to put forward in a way that avoids this, may get some in enforcement).
- Cynthia Jagger - who do we envision the Advisor to be"? Teri (appointed at the minister's discretion but not sure if internal or external at this time, may even be a group of people working together).
- Jeff Fisher - how nimber is the process fo Cabinet? UDI sits on a regional meeting and clear that the HNR process has more questions than answers and before the HNRs are reviewed, need some direction. Need to deal with the undercounting issue (Places like Surrey are being penalized bc took seriously but Whiterock

not so much). May need to look at overriding RGS by the minister. 2 year - project may be in limbo and may need grandfathering or review and renew 2 year timeframe so we should be able to renew. Teri (prov direction on HNR - what does that look like?) Jeff - example, issues raised by planners undercounting their population projections (affordability adjustment Joy McPhail and Brian McCauley). Burnaby says they need 60 units per year of high end when tech sector moving in and they will need more high end. So need to address these issues and when HNRs are reviewed need to make LG and prov are happy with them. Teri (Min can request other info and then recommend to cabinet for override enforcement).

- Cassandra McComan - timing of HNR, review before they because they will always be just ahead of the next census data so need to look at economic forecasts and building this in to be more comprehensive. Also, not building permits so what other standards and goals. Teri (do we look at DP, occupancy, etc. and qualitative approach, Alyssa (looking at other metrics). Performance based is important. What is timeline for Advisor for review? (Teri - a year out from spring 2023, need to shore up our internal team). What is the timeline for review by Advisor? (Teri - brief, administrative fairness but aim to be brief?)
- Cynthia Jagger - the layers of approvals and what are added at the end which layer up all the requirements.
- Rob Blackwell - time and money and LG. Increasing costs that are not necessary from the approval process that LG control. Tiers of municipalities in New Zealand - quick capacity load where there are infrastructure that might apply (ie schools), Teri (aligns with the areas we are thinking about, starting with transit corridors but also got feedback on whether we should set density around corridors or set targets in general)
- Jeff Fisher - comparative analysis (i.e. Surrey is doing ok but Port Moody not, then look at why), talk to LG at different stages but add others as needed (talk to industry etc.)
- Michael Drummond - Eby has looked at using Provincially owned land - how would this differ for a public or private sector project. (Teri - here won't be targets applied to specific land but will look at muni in general.). Will there be gov't changes like coordinate with other ministries (MUNI who has generally acted in best interests of LG).
- Jeff Fisher - in addition to MUNI, ministry of ENV, water act, MOTI approvals taking time that stall system. Teri (fully engaged with those ministries)
- Rick Ilich - provincially owned lands, not optimistic and would encourage Prov to have language within the rights of own lands to do our own approval process, and not let cities who hide behind the charter. Look at SN lands at Burrard. No involvement in this development by LG. Ill-conceived project but LG are singing allocades but would never have approved in the LG process.
- Jon stovell - SVT, one potential flaws is that the LG has to answer to the electorate and likely continue show NIMBYISM. How do we ensure population is educated that there are consequences over time if LG don't do otherwise public will throw councils out over elections.
- Teri - does UBCM have a role in communicating to develop a broader understanding of needs? Jon - Education is good and consequences are good?
- Jon Stovell - Arbutus - 3000 letters of objection and some of the council members who approved will pay the price from public, and may see more political churn as the politicians need to be able to answer. Need a financial consequence
- Jeff Fisher - recommended changes to Translink tax, if not providing enough housing so this tax can be adjusted as it could have been put in place where they would have supported development
- Rick Ilich - if we believe there is a crisis, then we need to respond as it is a crisis, need bolder and swifter powers (not for market but affordable). Crisis response like if a social housing project can act they should be able to bypass city processes - connection between provincially owned land (and any legislation to support bypassing). Lots of social projects are on city lands funded by province.
- Rick Ilich - they are building several social projects, and took 10 months to do an agreement and cities give each department equal clout, City of Vancouver housing is a disaster and political will is spineless.
- Yes they want to look at Consultation draft, regulations, etc.

Bonnie Ruscheinski, B.Comm., AACI, P.App.
Executive Director, Housing Policy Branch
Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing

ph: 778-974-5870 **|** ***cell:*** 250-882-6430 **|** ***e:*** bonnie.ruscheinski@gov.bc.ca



I gratefully acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory I live and work and the Songhees, Esquimalt and W̱SÁNEĆ people whose historical relationships with the land continue to this day.

Attachment 1

Wed March 31st, 1 pm to 3 pm Pacific Daylight Savings Time

Consultation on Contributions to a Strata Corporation's Contingency Reserve Fund

Agenda

Chairing Meeting: Doug Page, Director, Policy and Legislation
Lead Policy Analyst: Veronica Barlee, Senior Policy Advisor

1:00	Doug Page	welcome, purpose of consultation and confidentiality
1:15	Discussion all	1. s.13
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1:45		4.
2:05		5.
2:30		6.
2:55		7. concluding remarks and next steps

Attachment 2: Meeting Participants March 31st, 2021 1 to 3 pm

1. Jim Allison, President, CCI, (Canadian Condominium Institute) Vancouver Chapter
2. Tony Gioventu, Executive Director, CHOA (Condominium Homeowners Association)
3. Wendy Wall, President, VISOA (Vancouver Island Strata Owners Association)
4. Laura Asta, Policy, Policy Development Advisor, Insurance Bureau of Canada (IBC)
5. Chuck Byrne, Executive Director, Insurance Brokers Association of BC (IBABC)
6. Tara Laidman, Associate Vice President National Product Portfolio, Cooperators Insurance
7. Jennifer Mason, Home Product Specialist, Cooperators Insurance
8. Joseclyn Baker, lawyer representing UDI (Urban Development Institute)
9. Adrienne Murray, lawyer, Hamilton and Company
10. Kim Schuss, Partner Owner - Dorset Realty Group, representing Musqueam Capital Corporation
11. Carmina Tupe, Director, Government Relations, Canadian Homebuilders Association, BC Chapter (CHBABC)
12. Jake Fry, CEO, CEO Smallworks Studios and Laneway Housing Inc, representing CHABC
13. Norma Miller, Senior Policy Analyst, BCREA (BC Real Estate Association)
14. Alex Longson, Professional Standards Advisor, RECBC (Real Estate Council of BC)
15. Greg Bickert, President, PAMA (Professional Association of Managing Agents)
16. Tom Quinton, Director, SPABC (Strata Property Agents of BC)
17. Michelle Hayes, Deputy Register, Licencing and Consumer Services, BC Housing
18. Evan Kelly, A/Senior Policy Advisor, Financial and Corporate Sector Policy Branch, Ministry of Finance
19. Brian Remington, Manager Policy and Oversight, Office of the Superintendent of Real Estate (OSRE)
20. Harry James, Director, Policy Initiatives, BC Financial Services Authority

Office of Housing and Construction Standards, Ministry of Attorney General and Minister Responsible for Housing, Housing Policy Branch: Doug Page, Director of Legislation and Policy; Veronica Barlee, Senior Policy Advisor; Roxanne DeSouza, Senior Policy Analyst. Building and Safety Standards Branch: Nicole Vukosavljevic , Senior Policy Analyst; Tiffany Warkentin, Manager Policy and Regulation.

Attachment 3: Resources

Province's strata housing website:

Contingency Reserve Fund:
https://www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing/operating-a-strata/finances-and-insurance/the-contingency-reserve-fund-crf

New Strata Developments
https://www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing/renting-buying-selling/buying-and-selling-strata/new-strata-developments

Changes to Strata Legislation
Specifically, amendments in Bill 14, August 14, 2020. Some of the amendments will be developed and enacted by regulation after further consultation.
https://www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing/legislation-and-changes/changes-to-legislation

Research on strata corporation contributions to Contingency Reserve Funds

In May 2019, the Building Envelope magazine analyzed contingency reserve funds, contributions to contingency reserve funds and special levies by type of strata property, number units and age in B.C. for 200 strata corporations.
https://www.mediaedgemagazines.com/british-columbia-building-envelope-council-bcbec/bc91/

"The good news is that there is significant evidence that strata properties are generally saving and likely spending more on repairs and renewals."

While most contingency reserve funds are not fully funded, average annual contributions to the CRF ranged from 13-25% of the operating budget across all sizes, types and ages of strata property. Contributions increased from a range of 7% to 17% in 2014 to 13% to 25% in 2017.

Strata Property Act and Strata Property Regulations

Owner Developer

12 (1) At the time of the first conveyance of a strata lot to a purchaser, the owner developer must establish a contingency reserve fund by paying into the fund an amount calculated according to this section.

(2) If the first conveyance of a strata lot to a purchaser occurs no later than one year after the deposit of the strata plan, the minimum contribution to the fund must be 5% of the estimated operating expenses as set out in the interim budget referred to in section 13.

(3) If the first conveyance of a strata lot to a purchaser occurs later than one year after the deposit of the strata plan, the minimum contribution to the fund must be the lesser of

(a) 5% of the estimated annual operating expenses as set out in the interim budget referred to in section 13 multiplied by the number of years or partial years since the deposit of the strata plan, and

(b) 25% of the estimated annual operating expenses as set out in the interim budget referred to in section 13.

(4) The owner developer must not use money in the contingency reserve fund to pay strata corporation expenses.

(5) The contingency reserve fund belongs to the strata corporation.

Interim budget following first conveyance

13 (1) The owner developer must

(a) prepare an interim budget for the strata corporation for the 12 month period beginning the first day of the month following the month in which the first conveyance of a strata lot to a purchaser occurs, and

(b) deliver a copy of the interim budget to each prospective purchaser of a strata lot before the prospective purchaser signs an agreement of purchase and sale.

(2) The interim budget must include

(a) the estimated operating expenses of the strata corporation for the 12 month period,

(b) the contribution to the contingency reserve fund for the 12 month period, which must be at least 5% of the estimated operating expenses, and

(c) each strata lot's monthly share of the estimated operating expenses and contribution to the contingency reserve fund, calculated in accordance with section 99.

Strata Property Act

Minimum and maximum contributions to contingency reserve fund

93 Subject to the requirements set out in the regulations, the strata corporation must determine the amount of the annual contribution to the contingency reserve fund.

Strata Property Regulation

Contingency reserve fund contribution in first annual budget

3.4 For the purposes of section 93 of the Act, the amount of the annual contribution to the contingency reserve fund for the fiscal year following the first annual general meeting must be determined as follows:

(a) if the amount of money in the contingency reserve fund at the time of the first annual general meeting is less than 25% of the estimated operating expenses for the 12 month period set out in the interim budget, the annual contribution to the contingency reserve fund under the first annual budget must be at least 10% of the total amount budgeted for the contribution to the operating fund for the 12 month period covered by that budget;

(b) if the amount of money in the contingency reserve fund at the time of the first annual general meeting is at least 25% of the estimated operating expenses for the 12 month period set out in the interim budget, additional contributions to the contingency reserve fund may be made as part of the annual budget approval process after consideration of the depreciation report, if any, obtained under section 94 of the Act. [en. B.C. Reg. 238/2011, Sch. 1, s. 1.]

Contributions to the contingency reserve fund

6.1 For the purposes of section 93 of the Act, the amount of the annual contribution to the contingency reserve fund for a fiscal year, other than the fiscal year following the first annual general meeting, must be determined as follows:

(a) if the amount of money in the contingency reserve fund at the end of any fiscal year after the first annual general meeting is less than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, the annual contribution to the contingency reserve fund for the current fiscal year must be at least the lesser of

(i) 10% of the total amount budgeted for the contribution to the operating fund for the current fiscal year, and

(ii) the amount required to bring the contingency reserve fund to at least 25% of the total amount budgeted for the contribution to the operating fund for the current fiscal year;

(b) if the amount of money in the contingency reserve fund at the end of any fiscal year after the first annual general meeting is equal to or greater than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, additional contributions to the contingency reserve fund may be made as part of the annual budget approval process after consideration of the depreciation report, if any, obtained under section 94 of the Act.

[en. B.C. Reg. 238/2011, Sch. 1, s. 2.]

Attachment 1

Agenda

Wed March 31st, 1 pm to 3 pm Pacific Daylight Savings Time

Consultation on Contributions to a Strata Corporation's Contingency Reserve Fund (CRF)

Chairing Meeting: Doug Page, Director, Policy and Legislation, Housing Policy Branch
Lead Policy Analyst: Veronica Barlee, Senior Policy Advisor, Housing Policy Branch

1:00	Doug Page	Welcome, purpose of consultation and confidentiality
1:15	Discussion all	1. s.13
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Consultation Notes on Contributions to a Strata Corporation's Contingency Reserve Fund (CRF)

Wed March 31st, 1 pm to 3 pm Pacific Daylight Savings Time

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Lead Policy Analyst: Veronica Barlee, Senior Policy Advisor, Housing Policy Branch

Participants: Jim Allison CCI, Laura Asta IBA, Joscelyn Baker UDI, Chuck Byrne IBABC, Greg Bickert PAMA, Jake Fry CHABC, Tony Gioventu CHOA, Tara Laidman Cooperators, Alex Longson RECBC, Adrienne Murray lawyer, Jennifer Mason Cooperators, Norma Miller BCREA, Tom Quinton SPABC, Kim Schuss Musqueam Capital Corporation, Carmina Tupe CHABC, Wendy Wall VISOA.
The Province: Roxanne DeSouza, Evan Kelly Finance, Michelle Hayes and Wendy Acheson BC Housing, Harry James BCFSA, Brian Remington Finance, Tiffany Warkentin, Nicole Vukosavljevic?
Roxanne's notes
Veronica's notes

1:00	Doug Page	Welcome, purpose of consultation and confidentiality Underlying theory: a more robust CRF will result in better maintenance
1:15	Discussion all	1. s.13

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Page 041 of 162 to/à Page 044 of 162

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2:30 6.

s.13

2:55 Doug Page Concluding remarks and next steps

March 26, 2024

Tuesday, March 26, 2024
3:11 PM
ADU and seismic consultation

Base on real world examples
UDI- in stream protection is still an important discussion- some will still need redesign despite the delay
Agree with focus on space, but don't lose focus on cost impacts on seismic as there is a material cost.
Glad to hear density standards is in the conversation
Trying to data mine real examples to provide to us

Timelines- mapped out to election date- march/April consult, idea gathering, direction in Summer.
Noting interregnum will require a pause.
UDI acknowledges timeline is condensed, lot of work.

Are any measures off the table? Is 100% off the table?

It was noted that differences in interpretation of the code are leading to different space impacts, also need more understanding of compounding impacts of seismic and access

Udi- marketability. BSSB acknowledged to include, but also acknowledged limited influence in the codes.

UDI- walk through some misconceptions we are already seeing, demonstrate.

UDI- sec 568 of LGA and development permit/precursor applications- can we revisit in stream protection concept?

Invite should be clear on what kind of conversation -small and targeted or larger with broad perspectives. UDI recommends larger to start to help identify issues to focus on.

Electrical codes - UDI letter received- timing KH notes advance notice is a primary goal- looking at March next year. EV infrastructure- derating table removed due to safety risk- assumption that not more than 1 charger will be used at one time was incorrect, overloading circuits, energy management system is new option. UDI submission concern was mandating chargers KH noted not currently on the table. Other concern AEB- energy management system is also the solution for existing buildings due to safety concern.

JJ noted mandatory EV chargers may be discussed again nationally[s.13]
s.13

SCC meeting 2024-02-05

What do I want to do?

- Overheating
  - - future shifted climate files nationally - s.13 s.13

    andy: future shifted can come later we need to focus on cooling calcs - reach out to chair of national group to see where things landed - could have LGs pilot natioanl direction
    - Update from Ahmed - 50 year time horizon 2025-2075 looking at RCP 8.5 - HDD stays the same - however summer values will be reflective of this pathway. Hoping to have PCFs out by February. Doing additional impact analysis for mechanical systems design for 50 year time horizon.
  - Overheating roll out - Andy needs my help to roll out what to do - 15% FTE to rolling out - bulletins - working with TECA and HRAI lack of understanding for code basics - DM table met for national - start on this right away - apparently confusion regarding what this means
  - Andy: Part 9 ventallation needs to advance and can be impactful on overheating - do concurently with overheating - do we eliminate our variation? This is a broader tech team discussion as it dovetails with overheating
- Technical support for digitization
  - - BIM integration?
  - Using some of SC ZCSC work ie overheating and dovetailing into digitization.
    - Energy efficiency and ZCSC as first pilot

Other things:

- Single egress stairs - can look at in terms of energy efficiency and can help Kevin with this

Loose ends:

- Ancillary end uses and the ZCSC - Zac: appeals board is the arbiter regarding District of Saanich-code change in March we can make some changes to our regualtion to fill the gaps
  - I need to liase with Hugo and figure out how to best tackle - best to do in the new year.
- Part 3 high process loads - zac talk to Aman about whether or not this is an issue - Andy what are we trying to do here? - we should leave these alone and get a plan of attack and just monitor for the time being - I will need to come up a strategy - engage Andy further on this. It gets extremely complicated when having a definitive list of occupancies. Look at survey again and devise a plan of attack
- EMGs - revisions and fenestration - adopt new or buletin? I will look at revised language and we can figure out what to do and get back to the team. Revisions could be very clean. I need to confirm.
- Volta/snap - Input for changes to H2K - I will kick start the conversatoin and have stakeholders liase directly with NRCan - this is their initiative, not ours. Will help with our overheating.
  - Reached out to Alex - proposed meeting in the new year
- s.13

s.13

-

-

Nicole

- Nrcan funding - needs to be linked to energy - what needs to happen for submission of permit related docs - issues with expertise and LGs has been identified by BCHydro
- can tool help ee and carbon and what work do we need to do - permit side and code expertise - what process and what do we want to tackle - paint by numbers type of approach with user interface
- Julie is handling BIM - no technical expertise - what is necessary to digitize and validation and maintenance of code - how do we break down BIM -starting small and logical steps - small digestible chunks - ee first? - how do we make the code workable - what is a feasible scope? What can we build into AI tools -
- They are looking for guidance and expertise in forming and shaping digitization - not just engineers and architects but for the layperson.
- Permits a few hours a week - half my time ideally
- Pilot of digization regarding energy only - seems logical
- Fortis and funding - still need to access/use funding via ECIF
- NRCan is doing digitization roadmap and they are looking at us as province to pilot certain aspects
- Do we need to tweek code language to be compatible with machine learning? This would be challenging and would need buy in nationally
- Julie is engaging engineers and architects for BIM - integrating with BIM software - how this is accomplished remains to be seen - just started engagement with EGBC AIBC
- If I am working on overheating - then could have with a digitization lenses and I could them feed into the digitization process

Pauline - application of SC for retrofits - need clarity
Also technical approach for 26C - me: bulletin will be released - then we can fill gaps after as necessary.

Meghann - colder climate zones on whole building optimization - they are engaging to see what supports can be provided.

LG best practice guide

- New climate data and making sure this is being incorporated via NRCan - also too micro climates and issues with LGs setting their own values and how this works in the context of code requirements and NRCan process.
- Links to resiliency
- Nick - talk about performance path and the why for those LGs that had not previously adopted step code and don't understand the philosophy.
- Jeff - hydro capacity - distribution capacity and things to think about as an LG.
- Overheating? 26C

- Tying back to all new housing legislation
- Bea - looking at capacity and peak demand by the LGs and what works best re: gas or electricity given supply and infrastructure.
- Pauline - examples should provide info that EL1 is encouraged given education piece. Also what happens when prescriptive is no longer an option.
- Robyn - actual real world examples - case study of LG or LGs and what is being done right now.
- Jeff - there are projects that are being held up due to lack of BCHydro infrastructure - so LGs need to be cognisant of the fact that they maybe should not go to EL-4 given this issue.
- Jeff - overheating - if cooling for one room only and 26C - how is this shown to be enough. What is the context regarding impact to other spaces in the dwelling unit or building.

Digitization:
BIM - have data enabled within the code so, BIM software can read code and pull out relevant information pertenant to the project - example - BIM software is able to identify windows in the code and all associated requirements.
Pilot for March will look at Part 9 1-4 units and pilot in 16 LGs and 2 indigenous
Some LGs already have digital permitting. How do we leverage and add to what they already have while creating something for LGs that have nothing.
Richmond has quirky restraints ie building height due to air port, geotech requirement given soil issues. How would these types of requirements be integrated. Gets very challenging given all quirky requirements across the province.
Roberto - tool would self populate based on location.
Zac - focus on energy and carbon right now to leverage the relationships that we already have the with the SCC. Engagement with SCC will happen soon.

SCC meeting 2023-02-10
Post Public Review Summary

Part 3/Part 10
No changes post public review

Part 9
9.36.1.3. Compliance and Application
Must comply with 9.36.6. - so the performance path is not the default
Should an LG wish to pursue the prescriptive path, then they will need to do so via their bylaws.

Prescriptive -
Removed the continuous insulation requirements for below grade walls and non-accessible flat roofs
For ceilings below attics and the requirement for heal truss systems - dialed back the RSI requirement
Removed the ER (Energy Rating) requirements for fenestration
HRV efficiencies were dialed back form 75% efficiency to code minimum of 60%

Part 9 Performance Path
Peak Cooling requirement removed
Mix and match compliance path is still available

Part 9 GHG
Performance path - defined as per MEUI calc - so space conditioning, DHW and ventilation - this excludes ancillary uses. Gas fire places and gas stove - efficiencies not currently regulated in the code.
Part 9 - Performance path

- The focus will solely be on space heating, ventilation and DHW equipment (same as what is required when calculating MEUI so is in line with current energy modelling requirements) and does not include any ancillary uses such as wood burning/gas fireplaces, cook tops, gas dryers etc.
- Back-up heat (ie redundant systems not designed to accommodate the entire heating load of the building) are not included in the calculations, so wood burning stoves and gas fireplaces would not be included.
- Supplemental heat will be included – this includes packaged units (for example - heat pump with either electric or gas supplemental heat or heat pump as the primary system with a natural gas furnace as the secondary system)

Part 9 – Prescriptive

- For EL-4 (ie zero carbon), the requirement is for '*energy sources supplying all building systems, including equipment and appliances*' – so we have opened the door to have gas cook tops and gas dryers included in the prescriptive requirements (wood burning stoves and gas fire places would still not be included as these would still be considered 'back-up').
- We are vague in the code as to what 'appliances' means, so will need to provide some clarification via a bulletin.

Emissions factors inserted directly into the code for both electricity and natural gas.

(RNG) is not specifically listed as a compliance option in the Code.

No, due to lack of viable mitigation measure. The Code language does not restrict renewable natural gas (RNG), but it does not provide RNG as an acceptable compliance option either. As enforcers of the code, local governments may consider RNG as a compliance option, at their discretion.

BCHousing:
8 modules - mandatory - these have been the main focus
This is primary material so do not want to muddy the waters with other materials such as builder breakfasts given 8 modules
Can co-sponsor and support as needed

The have been finding that builders want more info on costs - how to builders to address costing issues - could partner with CEA, Bchydro etc - sensitivity analysis is best - builder want exact costs which is not feasible
I asked about CBAT - Wilma indicated that they are taking on GHGs for this tool
Train the trainer sessions - CBAT, IDP
Updating of builder guide - is something that we agreed needs to be addressed in the short term,.
Presentation deck (generic from RDH) - that can be used by others - ie train the trainers - must complete 8 modules to access the slide deck
Train the trainer - embodied
MBAR - next round table will be touching on operational

Meeting -
Convenience copy not to be for broad distribution

BCHydro -
Supply:
20% of electricity for total demand - the rest is from biofuels and fossil fuels
To meet CleanBC goals need comprehensive approach across all utilities
Currently 30 hydro electric for more than 5 million - Site C is coming on line in next couple of years
Energy efficiency is a key to reducing demand side
Distribution:
Ok to meet projections - however, some areas are growing faster than others.

Tranmission voltage - then goes to sub-station to step down the high transmission voltage to distribution voltage to homes and communities - feeders are lines that distribute to homes/customers
Expanding infrastructure

Carbon Pollution Standard
They are anticipating that there will be broad adoption of this new standard
Working with LGs that are early adopting - asking that LGs reach out the BCHydro to kickstart
Understanding high growth areas in these communities
Norm - what about high retrofit areas - is that being considered?
Robyn - new construction is only a small part, a lot of existing organizations and retrofits are being considered.

Distribution Extension Policy
-alocates costs between customers and BCHydro

-incentives for connection costs
-increasing capacity for extensions (new lines, transformers due to increased loads etc)
Bigger develpments are coming on line, not just single family homes

Custom connection

- No design requirements, then no issues, but if design then delays
- Timelines for connections has been lagging
-

Joe Hart - seems like more of a focus on Multi unit
s.22

Option 3 will help to benefit lower density
Cost - will depend on loads for commercial - has not figured out yet what to do for residential
Single family home has a lot of infrastructure but low energy usage, MURBs and low infrastructure and high usage - trying to have a systems that has Murbs help to pay for single family homes
Or they could maybe do costs reflected in rates as opposed to connection fees.
'Free rider' issue - a customer pays for upgrades and connection fees and then customers that come after don't pay but benefit from these upgrades.
With option it may be cheaper for single family but more expensive for MURBS to try and balance issues - Adrian - a MURB project that he is working on the fees are already $100K - so these could be higher under Option 3?!!

Hydro has a surplus of energy looking to 2030 - it is not production that is the issue, it is the transmission/distribution that is the issue ie sub-stations that are at capacity, not enough lines to etc.....which is just as imortant.
Patrick - all new buildings are connecting to hydro anyway it is just how much they need - so how does DSM (ie EE) help to mititgate these loads - smart metres etc.

Regarding future weather predcitions - they have dropped the capacity to 65% of systems to allow for that uncertainty, so they over design and build by apprximately 35%. Resiliency of infrastructure regarding floods, wind storms etc is something altogther different. They working towards underground infrastructure , however this is exteremely costly
Zac: need to have guidance for LGs given what has been discussed

CBCIF
National support of existing buildings - leave technical to NRCan and we can spend money on communication
Metrics research report
Website
LG Best Practice Guide
Fill any gaps regarding BCHousing - can we provide $ through the fund

ECIF
Part 3 and Part 9 checklists and training
Overheating -earmarked

Roundtable

Jeff Metrics Reports update via BCHydro work to address capacity, pilot studies - this is what was planned and this is what we ended up with - issues with HPs in remote areas
Laura - process map for GHGs and for AHJs

My notes:
Part 9 - peak cooling requirement
Part 3 - air tightness testing methodology
Part 3 - small commercial spaces and potential relaxation of TEDI
Part 3 - urban infill projects
ASHRAE 62.1
ASHRAE 90.1
CEDI
Unique building types - continued studies

Existing Buildings -
Need agreements in place for both Portfolio Manager and Building Benchmark BC

Part 9 and overheating - since we will be dropping peak cooling load - consider issuing a bulletin regarding overheating and part 9 - this will all depend on what happens with national direction regarding overheating

Metrics research report - update to include more comprehensive carbon costing - could also include more refined ECMs - could also conduct additional analysis regarding ASHRAE 62.1
Could also look at HP DHW
As well as the changes to the NBC regarding 300 m3.

Bea: 18PJ of RNG will be on line in the next couple of years
Joe: gas HPs - not small enough for single family homes -
Bea: they are making advancements
Lise Townsend - they like to see regionally produced RNG - she does not feel that new construction is the best use.
Laura - some LGs do not want to go through the process of undergoing review of RNG - time of permitting, staffing issues, expertise.

BCHousing Energy Step Code Response Survey will be linked to the next newsletter
Matrix study - need to look at GHGs with costing etc.
Costing study - provide a baseline to compare to - Roberto - as opposed to absolute values then it has more durability - retrospective studies as opposed to theoretical (ie Metrics)
Joe is finding that most builders are doing better than code minimum, so comparing to base code minimum is not very telling.
Office of superintendants within government - get them involved in EA capcacity and regulation.
Harshan - joint practice guidelines can provide guideance for Eas

Carbon - slide deck

- Jeff - should have that link to energy efficiency for each of the case studies
- Joe - should have similar slide for perfromance as we have for prescriptive
- Jeff - seconds that
- Jeff - suggests some public sector

[2:40 p.m.] Laura Sampliner

Perhaps the CPS slide deck should also reference in the speaking notes that many municipalities have been incentivizing GHG reductions similar to moderate and strong for 3-4 years - as in this isn't a new concept

Implementation:
For best practice guide - jeff suggests that LGs contact BCHydro - distribution and supply
Lise - would be good to have a summary doc with all costing studies
Jeff - for 2024 really need to figure out what to do with Fort Nelson grid when GHGs become mandatory
Zac- would be best to get a bunch of materials for next version of code as opposed to rushing out this summer.
Joe - builders tend not to understand mechanical systems - mechanical contractors are not required to have TECA training, F280 is in the code but only about 10% use it. Most just oversize.
Laura - HPs - oversizing of systems in common - mechanical engineers are not signing off of smaller systems.
Wilma - webinar to talk about mechanical design - these are the issues that are commonly seen
Kelly Reid - in cold climates - designers will always provide back up heat regardless
Zac - we will finalize a list of key actions with partners - what our plan is and what we can collaborate with others

National Code - input for request for review of GHG policy - all felt that a webinar would be best to engage others outside of Step Code council - Zac felt that individual submissions would be best as opposed to from the entire council.

CBCIF
National support of existing buildings - leave technical to NRCan and we can spend money on communication
Metrics research report
Website
LG Best Practice Guide
Fill any gaps regarding BCHousing - can we provide $ through the fund

ECIF
Part 3 and Part 9 checklists and training
Overheating -earmarked

SCC meeting 2022-09-27
Post Public Review Summary
Part 9 Technical subco report out:
Met a week ago on September 20th -
The purpose of the meeting was discuss the ongoing research regarding unique building types which we will be hearing more about later this meeting

Discussed GHGs and potential means of calculating given certain ancillary uses and back up heat:

- Intended to be a preliminary discussion or primer to get a better sense of the issues.
- Gas cook tops, gas dryers, fireplaces
- Back up heat that is integrated or stand alone - how would use be accounted for
    - functionality within H2Kbased on heat pump capacity with back up the difference and may be able to reasonably calculate GHGs using these outputs.
- Brief discussion on home owners potentially bypassing HP use - HP efficiencies lend well to reduced operating cost so no incentive to do so.
- Back up heat necessary in colder climates, do not want to inadvertently penalize owners for associated gas use for back up heat- calculation methodology needs to be balanced.
- Discussion of owners with gas fireplaces using these more often when homes have electric baseboard.
- Discussion on taking the outputs from H2K and using the Part 9 Calculator to determine GHG outputs.

Round table

- Update on proposed public review
- Roberto highlighted an article that was released by ZeBx n June regarding Low Carbon Energy Systems for new homes.

Thoughts after the meeting -
Research - Energy Factor: the efficiency of a system is inputted in terms of an energy factor - how would this affect GHGs
H2K technical guide:
energy factor (EF)
An efficiency rating of gas- or oil-fired storage tank-type or tankless water heaters, where energy supplied as hot water is divided by the total amount of energy used by the water heater over a 24 hour period taking into account standby loss, cycling and recovery efficiency. The higher the EF, the more efficient the water heater.

Included: cook tops, gas dryers
How is back up heat (or supplementary heating) accounted for? Under Energuide Technical Procedures - Section 3.5.22 - would be set as 'always' or 'never'. So how can we account for it if is set as 'never'. This affects things like back-up heat and other supplementary systems like fire places.

Part 9 unique building types
Key questions to the group -

- TEDI=MEUI relaxations - we have heard from some stakeholders - when following this approach may still have issues complying with MEUI unless more expensive/efficient systems are used.

There is a perceived concern with a typical small home that would need an ASHP and/or HP water heater to achieve Step 3
    - The study has shown that we can reduce ICC somewhat, but cannot reach full parity without drastically relaxing the metrics. Ideally, we would like to find some middle ground.

- Or TEDI and MEUI independent - this may mean that we would need more aggressive relaxations for MEUI - ie close to next step lower. Also may need to find the line of best fit.

Future work
- THs
- MEUI relaxations and ground truthing with real world examples, MEUI vs TEDI
-If MEUI independent then may need to look at this more in terms of more home sizes to get appropriate values
-larger log homes.

Context:
Study:
ERS vs absolute
Laneway
CZ 4 ERS not an option - absolute
CZ5 ERS for Step 3, but absolute for rest
CZ6 ERS for Step 3, but absolute for rest
CZ7a ERS Steps 3 and 4, Step 5 absolute
CZ7b ERS Steps 3 and 4, Step 5 absolute
CZ 8 ERS Steps 3 and 4, Step 5 absolute

Metrics research report
CZ4 ERS Step 3, absolute for rest
CZ5 ERS Step 3 and 4, absolute
CZ6 ERS Step 3,

Presentation:
Susan - looked at medium Homes ECMs and then applied them to small homes - do they still achieve the same step? This was the fundamentals of the analysis.
Line graphs show where they would line up if these ECMs (in terms of TEDI and MEUI) were applied. As a result they would exceed the TEDI and MEUI limits for each of the steps for each of the climate zones. They then assumed that this would be the required relaxation and looked at ICC as a result. This essentially eliminates the need for additional ECMs to meet the step requirements and creates a level playing field with
Pauline - CZ5 and Step 3 is not really an issue from the builders that they have been talking too, so we could instead look at relaxations for upper steps only for CZ 5 and colder.
Pauline has stated that an absolute limit for smaller homes may be the better route - we could look at this for future research.
Jeff Fisher - what do the relaxations mean in terms of GHG outcomes . Me - not part of this study. Something we can look at in the future.

Patrick Enright - now that we will have the carbon pollution standard - the context has shifted and energy efficiency does not necessarily need to be the primary driver. Step 3 and zero carbon is good enough.

Patrick Caraher
If anything, electrically heated/DHW'd homes need to be more efficient than gas, both for DSM and mitigation of energy poverty that often comes with mandated electrification, esp. in the colder climate zones.

[3:03 p.m.] Patrick Caraher
And I'll remove DHW from my comment re: Part 9... not as big an effect as heating, esp. in cooler climates. My comment pertains to retrofits more so than new construction. A lot of exciting stuff happening in the U.S. re: energy equity programs to alleviate energy burden from LMI households as they're being decarbonized... BC/Canada needs to follow suit. The Clean BC IQP is a good start, but hard to navigate for that demographic.

Townhall -
Jeff - Metrics report - costs - these are the measures you can take expect it to cost this.

Megan - lot of folks are already referencing Step 3 in their region. There are a few other areas that don't have capacity, they will be following the province. Concerned about building a legacy toolkit continuing education and how this plays into credit regarding Bchousing licensing.
Maura - looking at this for impacts on architects - practice guideline has been issued with regards to major occupancy.
Ron - only 25% of constituents have their heads wrapped around step code. Builders are too busy.
Roberto - could Step Code newsletter populate HAVAN news letter.
Jeff Fisher - really concerned about the changes to metrics for office and retail - this comes into effect immediately and builders may miss this.
Joe Hart - owner builders in the north is a big concern. Capacity is not seen as an issue except for most remote areas.
Paulne - need education for mechanical contractors - Eas need to be aware of the changes and changes compliance forms.
TECA, HRAI and mechanical contractors association.
Jo hart - he has seen a lot of issues with designers not knowing anything about step code - a huge gap.
Zero architets being used for Part 9 in the north.
Jason Jung ASTTbc- starting to get info out to designers and how can ASTTBC partner and provide conitnuing education. ASTTbc has very similar channels as EGBC.

SCC meeting 2021-09-22

Industry representatives and partners
Professional associations
LGs
Non-profits
Academic Institutions
Utilities
Government

Zac: this will not be the last meeting on this topic - complexity of impact analysis is always more complicated once we get into it.
Summary sheet as opposed to one-pagers

What are the issues that need to clearly laid out in best practice guides
Max: Energy modelling guidelines need to be addressed here as well

Zac: Can CHBA provide some input with regards to summary sheets for Part 9 when they become available.

Emissions Factors:
GGRCA - values for electricity is anomolous for 2020 given certain factor
Zac: suggest that we maintain status quo for long term stability - not anticipated to go up but go down
Nick - province has directed BCHydro to go to clean grid - can utilities guarantee the Efs being proposed.
Zac: we are not in that position. Used the analogy of climate files - they are wrong but trying to bridge gap - Efs are no different
Bea - there is a EF for NG from BC Best Practices Guide that should be considered. Zac: would be an easy change for us to do and can consider.
Jeff: it takes years for buildings to be designed and built so why not just stick with what we have.
Max: best practices guide - can make sense but there are fluctuations. Imporantant to understand true emissions. Cannot just rely on best practice guide or RNG.
Bea: fortis provides info to CAS regarding supply etc to make determination regarding emissions factor.
Good news on RNG front - demand has outstipped supply - program is being reopened
Patrick - in favour of approach of keeping CoV - standard so allows designers to understand changes and GHGi requirements. Can change CoV to reflect NG EF from best practice guide. He is ok with this.
Ian - worried about maintenance and cost to tenants and owners

Review of one-pagers:
Step 2 used for Part 3 - given that 20% better proposal
Step 3 for Part 9

% RNG is not something we can regulate today.
Norm - why no HP for DHW?
Alex: HP for DHW is becoming more popular, but we need to draw the line in the sand with options to analyze to keep things simple
Zac: need to include in assumptions as to why HPs not used
RNG comes at a premium but NG, over 20 years due to carbon tax, will essentially be equal.

Nick: fragile assumptions regarding carbon tax - no true direction from government - not fair to assume that electricity will not have zero emissions, why has this not been used in calculations?
Zac: something we need to look at
Jeff: why not all climate zones? Also to why not have all steps too. We may need to get that information.
Zac: we can talk to alex about summarizing
Ian: annual modelled utlity costs seem off by 50%
Alex: these are modelled not actual.
Ian: this is an huge gap
Zac: we do not have actual data

[1:48 p.m.] Mohareb, Adrian ENV:EX
I think the C tax rate was reflected in regulation federally?

[1:48 p.m.] Mohareb, Adrian ENV:EX
https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/carbon-pollution-pricing-federal-benchmark-information.html
The federal carbon pollution pricing benchmark - Canada.ca

[1:49 p.m.] Mohareb, Adrian ENV:EX
https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/carbon-pollution-pricing-federal-benchmark-information/federal-benchmark-2023-2030.html
Update to the Pan-Canadian Approach to Carbon Pollution Pricing 2023-2030 - Canada.ca
The updated federal carbon pollution pricing benchmark, with new information to update the minimum national standards for carbon pricing for the 2023 to 2030 period.

Zac: to act on ian - could provide some limitations with analysis to indictate shortcomings - could maybe have an estimate here and in metrics report ie re: modelled vs meaured

To Katherine's point - perhaps add assumptions around efficiency assumptions of the equipment in the notes to this document?

Some options over 6/3/1 - roberto - why not adjust ECMs so that we are meeting the thresholds
Zac: wanted to take the approach of bare minimum requirement for that Step. Not accounting for orientation etc.

Patrick: with thresholds that are currently in place for LGs - can we tweek the DHW savings to get it over the finish line
Alex: yes is possible - higher or lower densities affect DHW. 6 is not necessarily the wrong target
For metrics of 1 - if over as shown in analysis then could be and issue with this step.
Katherine: great set of data to work from as a base - if we want to refine metrics then we will need to look at other ECMs.

Including heat pump DHW in the ECMs might get the annual modeled utility cost closer to reality, and sustainable for operators/tenants.

Jeff: BCHydro connections fees and tier 2 rates - should be stating assumptions
Max: need to include other steps before we can make a decision. Info may be useful but maybe not essential.
Zac: could put an * beside the red numbers and outline what ECMs are required to meet that given threshold.
Katherine - NPV would be best to include
Pete: total $ value? Zac: we need to know what the actual building size is. And $ value would only apply to one specific building.
Mary McWilliam - affordabilty - can we provide some relatable information?
Zac: maybe we can have some plain language terms with some examples
Tom: consistent units - square feet used for floor area for part 9
Remi: Including comments to answer obvious questions (e.g. whole column with 10.2). The challenge I have with having this cost being constant at 10.2 is that it would make people assume everyone should use RNG, but only a small percentage of buildings could use this due to the limited supply. Is there a clear note above on the maximum percentage of buildings that can use RNG?
Max: what about cooling?
Alex: in Part 3 models cooling has been included
Remi: with lowered cost for BB - needs to be explained
[2:29 p.m.] Nicholas Heap | P9SC (Richmond) (Guest)
Alex: if the high-rise MURB already has A/C installed, is the cost of adding a heat pump cost $42/m2 [$2,300/suite] - the incremental cost of switching an HP in instead of A/C ?
like 1
[2:31 p.m.] Alex Blue
Yes. I've assumed central ASHP for the high-rise MURB, same as the other Part 3 buildings. It may be that the upgrade cost could be somewhat less if you went suite by suite but we've assumed central system for all.

Part 9 architype:
Pauline: Meeting requirements in CZ4 is easier, we need to include other climate zones.
ICC for option 6a - jheat pumps is much more expensive
Nick: ACH of 2.5 should be used as opposed to 1.5.
Max: why are bb not included?
Pauline: disclaimer should be provided regarding issues with predicting costs via H2K. Issues with occupant behaviours
Absolute value for dollar value and GHG
Pauline - need to evaluate extremes - smaller homes and bigger homes - absolute metrics
Adrian - rounding methodology needs to be reviewed. If GHGis of 3, then could applicant get 3.49? This needs to be clarified
Nick: Richmond have GHGis for small homes - CoV have a cap on big homes
Remi - need to have adjustment for small homes given disproportionate DHW load

[3:12 p.m.] Wark, Robyn
I also like the idea of a cap (for large homes) and a minimum (for smal homes). Reflects equity issues like 1

[3:12 p.m.] Ian Cullis

cap should sit at 2,000ft2
[3:12 p.m.] Patrick Enright - CoV (Guest)
while not a fix, most new smaller homes we see in Vancouver (mostly laneway homes) are all-electric, just by default and regardless of GHGI or GHG cap
like 1

[3:12 p.m.] Patrick Enright - CoV (Guest)
if that context helps

Ian Cullis - we should be more punitive for homeowners can that can afford it.
Zac: case studies after the fact will help to identify issues - will need to iden
Density cannot be penalized

Zac: impact analysis - need to explore impacts of attaching GHGis to steps - ie analyze highest GHGi step highest step code step.

Measure only - not prescriptive - just making people take a look.

Robyn - need to work backwards from provincial goals to determine when incremental steps become mandatory.
Zac; cannot make that distinction right now - we do not have that clear mandate
In best practices guide - what does the path to decarbonization look like?
**very important that needs to be coupled with BCBC 2022 so minimum step 3
Goal - regulation would be in place upon signature, so ASAP.
Opt in process
In Metrics research report - needs to discuss availability of RNG and assumptions made.

Case Studies - could get info from LGs that already have these metrics in place

Laura Sampliner: in the short term ok for opt in , but need to see what mandatory steps need to be implemented.

Summary sheets October
Consensus from ESCC (late oct/early november)
Target recommendation by end of year
Best Practice Guide - would need to done with the regulation
Roberto - would be good to have the one pagers included in the best practice guide
Maya - is setting up a WG for the peer network for this issue

[3:00 p.m.] Remi Charron (Guest)
Baseboard heaters had initially not been included in the 2018 metrics study. Due to the desire to have that data, baseboards were added to the data using post-processing of the HTAP results.
Energy consumption of baseboard = TEDI...
like 1

[3:02 p.m.] Remi Charron (Guest)

Small homes would lead to the same issues as those encountered in MEUI. Domestic hot water load is the same regardless on how size…

Key Actions items from Meeting
Patrick - in favour of approach of keeping CoV - standard so allows designers to understand changes and GHGi requirements. Can change CoV to reflect NG EF from best practice guide. He is ok with this.
need to include in assumptions as to why HPs not used for part 3
Jeff: why not all climate zones? Also to why not have all steps too. We may need to get that information.
could provide some limitations with analysis to indictate shortcomings - ie re: modelled vs meaured
perhaps add assumptions around efficiency assumptions of the equipment in the notes to this document
Patrick: with thresholds that are currently in place for LGs - can we tweek the DHW savings to get it over the finish line
Alex: yes is possible - higher or lower densities affect DHW. 6 is not necessarily the wrong target
For metrics of 1 - if over as shown in analysis then could be and issue with this step.
Katherine: great set of data to work from as a base - if we want to refine metrics then we will need to look at other ECMs.
Jeff: BCHydro connections fees and tier 2 rates - should be stating assumptions
Zac: could put an * beside the red numbers and outline what ECMs are required to meet that given threshold.
Katherine - NPV would be best to include
Mary McWilliam - affordabilty - can we provide some relatable information?
Zac: maybe we can have some plain language terms with some examples
Tom: consistent units - square feet used for floor area for part 9
Remi: Including comments to answer obvious questions (e.g. whole column with 10.2). The challenge I have with having this cost being constant at 10.2 is that it would make people assume everyone should use RNG, but only a small percentage of buildings could use this due to the limited supply. Is there a clear note above on the maximum percentage of buildings that can use RNG?
Remi: with lowered cost for BB - needs to be explained
Nick: fragile assumptions regarding carbon tax - no true direction from government - not fair to assume that electricity will not have zero emissions, why has this not been used in calculations?
Zac: state assumptions…..

Part 9
Pauline: Meeting requirements in CZ4 is easier, we need to include other climate zones.
Nick: ACH of 2.5 should be used as opposed to 1.5.
Max: why are bb not included?
Pauline: disclaimer should be provided regarding issues with predicting costs via H2K. Issues with occupant behaviours
Pauline - need to evaluate extremes - smaller homes and bigger homes - absolute metrics
Nick: Richmond have GHGis for small homes - CoV have a cap on big homes

SCC meeting 2021-07-28

Not forcing decisions today, just presenting technical analysis with input and discussion.
We did not provide enough time for ESCC members to reach out to their members.

APS - affordability is the strongest driver
30 point plan- housing shortage
BSSB has endeavoured to guide our work via the affordability charter
4 dimensions of affordability

- Construction - ICC
- Life cycle analysis - lower retrofit costs, energy decreases energy $ to occupant
- Risk mitigation impacts - resilient design
- Social dimensions - accessibility, decarbonization

Working on the buildings pathway - new and existing buildings
RCT agreement has been signed - based on canadian free trade agreement - NBC does not regulate resiliency and mitigation. Agree to adopt within 24 months once NBC 2021 has been released, 18 months for each subsequent version. Regarding 20% better - will not be in regulation for this fall, but rather mid 2022.
Overheating - Zac - national committee in scoping and planning phase - need to have BC representation, so will be reaching out to members via SCC. National is taking this issue seriously and are moving forward with urgency. The national process will guide the process moving forward. NRC and Canmet will be doing the analysis.
Code cycle - update everyone 5 years- can it be sooner? APS - this is something that has been talked about nationally.

Proposed GHGis steps - voluntary pollution standards- could be similar to the Step Code
Step 1 - measure only
Step 2 - decarbonize of either heating or DHW - not prescriptive*
Step 3 - Near Zero Carbon
Zac acknowledges that looking at complete decarbonization of energy supply
Could have 4 steps instead of 3.
Emissions factor : Looking at GGIRCA 2019 values - would be static - we need to have something in regulation for everyone to build to. GGIRCA is based on a 3 year average, so 2019 would be 2017, 2018 and 2019 averages
Needs to be objective and defendable
Curt - discrepancy between emissions factors in Portfolio Manager and GGIRCA - Zac - there will be discrepancies; however, we need to pick one #.
Jeff- number of different steps currently within the Step Code comparing commercial, MURB, Part 9.
How will the 3 steps relate for GHGis? Zac - would be great to having 3 steps for all architypes for both GHGis and Energy
Patrick - GGIRCA number throws metrics out of whack currently established by LGs. Leary of adopting different emissions factors if they are just going to drop in the future via the clean grid proposals. CoV has been refernced in the code and works re: emissions factors. Why not stick with this rather than rocking the boat.
Jeff: LGs using GHG standards using CoV standards will cause issues
[10:23 a.m.] Curt Hepting (EnerSys) (Guest)

Patrick - I appreciate your hesitancy to increase the electric GHG factor, but my recent analysis using the even higher 0.0401 factor is still relatively low and I've found we can easily meet the previously proposed GHGIs for at least schools. I see no reason this wouldn't hold for other building types.

Tom - why not use current CoV and wait until clean grid and associated changes. Why change what is working? Can reference the clean energy standard when it becomes available.

Roberto - can conduct study of new emissions factor to see if Steps can be met. If not a big deal with increased emissions factor, then could consider using GGIRCA. Sensitivity analysis will shed some light.
Zac - voluntary carbon pollution standard, so would expand scope in BCBC and potentially include in Step Code for voluntary adoption.
APS - could be include objective via 'environment'.

RNG/Hydrogen - use an emissions factor for NG a this point in time given lack of emissions factor for RNG and Hydrogen
Bea - there is an emissions factor determined by Fortis for RNG - this should be look at this for analysis. Post occupancy is another issue altogether in terms of locking in customers for use of RNG in perpetuity.
Zac: could use RNG EF is code, but it is hard in terms of compliance and enforcement via Building Officials and LGS.
Bea: working on application for tariffs to BCUC for this december. Commission would not make a decision for about another 10 months.
APS - would bring into regulation once tariff has been put in place.
Zac: we need something now as opposed what could be in the future
District energy - will need to rely on discretion of LGs to set. In discussion regarding methodology.

Need minimum energy efficiency improvement for GHGis steps to apply to avoid high operational costs, with the exception of the report only step. Ie step 3 (20% better) for Part 9 - this applies to fall regulation and not future changes to basecode minimum.
[10:55 a.m.] Pape-Salmon, Andrew OHCS:EX
Further to discussion on affordability and land-use planning, it is our goal that local governments that require carbon performance will enable increased density without lengthy and detrimental rezoning negotiations and public hearings. The increased fuel cost of operating a low carbon building can be compensated by enabling density. This is not around approving larger houses as is the case in one municipality, but rather increasing the number of residential units. We will be monitoring the extent to which LGs are approving density in the context of carbon pollution standards and will consider policy responses if there are challenges identified.

Alex:
Question was asked about just using TEDI for calculating GHGis. For Part 3 - TEDI does not include DHW. So big descrepancy. Part 9 focuses on MEUI and ERS which does not include plug-loads and base loads, but does include DHW.
APS - could we determine peak KW to give an indication of challenges that the grid may see for electrification.

[11:22 a.m.] Roberto (ZEBx) (Guest)
We're moving to Step 3 in 2022. The service connection for an all-electric S3 building is likely to be less than current all-electric buildings.

Costs for additional transformers and distribution extension.

[11:23 a.m.] Patrick Caraher
Encouraging LGs to skirt around rezoning negotiations and public hearings to drive density is a slippery slope... these processes are in place for a reason, and relaxing them can have unintended consequences.
like 1

Offices have lower heating loads and lower DHW loads so lower GHGIs
Colder climate is a little bit higher for all architypes
Hotels have highest ICCs of all of the architypes so could be the limiting factor.
** in powerpoint by alex - she normalized the ECMs for all GHGis scenarios, so ICCs are refer to changes to equipment etc to meet GHGi level.
Max: could we find synergies with overheating with GHGis analysis. What about CEDI?

Part 9
Don't have the full parametric run via HTAP, yet.
Size of dwelling has a huge impact on proportion of DHW. High for small bldgs, small for big bldgs.
Option 1 - could use TEDI and DHW
Would different targets for different size homes. MEUI stays the same? This methodology would better help with smaller homes.
Option 2 - MEUI
% of MEUI based on expected proportion of low carbon fuel.
For large homes - biggest bang would be for space heating. For small homes - biggest would be DHW

Potentially have one GHGi metric for Part 9, harder for Part 3.
CoV has varying GHGis based on house size.

Zac: would be good to have working group. Get recommendations from volunteers to present to SCC.

Discussion with Alex:
Part 9 - the issue of trying to apportion the appropriate amounts of GHG reductions given building size.
One proposal is looking at TEDI and DHW in lieu of MEUI - fundamentally TEDI+DHW = MEUI. TEDI is apportioned based on a percentage of energy usage given the building size.
Issue is that for large buildings - electrifying DHW would not get them over the finish line, so they would need to focus on space heating which takes up a huge chunk of the pie, so they would well surpass the GHGi metric whereas small buildings may need to focus on both DHW and TEDI. Trying to level the playing field.
One issue is that TEDI does not take into account equipment efficiencies.

SCC meeting 2021-06-09

Next 2-4 weeks

Jeff UDI - re metrics - some concerns raised about electrification and additional costs. He is looking into this further and will report back.
Also asked the question about getting info out to industry about how to build the buildings as outlined in the Metrics Research Report. Zac indicated that they would happen later in the process, potentially after once we have some numbers and analysis.

Fortis - Brent Graham
Goal of 15% renewable gas to meet CleanBC.
Working on ammendments to the Greenhouse Gas Reduction Regulation (GGRR)
Renewable gas includes hydrogen, lignin (by product of pulp and paper, would be used as displacement of NG) and syngas - this expanded list gives Fortis more latititude regarding how they are going to meet the 15% reduction.
Currently on-line is 0.4 petajoules looking to get to a 30 petajould cap to meet GGRR - with agreements that are being worked on they will be up to 24 petajoules and have not yet looked at hydrogen.
Clean Portfolio Standard which is being developed via the CleanBC.
If they bring on RNG they need clarity regarding policy to make sure that there will be consumer demand for all these efforts. CPS needs to be finalized to move forward.
Majority of systems in 2050 will be renewable.
Fortis has undertaken a study of role of energy efficiency and renewable gas in reducing emissions in new construction. Will be expanding scope to existing buildings.

**Zac - could have in regulation prior to 2022 BCBC, this is not coupled with the code. Could be a stand alone regulation.
LGs would have a number of steps to choose from. They would need to do their own impact analysis to determine impacts.
Roberto - would LGs loose their current low carbon pathways? Zac: want to create a great approach so there is more buy-in. A delicate balance.
Zac- we have explicit mandate to create carbon polution standards for LGs. Need to balance with the roadmap, as necessary, and will have more clarity this fall.

GHG survey

- Consensus with measure only step - ie included with energy modelling outputs, similar to ATT for step 1
- Gradual implementation - how this would roll out with LGs remains to be seen - ie LGs could go to highest step right away which could be and issue.
- Support for GHGis as the metric, but some concerns with small buildings
- Start with the most common building types similar to the Step Code
- Measure only GHG step for Step2/3 for 2022?
- Some desire for measure only for embodied carbon - not ready to put in regulation
- Some flexibility to secondary sources - ie wood burning stoves
- LGs with existing limits want to be grandfathered so there is no step back. Max Sykes raised density bonuses for more stringent GHGi limits
- Not much consensus on when more stringent requirements should be phased in.
- Less consensus on aligning GHGs with energy efficiency other than report only.

From:	McCrae, Aura OHCS:EX
To:	"jfisher@udi.org"
Bcc:	McCrae, Aura OHCS:EX
Subject:	Feedback Request: Building Energy Requirements Tool (BeRT)
Date:	Thursday, June 4, 2020 1:16:26 PM
Attachments:	Request Upcoming Engagement Session with Building and Safety Standards Branch (Municipal Affairs and Housing).msg

Hello Jeff,

I reached out to you last year to requesting your participation in our consultation sessions for BeRT (email attached for reference). You have given Jonathan Meads and Dale Mikkelson for additional contacts.

Since the completion of the sessions last year, the project team has developed the initial tool prototype and conducted user testing in March. Currently, we are looking into data management – collection, usage and storage as well as privacy impact assessment as we plan the next phase of the tool development.

Once again, we're seeking your input and feedback as we develop this tool to standardize the process for demonstrating, gathering and storing data pertaining to energy efficiency for Part 3 buildings. Additionally, the project team is exploring ideas on the BeRT's long-term intention to be a central repository of building information (in addition to energy) from permit submission to post-occupancy.

Could you please provide your thoughts on the following:

- Any supplemental information that would be useful to collect (e.g., energy modelling documents, architectural, mechanical, electrical drawings etc.)?
- What other types of data would be useful to collect in addition to energy requirements (e.g., post-occupancy performance data, etc.)?
- What type of information constitutes intellectual property or what information would your members be reluctant to disclose privately or publicly?
- Would the information requested in the City of Vancouver's current checklists, or the Part 3 Energy Design Report be considered sensitive?

Looking forward to hearing your response.

Thanks in advance.

Aura McCrae
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
T: 778 698-7635 | M: 250 880-4566 | Email: aura.mccrae@gov.bc.ca

Offering acknowledgement in respect of the Lekwungen Speaking People, traditional keepers of this land on which I live, work and play.

Aura McCrae
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
T: 778 698-7635 | M: 250 880-4566 | Email: aura.mccrae@gov.bc.ca

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Request: Upcoming Engagement Session with Building and Safety Standards Branch (Municipal Affairs and Housing)

From: McCrae, Aura OHCS:EX </O=BCGOVT/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1D97A8531DAA4174849065AA493A1D0D-MCCRAE, AURA OHCS>
To: jmeads@qualico.com
Sent: December 4, 2019 11:32:13 AM PST
Attachments: image002.jpg

Hi Jonathan,
Jeff Fisher of UDI provided your name to us in response to the email below. Iâ€™m looking to book a 1 hour meeting with you to talk with our contractor who will be leading this session. Can you please advise on your availability this week (or next)? For this week, tomorrow or Friday afternoon looks pretty open from our end.
Thanks in advance,

Aura McCrae
Senior Policy Analyst
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
T: 778 698-7635 | M: 250 880-4566 | Email: aura.mccrae@gov.bc.ca

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From: McCrae, Aura OHCS:EX
Sent: November 18, 2019 12:28 PM
To: jfisher@udi.org
Cc: May, Zachary OHCS:EX
Subject: FYI/Request: Upcoming Engagement Session with Building and Safety Standards Branch (Municipal Affairs and Housing)

Greetings,
I am writing to you as you have been identified as a contact for your organization.
As you may or may not know, Building and Safety Standards Branch (BSSB) with the BC government is working on an initiative called Building Energy Requirements Tool (BERT for short).
This tool is intended to gather data to help inform policies and programs throughout the building lifecycle.
Specifically, BERT will:

- Help manage information
- Support industry compliance with BC Building Code requirements
- Support local government enforcement of code requirements
- Improve transparency

With the initial application aimed at supporting industry and local government's transition to new energy performance requirements, there is potential to assess opportunities in tool development and other data needs.
To do this, we would be conducting engagement/consultation sessions in the next few weeks to seek your input. The purpose of these sessions is to document data needs in building/built environment to inform tool development from a user interface (data inputs and outputs) and on how we may manage the data we collect.
In addition to yourself, please provide 2 to 3 additional contacts from your organization as soon as possible.
*Note: we have also reached out to International Building Performance Simulation Association of British Columbia, Association of Professional Engineers and Geoscientists of British Columbia, Architectural Institute of British Columbia to seek representation from their organizations.
Myself and/or other members of the project team will be in contact with you with further details on this planned engagement/consultation session.
Please advise if you are no longer the appropriate contact. I look forward to hearing from you.
Sincerely,

Aura McCrae
Senior Policy Advisor
Building and Safety Standards Branch | Ministry of Municipal Affairs and Housing
T: 778 698-7635 | M: 250 880-4566 | Email: aura.mccrae@gov.bc.ca

From: Cassandra McColman
To: McCrae, Aura HOUS:EX
Cc: Jeff Fisher
Subject: RE: Feedback Request: Building Energy Requirements Tool (BeRT)
Date: Thursday, August 13, 2020 2:14:29 PM

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Hi Aura,
I hope you're enjoying the summer and apologies for the delay. Please see our comments on the questions you provided, and if you have any follow-up questions, don't hesitate to let us know.
Many thanks,
Cassandra

Could you please provide your thoughts on the following:

- *Any supplemental information that would be useful to collect (e.g., energy modelling documents, architectural, mechanical, electrical drawings etc.)?*
  - *Building description by location (climatic zone) + what step code level designed.*
- *What other types of data would be useful to collect in addition to energy requirements (e.g., post-occupancy performance data, etc.)?*
  - *Building air tightness would be an after thought (design versus tested building) how many buildings met the air tightness design requirements.*
- *What type of information constitutes intellectual property or what information would your members be reluctant to disclose privately or publicly?*
  - *Must be in full compliance with privacy act.*
- *Would the information requested in the City of Vancouver's current checklists, or the Part 3 Energy Design Report be considered sensitive?*
  - *Yes in compliance with privacy act.*

We also received the following general comments:

We would suggest that the required data held and published be kept to a minimum and focused on the major Step Code performance indicators:

1. *Modelled TEDI, TEUI and carbon intensity*
2. *Annual post-occupancy TEUI, carbon intensity*
3. *Post-occupancy TEUI, carbon intensity normalized to account for differences in model to actual use (e.g., normalization to account for differences in occupant density, operational hours, addition of data centres/ exceptional loads, changes in space utilization)*
4. *Post-occupancy data posted publicly as per CaGBC Disclosure Project (Energy Star score, NEUI, water intensity, etc..)*

All four should be reviewed by a third-party to validate accuracy (EPL does this for us already, so no extra cost for builders).
All other data should either be confidential and/or will not be consistently enough gathered to be of public value and/or burdensome for the owner to maintain in the public record.

From: McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Sent: July 21, 2020 9:25 AM
To: Cassandra McColman <cmccolman@udi.org>

Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: Feedback Request: Building Energy Requirements Tool (BeRT)
Hi Cassandra,
Feedback would be appreciated – no rush though. Perhaps in the next couple of weeks would be great.
I will let you know once there are additional information sessions planned. Right now we are sorting out some internal/backend work on BeRT.
Thanks again!
Aura

From: Cassandra McColman <cmccolman@udi.org>
Sent: July 20, 2020 12:18 PM
To: McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Cc: Jeff Fisher <jfisher@udi.org>
Subject: RE: Feedback Request: Building Energy Requirements Tool (BeRT)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Aura,
Apologies for the delay, Jeff asked me to follow-up on your earlier note to confirm whether or not you are still looking for feedback on the items below. If so, when would you like comments submitted by?
We also wanted to confirm if there will be any additional information sessions for this project (webinars) that we could send out to our members?
Many thanks,
Cassandra

From: McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Sent: June 4, 2020 1:16 PM
To: Jeff Fisher <jfisher@udi.org>
Subject: Feedback Request: Building Energy Requirements Tool (BeRT)
Hello Jeff,
I reached out to you last year to requesting your participation in our consultation sessions for BeRT (email attached for reference). You have given Jonathan Meads and Dale Mikkelson for additional contacts.
Since the completion of the sessions last year, the project team has developed the initial tool prototype and conducted user testing in March. Currently, we are looking into data management – collection, usage and storage as well as privacy impact assessment as we plan the next phase of the tool development.
Once again, we're seeking your input and feedback as we develop this tool to standardize the process for demonstrating, gathering and storing data pertaining to energy efficiency for Part 3 buildings. Additionally, the project team is exploring ideas on the BeRT's long-term intention to be a central repository of building information (in addition to energy) from permit submission to post-occupancy.
Could you please provide your thoughts on the following:

- Any supplemental information that would be useful to collect (e.g., energy modelling documents, architectural, mechanical, electrical drawings etc.)?
- What other types of data would be useful to collect in addition to energy requirements (e.g.,

post-occupancy performance data, etc.)?

- What type of information constitutes intellectual property or what information would your members be reluctant to disclose privately or publicly?
- Would the information requested in the City of Vancouver's current checklists, or the Part 3 Energy Design Report be considered sensitive?

Looking forward to hearing your response.

Thanks in advance.

Aura McCrae
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From: Maura Gatensby
To: Harshan Radhakrishnan; Andersson, Dale OHCS:EX
Cc: Williams, Scott B HOUS:EX; McCrae, Aura HOUS:EX
Subject: RE: Follow-up AIBC-EGBC- Part 3 Energy Design Report Collection meeting Sept. 17
Date: Tuesday, November 10, 2020 4:41:13 PM

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thanks Harshan.
I support to the addition of your four points, really helpful.
All the best
Maura

From: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>
Sent: November 10, 2020 2:44 PM
To: 'Andersson, Dale OHCS:EX' <Dale.Andersson@gov.bc.ca>; Maura Gatensby <MGatensby@aibc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: Follow-up AIBC-EGBC- Part 3 Energy Design Report Collection meeting Sept. 17

Hi Dale,

I seemed to recollect that AHJs could have greater sensitivities regarding central reporting out. Reason being is that although LoAs are FOIPPable, AHJs typically handle those requests and have vetting mechanisms in place to deal with requests. My recollection was also that some of AHJs present at the last meeting were going to seek legal counsel on this matter. Also, perhaps checking to see if there are sensitivities from BOMA or UDI's perspectives could be useful as it could highlight concerns of owners or builders.

It is not immediately clear to me what concerns Engineers and Geoscientists BC might have about individually identifying buildings and would seek to learn from Maura's perspectives on this.

If proceeding with this, there might be benefit in having an explanatory notes section (for the uninitiated) and a disclaimers section (with legal input). This would include stating things such as:

1. information provided is based on the checklist submitted to local government authorities to verify compliance with the BC Energy Step Code - purpose is to inform future policies, bylaws & code
2. the Energy Design Reports are not stamped and sealed and they are not Letters of Assurance under the BC Building Code – for code mandated LoAs refer to filed LoAs.
3. information is provided to promote a consistent way to gather and review modelled energy performance. Actual building energy performance will differ from modelled outputs due to variations in occupancy, operations, maintenance, weather, and other factors
4. there could be gaps in the information presented here because the report presents information at a snapshot in time – more complete information can be obtain through a review of information submitted at various development review stages

I am sure there's more to add in to this space, but I wanted to provide an initial response to your email and await further input from Maura.

On another note, I know Susan was working on a "Tips sheet" relating to the Energy Design Report – it might be useful to publish it ahead of going live.

Thanks,

Harshan Radhakrishnan, P.Eng., M.A.Sc., | Manager, Climate Change and Sustainability Initiatives
Engineers and Geoscientists British Columbia
200 - 4010 Regent Street, Burnaby, BC, V5C 6N2
Tel: 604.412.6054 | **Toll-Free:** 1.888.430.8035 ext. 6054 | **Web:** egbc.ca

To meet the latest advice from public health officials, our office is temporarily closed to help prevent the spread of COVID-19. We will continue to work remotely to support our operations. For the latest information, please visit our website at egbc.ca/COVID-19.

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From: Andersson, Dale OHCS:EX <Dale.Andersson@gov.bc.ca>
Sent: November 10, 2020 11:02 AM
To: Harshan Radhakrishnan <hradhakrishnan@egbc.ca>; Maura Gatensby <MGatensby@aibc.ca>
Cc: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Subject: Follow-up AIBC-EGBC- Part 3 Energy Design Report Collection meeting Sept. 17

Hello Harshan and Maura,

I just wanted to follow-up with you re: the Sept. 17 meeting about centrally collecting the completed Part 3 Energy Design Reports. My notes indicate that both AIBC and EGBC support collection of the reports at the As Built stage, so long as individual buildings are not identified in any central reporting out? Is that correct?

If yes, can you clarify what the concern is if individual buildings are identified? Is it the concern of owners or builders as to how their buildings perform compared to other buildings?

Thank you for your assistance. We hope to follow-up with everyone about the Sept. 17 meeting soon.

Kind regards,

Dale

DALE ANDERSSON | Building and Safety Standards Branch

Email: Dale.Andersson@gov.bc.ca

From:	Jeff Fisher
To:	McCrae, Aura HOUS:EX; "reception@concertproperties.com"; "cho@polyhomes.com"; "Rick.Bortolussi@townline.ca"
Cc:	Vukosavljevic, Nicole OHCS:EX; "dramslie@concertproperties.com"; Cassandra McColman; Lily Shields-Anderson
Subject:	RE: Response Requested: Existing Buildings Technical Research Steering Committee - please respond by end of day Wednesday, February 2, 2022
Date:	Monday, January 31, 2022 4:06:14 PM
Attachments:	image016.png image001.png image017.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Aura, I talked to David Ramslie, and he would like to participate as the alternate for UDI. His contact information is:

Dave Ramslie | Vice President, Innovation & Sustainability

8th Floor, 1190 Hornby Street
Vancouver, BC V6Z 2K5

Email: DRamslie@concertproperties.com

d 604.602.3826 **c** 604.307.7184

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Jeff Fisher, M.PL., CAE, MCIP, RPP
Vice-President & Senior Policy Advisor
Direct: 604.661.3031 | Cell: 604.340.8019
Email: jfisher@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

UDI URBAN DEVELOPMENT INSTITUTE PACIFIC REGION

From: McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Sent: January 31, 2022 2:09 PM
To: 'reception@concertproperties.com' <reception@concertproperties.com>; 'cho@polyhomes.com' <cho@polyhomes.com>; 'Rick.Bortolussi@townline.ca' <Rick.Bortolussi@townline.ca>; Jeff Fisher <jfisher@udi.org>
Cc: Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: Response Requested: Existing Buildings Technical Research Steering Committee - please respond by end of day Wednesday, February 2, 2022

Greetings,

This email is from the Building and Safety Standards Branch (BSSB) in the Ministry of the Attorney General and Responsible for Housing. BSSB has retained RDH and Integral to complete research to understand the energy and GHG performance of equipment and existing buildings in British Columbia and to identify the potential for energy and GHG reductions using a variety of retrofit measures and strategies. As a result, BSSB is convening an Existing Buildings Technical Research Steering Committee to help guide the project and provide feedback on the technical analysis and draft reports.

You are receiving this email because your organization is invited to participate on the Steering Committee. Membership is limited to 1 main participant and 1 alternate representative from each organization. The Steering Committee will meet approximately 8 times, up to 2.5 hours per meeting, throughout the duration of the research project. The first meeting is slated in mid-February.

Please confirm your organization's interest in participating and your 1 main participant as well as a 1 alternate representative by replying to this email by end of day Wednesday, February 2nd.

Myself and/or other members of the project team will be in contact with you with further details on this planned kick-off. In the meantime, watch out for a subsequent email with possible dates to hold the kick-off via doodle poll.

If you have any questions, please contact myself via email at aura.mccrae@gov.bc.ca.

Thank you and we look forward to hearing from you.

Aura McCrae
Senior Policy Analyst
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
T: 778 698-7635 | M: 250 880-4566 | Email: aura.mccrae@gov.bc.ca

I acknowledge, with gratitude and respect, the Lək̓ʷəŋən peoples on whose traditional territory I live and work, and recognize the Songhees, Esquimalt (Xwsepsum), and W̱SÁNEĆ Nations whose deep connections with this land continue to this day.

BRITISH COLUMBIA

From: Williams, Scott B OHCS:EX
To: McCrae, Aura HOUS:EX; Vukosavljevic, Nicole OHCS:EX
Subject: RE: For review: EBTR SC Minutes kick off Feb 14 22
Date: Tuesday, February 22, 2022 12:10:22 PM
Attachments: EBTR SC Minutes kick off Feb 14 22.docx

HI Aura,

Sorry, I was not able to address last week.
I added a few more comments to the minutes. See attached.

As a courtesy, I suggest that we send over to RDH/Integral for some additional input as necessary prior to firing over to the SC.

Scott Williams P.Eng, CPHD, LEED AP| Senior Codes Engineer

Building and Safety Standards Branch | Ministry of Attorney General and Minister Responsible for Housing
Phone: 236-478-2043 cell: 250-880-7712
Email: Scott.B.Williams@gov.bc.ca

From: McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Sent: Tuesday, February 22, 2022 8:12 AM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: For review: EBTR SC Minutes kick off Feb 14 22

Good morning,

Any chance this was dealt with last Friday?

If not, can you please let me know when this is ready to go.

Thank you.
Aura

From: McCrae, Aura OHCS:EX <Aura.McCrae@gov.bc.ca>
Sent: Thursday, February 17, 2022 2:09 PM
To: Williams, Scott B OHCS:EX <Scott.B.Williams@gov.bc.ca>; Vukosavljevic, Nicole OHCS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: For review: EBTR SC Minutes kick off Feb 14 22

Hello again you two,

Here's the revised minutes for your review. As mentioned, if I don't hear back from you today, can either of you send this out to the Steering Committee members?

Nicole - You can see that I've removed the table formatting and summarized/themed the comments. Action items are now at the top of the document and include other tasks from the meeting. Attendance is based on the actual MS Teams record.

Existing Buildings Technical Research Steering Committee | MINUTES

Meeting date | time *February 14, 2022* | *1:30-3:00pm PST* | Meeting location *MS Teams*

Chair Nicole

Agenda topics

Time allotted | *60 min* | Agenda topic *Proposed Methodology* | Presenter *Christy*

Action items	Person responsible	Deadline	Status
Proposed Methodology – written feedback	All	Friday, Feb 18	IP
Terms of Reference – written feedback	All	Friday, Feb 18	IP
Share BC Hydro study as requested by Max	Scott and Christy	asap	IP
Follow-up with Max on data tool and dataset sources	Eduard	asap	IP
Send international and national studies of successful retrofits to BSSB/RDH/Integral	Robert	asap	Completed

DRAFT

Discussion

- Technical research completion by end of June 2022 which will feed into the EB Renewal Strategy to be released in fall 2022.
- Advisory Committee Roles and Responsibilities: SC members to review the draft Terms of Reference.
- Overall approach
    - Phase 1: Research and Test Methodology
        - Task 1 Research Scan (build on prior research)
        - Task 2: Market Scan (Phase 2) - objectives include identifying dominant building archetypes in the Province and inform archetype selection for Phase 2 analysis
        - Task 3: Test Methodology
    - Phase 2: Apply methodology to all archetypes (QTY 10) – 5 PSO and 5 non-PSO with some crossover
- Proposed Approach – Phase 1: 2016 CWEC climate files and 3 climates (Vancouver zone 4, Kelowna zone 5 and Prince George zone 6)
- Selection of Measures – provided a summary of NECB 2020 prescriptive requirements and suggested alternatives.

SC Member Comments

Trigger requirements

- Focus on 'time of replacement' with no mandatory requirements on when retrofits are to be undertaken (or performance met).

Archetypes:

- Non-PSO model for Phase 1(MURBS and offices) would underestimate low-income energy use since it does not take the person density into account. Condos, market rent, non-market rent each with different performance
- Private and public care facilities have different existing building performance (public = higher than minimum code levels in public procurement vs private is likely closer to code minimums).
- Consider archetypes and ECM solutions to at least be run through the future climate files to at minimum identify 'potential implications for the main results and issues for future investigation' = could inform Phase 2 and after
- Care facilities are treated as an archetype constructed by the public sector, but the approach and performance metrics would likely apply to private sector archetypes (2/3 of care facilities are private sector).
- s.13

Test Methodology:s.13

- Consider overheating/future climate analysis in the test methodology metrics (i.e., overheating hours along with TEUI, GHGI, etc.) given knowledge of warming climate.
- Overall, the methodology proposes to look at overall heating and cooling demand, not necessarily sizing of mechanical systems. With future climate files, we can expect the heat demand to drop and the cooling demand to increase;s.13
- Peak demand will be looked at as part of the analysis.
- IAQ/health considerations in retrofits – where envelope s.13 , consider ventilation assessment (e.g., wildfire smoke) and how ventilation requirements would be incorporated into retrofits.
- s.13
- "Cool Roofs" (light coloured roof coatings) for a more economical way reducing overheating top floors of MURBs & offices.
- s.13 improved airtightness assumed within other envelope upgrades.
- Consider sensitivity runs re: 2020 and 2050 files; proposal to use CWEC 2016 files for energy modelling; will lead us to overestimate TEDI for space heating and underestimate cooling energy consumption and peak demand compared to current and future climate

Performance Measures:

- Opaque building assemblies will be more important in Climate Zone 6 than Climate Zone 4 and should be a stand alone 'measure'.s.13
- Consider fuel switch to RNG and hybrid heating systems.
- Measures should be reviewed based on alternate base buildings (i.e., if the building had electric heating baseboard, not a gas fired hydronic).
- Narrow options based on whether the existing heating system delivery is unitary, ducted, hydronic in-floor, etc.
- Consider a flow chart optic with pathways that include the 'bundling' of upgrades that would guide renovators (i.e., if you replace windows or exterior opaque wall assemblies you must have s.13 ventilation system overview).

s.13

s.13

Timeline	Person responsible	Deadline
Phase 1 modelling and market scan – complete by March 4	RDH / Integral	Complete by March 4
SC meeting	BSSB / All	Week of March 7
Phase 1 iterations as needed	RDH / Integral	Complete by March 18
SC meeting	BSSB / All	Week of March 28
Phase 2 Kickoff	BSSB / All	Week of March 28
SC meeting	BSSB / All	Week of March 28

Organization	Participant	Confirmed / Regrets
1. BC Climate Action Secretariat	Adrian Mohareb	confirmed
2. EMLI	Cam Shook	confirmed
3. Natural Resources Canada	Meli Stylianou	confirmed
4. National Research Council	Iain MacDonald	confirmed
5. Citizen Services – Real Property Division	Namrata Sheth	regrets
6. BC Hydro	Toby Lau	confirmed
7. FortisBC	Pete Koepfgen	confirmed
8. BC Housing	Bill MacKinnon	confirmed
9. Focal Engineering	Susan MacDougall	confirmed
10. ZeBX	Roberto Pecora	confirmed
11. Engineers and Geoscientists of BC (EGBC)	Harshan Radhakrishnan	confirmed
12. Architectural Institute of BC (AIBC)	Maura Gatensby	confirmed
13. Urban Development Institute (UDI)	Rick Bortolussi	confirmed
14. Canadian Home Builders' Association of BC (CHBA)	Darren Witt	confirmed
15. City of Vancouver	Greg McCall	confirmed
16. Metro Vancouver	Erik Blair	regrets
17. City of Port Moody	Laura Sampliner	confirmed
18. City of Surrey	Max Sykes	confirmed
19. City of Maple Ridge	Kelly Lane	confirmed
20. City of Richmond	Norm Connolly	confirmed
21. Community Energy Association (CEA)	Alison Jenkins	confirmed
22. City of Kimberley	Andy Christie	confirmed
23. Regional District of Central Kootenay (RDCK)	Paul Faulkner	confirmed
24. University of British Columbia	Ralph Wells	confirmed

25. Aboriginal Housing Management Association (AHMA)	Pat Caraher	confirmed
26. BC Non-Profit Housing Association	Ian Cullis	confirmed
27. AME Consulting Group Ltd.	Matt Younger	confirmed
28. Landlord BC	David Hutniak	confirmed
29. Bernhardt Contracting	Jordan Lester	confirmed
30. Passive House	Luiz Bezerra	confirmed

From:	McCrae, Aura OHCS:EX
To:	Mohareb, Adrian ENV:EX; Shook, Cameron EMLI:EX; "meli.stylianou@canada.ca"; "Macdonald, Iain"; Lau, Toby; "Koepfgen, Pete"; "Susan MacDougall"; Bill MacKinnon; "Roberto Pecora"; "Harshan Radhakrishnan"; "Maura Gatensby"; "Rick.Bortolussi@townline.ca"; "darren@bercumbuilders.com"; "McCall, Gregory"; "Erik Blair"; "Laura Sampliner"; "Sykes, Maxwell"; "Kelly Lane"; jordan@bernhardtcontracting.com; "Connolly,Norm"; "ajenkins@communityenergy.bc.ca"; "Building.Official"; "Paul Faulkner"; "Wells, Ralph"; "Patrick Caraher"; "ian@bcnpha.ca"; "mattyounger@amegroup.ca"; "David Hutniak"; Allison DenToom; "luiz.bezerra@passivehousecanada.com"; Sheth, Namrata CITZ:EX; French, Christine CITZ:EX
Cc:	Vukosavljevic, Nicole OHCS:EX; Williams, Scott B HOUS:EX; "Christy Love"; "Lisa Westerhoff"; "Eduard Cubi"; "Malin Ek"; "Laura Simandl"
Subject:	FYI - EBTR Steering Committee Kick-off Meeting Minutes
Date:	Monday, March 7, 2022 11:29:21 AM
Attachments:	image001.png EBTR SC Minutes kick off Feb 14 22 final.pdf

Good morning,

Please find attached the minutes for the February 14th existing buildings technical research kick-off meeting.

Aura McCrae
Senior Policy Analyst
Building and Safety Standards Branch | Office of Housing and Construction Standards
Ministry of Attorney General and Minister Responsible for Housing
T: 778 698-7635 | M: 250 880-4566 | Email: aura.mccrae@gov.bc.ca

I acknowledge, with gratitude and respect, the Lək^{w}əŋən peoples on whose traditional territory I live and work, and recognize the Songhees, Esquimalt (Xwsepsum), and W̱SÁNEĆ Nations whose deep connections with this land continue to this day.

Existing Buildings Technical Research Steering Committee | MINUTES

Meeting date | time *February 14, 2022* | *1:30-3:00pm PST* | Meeting location *MS Teams*

Chair	Nicole

Agenda topics

Time allotted | *60 min* | Agenda topic *Proposed Methodology* | Presenter *Christy*

Action items	Person responsible	Deadline	Status
Proposed Methodology – written feedback	All	Friday, Feb 18	IP
Terms of Reference – written feedback	All	Friday, Feb 18	IP
Share BC Hydro study as requested by Max	Scott and Christy	asap	IP
Follow-up with Max on data tool and dataset sources	Eduard	asap	IP
Send international and national studies of successful retrofits to BSSB/RDH/Integral	Luiz	asap	Completed

Discussion

- Technical research completion by end of June 2022 which will feed into the EB Renewal Strategy to be released in fall 2022.
- Advisory Committee Roles and Responsibilities: SC members to review the draft Terms of Reference.
- Overall approach
    - Phase 1: Research and Test Methodology
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        - Task 3: Test Methodology
    - Phase 2: Apply methodology to all archetypes (QTY 10) – 5 PSO and 5 non-PSO with some crossover
- Proposed Approach – Phase 1: 2016 CWEC climate files and 3 climates (Vancouver zone 4, Kelowna zone 5 and Prince George zone 6)
- Selection of Measures – provided a summary of NECB 2020 prescriptive requirements and suggested alternatives.

SC Member Comments

Trigger requirements

- Focus on 'time of replacement' with no mandatory requirements on when retrofits are to be undertaken (or performance met).

Archetypes:

- Non-PSO model for Phase 1(MURBS and offices) may underestimate low-income energy use since it does not take the person density into account. Condos, market rent, non-market rent each with different performance
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- Care facilities are treated as an archetype constructed by the public sector, but the approach and performance metrics would likely apply to private sector archetypes (2/3 of care facilities are private sector).

Methodology:

- Consider overheating/future climate analysis in the test methodology metrics (i.e., overheating hours along with TEUI, GHGI, etc.) given knowledge of warming climate (at least for archetypes vulnerable to overheating).
- Overall, the methodology proposes to look at overall heating and cooling demand, not necessarily sizing of mechanical systems. With future climate files, we can expect the heat demand to drop and the cooling demand to increase.
- Consider sensitivity runs re: 2020 and 2050 files; proposal to use CWEC 2016 files for energy modelling; will lead us to overestimate TEDI for space heating and underestimate cooling energy consumption and peak demand compared to current and future climate
- Peak demand will be looked at as part of the analysis.
- IAQ/health considerations in retrofits – where envelope airtightness is improved, consider ventilation assessment (e.g., wildfire smoke) and how ventilation requirements would be incorporated into retrofits.
- Consider "Cool Roofs" (light coloured roof coatings) for a more economical way reducing overheating top floors of MURBs & offices.
- Assumed airtightness improvements will be modeled with enclosure upgrades.
- Wherever possible consider emissions reduction and climate resilience in concert with energy efficiency
- Performance path should be an option for private sector buildings

Performance Measures – Future Considerations from the Steering Committee:

- Consider that opaque building assemblies may be more important in Climate Zone 6 than Climate Zone 4 and should be a standalone 'measure'.
- Consider fuel switch to RNG and hybrid heating systems.
- Consider evaluating measures based on alternate base buildings (i.e., if the building had electric heating baseboard, not a gas fired hydronic).
- Narrow options based on whether the existing heating system delivery is unitary, ducted, hydronic in-floor, etc.
- Consider a flow chart optic with pathways that include the 'bundling' of upgrades that would guide renovators (i.e., if you replace windows or exterior opaque wall assemblies you must have a ventilation system overview).
- Would be great if building owners could be provided guidance, for example based on window to wall ratio – e.g. is there a certain percentage of glazing that would shift focus from opaque to glazed components, or when would one abandon central systems for distributed heat pumps?

Timeline	Person responsible	Deadline
Phase 1 modelling and market scan	RDH / Integral	Complete by March 11
SC meeting	BSSB / All	TBC

Timeline	Person responsible	Deadline
Phase 1 iterations as needed	RDH / Integral	TBC
SC meeting	BSSB / All	TBC
Phase 2 Kickoff	BSSB / All	TBC
SC meeting	BSSB / All	TBC

Organization	Participant	Confirmed / Regrets
1. BC Climate Action Secretariat	Adrian Mohareb	confirmed
2. EMLI	Cam Shook	confirmed
3. Natural Resources Canada	Meli Stylianou	confirmed
4. National Research Council	Iain MacDonald	confirmed
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27. AME Consulting Group Ltd.	Matt Younger	confirmed
28. Landlord BC	David Hutniak	confirmed
29. Bernhardt Contracting	Jordan Lester	confirmed
30. Passive House	Luiz Bezerra	confirmed

From: UDIOkanagan
To: OHCS BSSB Public Review OHCS:EX
Subject: RE: Invite Reminder: BC Building Code Accessibility Focus Group
Date: Friday, June 17, 2022 11:55:48 AM
Attachments: image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Dan,

I have forwarded this to the appropriate people on our board. It will be up to them to respond in kind.

Hope this helps. Thank you for the reminder.

Cheers,

Lisa Jeffrey

Urban Development Institute – Okanagan Chapter
210, 1460 Pandosy Street
Kelowna, BC V1Y 1P3

Phone: 778.478.9649
Fax: 778.478.0393

Like us on…

From: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Sent: June 17, 2022 8:51 AM
To: OHCS BSSB Public Review OHCS:EX <BSSB.public.review@gov.bc.ca>
Subject: Invite Reminder: BC Building Code Accessibility Focus Group

Good morning,

I am writing to remind you of the invite to attend a virtual focus group discussion about how BC Building Code requirements may be improved to make new buildings more accessible.

This engagement follows the fall 2021 public engagement where I invited British Columbians to complete an online survey on accessibility in new buildings.

The purpose of this focus group session is to deepen our understanding of the feedback

received to help inform the development of enhanced BC Building Code changes to support all people to navigate new buildings safely.

> **Note:** A separate engagement session with First Nations and organizations representing Indigenous Peoples is planned for the fall 2022. A separate invitation will be provided.

Two virtual focus group sessions are planned to occur on June 29 from 12:30 pm to 3:00 pm and June 30 from 10:00 am to 12:30 pm. Each session will offer discussion on the following breakout group topics.

Topics	**Objectives**
Accessibility Features	Identify opportunities to enhance functional accessibility features to improve accessibility for people navigating new buildings.
Adaptable Buildings	Identify opportunities for homes to be designed and built to be more easily and cost-effectively changed to meet peoples' evolving accessibility needs.
Safe Evacuation	Identify changes to the BC Building Code that could enhance safe evacuation from new buildings.
Visitable Buildings	Identify enhanced standards that would help make new buildings more visitable.

If your organization would like to take part, please nominate a participant. To deepen the understanding of feedback collected, it would be ideal to nominate the person who responded to the fall survey and/or a person living with a disability. This request is provided as guidance to support inclusion of perspectives from people with lived experience. To support fluid discussions and time to hear all perspectives, a maximum of one participant per organization is requested.

I understand that some organizations may want to attend multiple topics, or some won't have the availability or capacity to attend a focus group. To make sure we receive your input, we will accept written feedback in response to specific questions related to the topics identified, until June 30, 2022.

Registration for nominees will close June 20 at 4:00 pm and is on a first-come basis. Please note we are unable to guarantee registration in selected breakout groups, as space is limited.

To register, please visit BC Building Code accessibility event poll to:

- Provide the name and email address of your nominee,
- Indicate whether they wish to attend a virtual session or submit written feedback,
- Request the preferred date and breakout group topic they would like to attend, and
- Note any accessibility requirements, such as an ASL translator.

Upon receipt of your nominee, we will send them background information in advance to support discussions as well as the virtual Zoom invite.

Focus group sessions will conclude the initial public engagement phase for how BC Building Code accessibility requirements may be improved. The next step will involve ministry staff working with construction industry representatives to develop proposed changes that will be published for a final public review, prior to adoption in the next BC Building Code.

If you have any questions or would prefer to provide the required information by email or phone, please contact Kate Rollheiser, with Elevate Consulting, by email to Kate@elevateconsulting.ca or call 250-858-1307.

Thank you for considering this invitation. I look forward to meeting with your organization.

Yours truly,

Dan Coulter
Parliamentary Secretary for Accessibility

From: May, Zachary HOUS:EX
To: McCrae, Aura HOUS:EX; Vukosavljevic, Nicole HOUS:EX
Subject: FW: Contacts for digital permitting roundtable
Date: Monday, April 3, 2023 12:08:33 PM

Hi Aura,

Not sure if Nicole has had a chance to reach out to you on this yet – we need to pull together some suggested contacts at the organizations listed below. For UDI and homebuilders we should also list any of the contacts we reached out to for our survey.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Monday, April 3, 2023 12:00 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: Re: Contacts for digital permitting roundtable

Hi Mark, I'm including Zac May who can help us with this.

Bindi

Get Outlook for iOS

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 11:58:55 AM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: Contacts for digital permitting roundtable

Hi Nikki and Bindi,

I hope you both are well.

I am reaching out to see if you can help us identify contacts to invite to a digital permitting round

table on Thursday, April 6.

We have time held from 3-5 pm that day. It should be an hour. As I understand it, the Minister would like Ministry staff to speak about where we are going as well as the Digital Supercluster. And then open it up to thoughts from the attendees. Below is a list of the stakeholders he'd like to join.

Digital Supercluster
UDI
Homebuilders
Architects
Engineers
Planners
BC Building Trades
GVBOT
North Vancouver – Tim Ryce (Chief Building Official)
Kelowna
Surrey
Vancouver
Victoria
Burnaby
Port Coquitlam

We are hoping to have the list of invitees finalized today so if you can please provide contact details at your earliest convenience that would be amazing.

Thanks for your help and all the best,

Mark
Mark Hosak, *he/him*
Ministerial Advisor to
The Honourable Ravi Kahlon
Minister of Housing
Cell: 250-886-1834

From:	Cassandra Smith
To:	Jensen, Jun"ichi HOUS:EX; Verna Yu; HOUS Building & Safety Standards Branch HOUS:EX; McCrae, Aura HOUS:EX
Cc:	Chase, Andy HOUS:EX; Lily Shields-Anderson
Subject:	RE: 2023 Codes
Date:	Thursday, April 6, 2023 5:18:55 PM
Attachments:	image001.png

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

That sounds great, and we'll be in touch next week regarding a webinar.

Thanks,
Cassandra

Cassandra Smith
Director, Policy and Public Affairs
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: April 6, 2023 5:06 PM
To: Cassandra Smith <csmith@udi.org>; Verna Yu <vyu@udi.org>; HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: 2023 Codes

Hi Cassandra,

Yes 1.5 should be plenty. I will run through a few more topics, but will include seismic and accessibility for sure. I'd think 45 presenting and that would leave 45 for questions. Feel free to scale that down if appropriate.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, April 6, 2023 5:01 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Verna Yu <vyu@udi.org>; HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: 2023 Codes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

That's great that the dates align and I'll send an invitation over shortly. In terms of timing, do you think 1.5h would be sufficient to cover both the seismic and accessibility changes, with time for discussion?

I'll discuss a possible webinar with Verna and we'll follow-up with some potential dates next week. The original intent was to create broader awareness on the changes during the engagement period so that members could still have the opportunity to participate in the consultation, however we'll need to take a look at timing.

Thanks,
Cassandra

Cassandra Smith
Director, Policy and Public Affairs
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: April 6, 2023 3:53 PM
To: Cassandra Smith <csmith@udi.org>; Verna Yu <vyu@udi.org>; HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: 2023 Codes

Hi Cassandra,

If you can please forward the invitation for April 26th, I will plan to present regardless. The consultation should be live by then. How much time should I plan for?

We hope to have it go live in late April. It will be open for about 4 weeks, so we should plan the webinar for soon after if the intent is to walk your members through the content that is out for consultation. If it's more about educating them on the proposed changes coming, but not with a specific goal of having them subsequently provide feedback, late May or June is fine.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, April 6, 2023 2:03 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Verna Yu <vyu@udi.org>; HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: 2023 Codes

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Jun'ichi,

Thanks for the update, and we'd be interested in scheduling a dedicated session with our Building Codes Committee and a few others, followed by a webinar for our broader membership during the consultation period, if that's an option.

We've heard some feedback already regarding challenges prompted by the seismic changes and would also be interested is discussing the accessibility changes in more detail. The committee would offer detailed feedback, and identify issues ahead of a presentation to our broader membership.

We currently have a Building Codes Committee meeting scheduled for April 26th, however if that date does not align with the consultation period we could shift it. Then perhaps look at options for a webinar towards the end of May/start of June?

Let us know what your thoughts are and we're happy to discuss options further.

Thanks and have a great long weekend,

Cassandra

Cassandra Smith
Director, Policy and Research
Direct: 604.661.3032
Email: csmith@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: April 5, 2023 11:26 AM
To: Verna Yu <vyu@udi.org>; HOUS Building & Safety Standards Branch HOUS:EX <Building.Safety@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: 2023 Codes

Hi Verna and Cassandra,

We expect the public consultation to start in late April. We did reach out in advance to UDI and have a conversation, but it was not to a broad group. Perhaps a Q&A session at your building code group after the launch would be a good starting point, but I'm happy to do whatever works best.

Thank you for reaching out.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Verna Yu <vyu@udi.org>
Sent: Tuesday, April 4, 2023 1:27 PM
To: HOUS ADMO HOUS:EX <Building.Safety@gov.bc.ca>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>
Subject: RE: 2023 Codes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Thank you Zach.

Jun'ichi, it is great to connect with you again for another information session with our members. Please let us know what the anticipated timing looks like for the public review period and effective date. I have also copied our Director of Policy and Research, Cassandra Smith, on this email as she will be working with our Building Code committee groups and may reach out for further discussions with you.

Kind regards
Verna

Verna Yu, PMP®
Director, Professional Development & Programming
Direct: 604.661.3038
Email: vyu@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca

From: HOUS ADMO HOUS:EX <Building.Safety@gov.bc.ca>
Sent: April 4, 2023 12:16 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Verna Yu <vyu@udi.org>
Subject: 2023 Codes

Hi Juni,

I just had a call with UDI about some questions they had about the 2023 codes, and potential implications for in-stream developments.

I suggested you connect with them to coordinate on consultation related to accessibility and seismic. It sounds like there may be some value in having smaller direct discussions and also providing a broader presentation to UDI to notify them of the public review process and key changes. I said you would be best positioned to sort out what format and timelines make sense.

Please coordinate with Verna.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Jensen, Jun"ichi HOUS:EX
To: McCrae, Aura HOUS:EX
Cc: Laboucane, Shannon HOUS:EX
Subject: FW: UDI 2023 Building Codes Presentation
Date: Thursday, May 4, 2023 10:33:52 AM
Attachments: image001.png

Hi Aura,

Another personal notification to send when PR is live, please. See below.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, May 4, 2023 9:33 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: UDI 2023 Building Codes Presentation

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi Jun'ichi,

That's helpful, please let us know when the review becomes public.

Cassandra

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: May 3, 2023 1:05 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: UDI 2023 Building Codes Presentation

Hi Cassandra,

We are still not certain on our date, but we hope it will be in the coming few weeks. But yes, once we get to public review what is proposed will reflect the latest thinking and direction. That will not mean it's set in stone, as the point of public review is to get feedback for the final decisions that have to be made for building code adoption.

Jun'ichi Jensen

Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Wednesday, May 3, 2023 12:45 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: RE: UDI 2023 Building Codes Presentation

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thanks for sending these over and we'll ask that they stay within the group that you met with last week. We're happy to wait to share anything more broadly under slides are updated based on newer decisions- we'd like to be able to provide our members with the most relevant information.

Do you have a sense as to when the public review will be live? Confirming as well that the information available through the public review would also reflect any newer decisions?

Thanks,
Cassandra

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: May 3, 2023 11:52 AM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Cassandra Smith <csmith@udi.org>
Subject: RE: UDI 2023 Building Codes Presentation

Hi Lily,

Thanks for following up. I promised to share and forgot. A PDF is attached. Since we are still making decisions on some of this content, I would ask that you pass along the request not to share these beyond the group for now. I've agreed to a larger presentation for UDI once the public review is live, and may have to adjust these slides to reflect newer decisions before sharing more broadly.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Wednesday, May 3, 2023 9:39 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Cassandra Smith <csmith@udi.org>
Subject: UDI 2023 Building Codes Presentation

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thank you for your presentation last week to UDI members on the upcoming 2023 B.C. Building Code changes.

I am wondering if you have any materials available to share with the group following the presentation? Specifically, if you are able to share the presentation slides?

Please let me know when you get the chance!

Regards,
Lily

Lily Shields-Anderson
Policy & Research Coordinator
Direct: 604.901.1948
Email: lshieldsanderson@udi.org

Urban Development Institute
1100-1050 West Pender Street
Vancouver, BC V6E 3S7
Office: 604.669.9585 | Fax: 604.689.8691
Web: udi.bc.ca



From: McCrae, Aura HOUS:EX
To: Chase, Andy HOUS:EX
Subject: RE: BN Request
Date: Monday, July 10, 2023 11:48:00 AM
Attachments: image001.png

Thanks for the great summary Andy. eApps should be coming your way shortly.

Best regards,
Aura

From: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Sent: Monday, July 10, 2023 9:06 AM
To: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: RE: BN Request

(Sorry- further to that but probably assumed; please also set this up in eApps…)

From: Chase, Andy HOUS:EX
Sent: Monday, July 10, 2023 8:54 AM
To: McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: BN Request
Importance: High

Hello Aura, please see below for the BN request…

Bindi has asked that we prepare a BN-D for the Minister s.13
s.13

See notes shared with Bindi:

Building Code update:

What is happening?
s.13

Why is this happening?

s.13

s.22

What does this mean for the public?

s.13

What are we planning to do to mitigate impacts?

s.13

s.13; s.14

Andy Chase | Team Lead, Building Codes & Standards

Building and Safety Standards Branch
Ministry of Housing
Phone: 778-677-0944
Email: andy.chase@gov.bc.ca
Website: www.gov.bc.ca/buildingcodes

Offering acknowledgement in respect of the Lekwungen People, traditional keepers of this land on which I live, work and play.

From: Jensen, Jun"ichi HOUS:EX
To: McCrae, Aura HOUS:EX
Cc: Chase, Andy HOUS:EX; Watt, Stephen HOUS:EX; Dang, Tommy HOUS:EX
Subject: FW: UDI Letter – B.C. Building Code 2023
Date: Monday, July 31, 2023 4:35:39 PM
Attachments: image001.png
23-07-25_UDI Support Letter.pdf

For consideration and filing. I'm not sure yet what happens as this is copied to the MO- I suspect we need to wait for it to be assigned formally prior to responding. That can take some time, so please ensure to follow this up so that it does come to us for response ASAP.

Thanks.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Volodya Gusak <vgusak@denciti.ca>
Sent: Tuesday, July 25, 2023 11:13 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: David Fawley <dfawley@denciti.ca>; Minister, HOUS HOUS:EX <HOUS.minister@gov.bc.ca>; HOUS DMO HOUS:EX <HOUS.DMO@gov.bc.ca>
Subject: Re: UDI Letter – B.C. Building Code 2023

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Dear Mr. Jensen,

Please see our letter attached. Thank you for your attention to this matter.

Regards,

Volodya Gusak
PRESIDENT

DENCITI
development corp.

New Address! We moved one floor down.
1550-1185 WEST GEORGIA ST
VANCOUVER BC V6E 4E6
T 604.767.1612

E vgusak@denciti.ca

denciti.ca

From: Cassandra Smith
To: Lily Shields-Anderson; Jensen, Jun"ichi HOUS:EX
Cc: Chase, Andy HOUS:EX; McCrae, Aura HOUS:EX; Laboucane, Shannon HOUS:EX
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes
Date: Thursday, October 12, 2023 2:27:18 PM

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I hope you're doing well. I'm confirming that you're still able to participate in our Building Code meeting next Thursday afternoon via Zoom? Let me know if you have any slides/materials that we can circulate to our committee in advance.

I'm hoping that you'll be able to provide an update on the status of the 2023 BC Building Code updates and any potential mitigation measures, would this be possible?

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

*** Vacation Alert *** s.22
s.22

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: September 15, 2023 11:06 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Jun'ichi,

Please see a few alternate times below:

Monday, October 16th at 10 am
Thursday, October 19th at 2pm

Let me know if either of these dates work for you.

Thanks,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 14, 2023 2:57 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

My apologies, Lily but something I committed to had not yet been input in to my calendar and I realize now that October 18 at 2 I will be in another presentation. Would the following day work?

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Wednesday, September 13, 2023 4:32 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I have sent an invite for 2 pm on October 18th.

Thank you,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, September 13, 2023 10:02 AM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Lily,

I can make it work any time in that window.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Tuesday, September 12, 2023 10:45 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thank you for the update.

If you think the timing would work to have more information later in the fall, we would be happy to move our Building Codes Committee meeting. Are you available in the afternoon on October 18th? Any time between 1pm – 4 pm works on our end.

Thank you,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, September 7, 2023 4:52 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

Thank you, I did receive your other email and will respond soon after we've had time to review and discuss.

On this note, I don't have a set day yet, but we do expect to know a bit more in late September or early October. I can definitely attend a meeting shortly after, but I'm sorry that I don't have a specific date I can give you.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Thursday, August 31, 2023 2:44 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi

Thanks for following up on this. If the Sept. 21 timing no longer aligns, we can shift our meeting date to accommodate your schedule. This will avoid us needing to have two meetings in short succession, as the Building Code changes remain a major topic of discussion. Please let us know what timing would work better.

As well, we have gathered additional information from our members estimating the changes required to comply with the proposed accessibility requirements and we be able to share that next week. Hopefully this information is helpful and can still be considered as part of the process.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 28, 2023 5:44 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

It sounds like there will be some further clarity on this just after your meeting- closer to the end of September. That means I won't have anything to share on September 21. Please feel free to let folks know we are expecting to know more shortly after the meeting. If helpful, I could attend the subsequent meeting to answer questions. For now, please do not hold a space for me on Sept 21. Thank you so much for working with me on this and for accommodating the changes as they've happened.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>

Sent: Wednesday, August 16, 2023 4:06 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thanks for the update. We will plan to have you provide a virtual update at the September 21st meeting. There may also be topics that our members want to discuss with you related to the BCBC changes as well.

I'd also flag that going into the fall our members will be looking for confirmation of the implementation timeline for the Building Code changes, as they were slated to come into effect by the end of the year. They're already reaching out to us looking for information to help direct their design processes, since these proposed changes will have a large impact. If you have any updates on when they will be effective that would be of interest to our members in September, or whenever information is available.

Feel free to reach out to myself or Jeff if there's any way we can be of assistance.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 16, 2023 1:47 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

I think meeting with the group on Sept 21 will be fine for me. I may or may not have any news to share at that time, but we can touch base closer to the date to confirm.

Thanks again,

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, August 14, 2023 1:57 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thanks for the quick reply. Keep me posted on the next steps and whether follow-up discussion is needed.

Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: August 14, 2023 1:52 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Cassandra,

Thanks for following up. I hope to know this week if we will need to speak with the group again.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Monday, August 14, 2023 1:48 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

I hope you had a great vacation and got some R&R! I'm just picking up this thread from last month to confirm the timing of a follow-up meeting with UDI and our Building Codes Committee. We still have our next Committee meeting booked for Sept. 21, but could convene the group earlier if needed.

Let me know what the timing looks like for the next steps and we can set up a meeting with our Committee.

Thanks,
Cassandra

Cassandra Smith
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: July 21, 2023 9:26 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Jun'ichi,

Sounds good. Have a great vacation and I look forward to connecting in a few weeks!

Thanks,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Thursday, July 20, 2023 4:49 PM
To: Lily Shields-Anderson <lshieldsanderson@udi.org>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Thank you, Lily for the quick response. I will pick this up on my return as I should know a bit more about the topic of discussion in early August.

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Lily Shields-Anderson <lshieldsanderson@udi.org>
Sent: Thursday, July 20, 2023 2:46 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Cassandra Smith <csmith@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Jun'ichi,

Thank you for reaching out and glad to hear you are enjoying your summer!

We would be pleased to meet to discuss the options you are looking at. Our next Building Codes

Committee meeting is scheduled for September 21st, 10am-11am. If it is preferred to meet with the group earlier, or if you require more than 1 hour, this can be adjusted.

Please let us know what your timing looks like to receive feedback on this and we look forward to continuing this discussion.

Best regards,
Lily

Lily Shields-Anderson
Direct: (604) 901-1948

URBAN DEVELOPMENT INSTITUTE

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, July 19, 2023 1:24 PM
To: Cassandra Smith <csmith@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>; Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>
Subject: RE: UDI Submission: proposed B.C.-specific Building Code changes

Hi Lily and Cassandra,

I hope you are both finding some time to relax this Summer. I've got some vacation coming up next week :)

When is your UDI building code committee meeting next? I would like to discuss with the group some proposed options for delayed implementation of some code requirements. This is based on the suggestion of tying the new code requirements to development permits.

Thanks,

Jun'ichi Jensen
Director, Codes and Standards
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: Cassandra Smith <csmith@udi.org>
Sent: Friday, June 16, 2023 1:17 PM
To: HOUS BSSB Public Review HOUS:EX <BSSB.public.review@gov.bc.ca>

Cc: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Anne McMullin <AMcMullin@udi.org>; Jeff Fisher <jfisher@udi.org>; Lily Shields-Anderson <lshieldsanderson@udi.org>
Subject: UDI Submission: proposed B.C.-specific Building Code changes

[EXTERNAL] **This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Good afternoon,

On behalf of Anne McMullin, President & CEO of UDI and our members, please find attached our submission on the proposed B.C.-specific Building Code changes. Throughout our letter we recommend that additional time be taken before implementation to analyze the impacts of the proposed changes and develop offsets to mitigate them. We reiterate our appreciation for the work being done by the Building and Safety Standards Branch, and would be pleased to provide support if it is determined that further analysis will be done.

If you would like to discuss any of our recommendations further, please let us know.

Regards,

Cassandra Smith
Director, Policy & Research
Direct: (604) 661-3032

URBAN DEVELOPMENT INSTITUTE

1100-1050 West Pender Street
Vancouver, BC V6E 3S7

From:	HOUS Building & Safety Standards Branch HOUS:EX
To:	Jayme Colville; "afehr@egbc.ca"; "achen@egbc.ca"; "maura"; "MVernon@aibc.ca"; "jfisher@udi.org"; "lshieldsanderson@udi.org"; "csmith@udi.org"; "amcmullin@udi.org"; pauline@chbabc.org; "diana@havan.ca"; "vic.builders@vrba.ca"; "infopg@icba.ca"; "info@denciti.ca"; Sawchuk, Bindi HOUS:EX; May, Zachary HOUS:EX; Jensen, Jun"ichi HOUS:EX; Harding, Kevin HOUS:EX; Laboucane, Shannon HOUS:EX; "carmina@chbabc.org"; "neilmoody@chbabc.org"
Cc:	Gill, Aman X HOUS:EX; Ramin Seifi; Sophie Pan; Andrew Harmsworth; Harrison Glotman; Chase, Andy HOUS:EX
Subject:	BCBC Seismic Requirements – Review and Discussion of Industry Feedback
Start:	Friday, October 20, 2023 2:30:00 PM
End:	Friday, October 20, 2023 3:30:00 PM
Location:	Microsoft Teams Meeting
Attachments:	Building Code and Seismic Agenda.docx

Greetings,

The Ministry of Housing is working toward finalizing the British Columbia Building Code.

Thank you for participating in the earlier public review of code changes and providing feedback on proposed seismic mitigation provisions.

The purpose of this session is to continue that discussion and consider options to mitigate any unintended impacts of the seismic provisions in the proposed British Columbia Building Code. An agenda is attached.

Please feel free to send this invitation to the appropriate representative from your organization.

Sincerely,

Kevin Harding

A/Executive Director

Building and Safety Standards Branch

Ministry of Housing

Microsoft Teams meeting

Join on your computer, mobile app or room device

s.15; s.17

Page 132 of 162

Withheld pursuant to/removed as

s.15

November 17, 2021
Dear Anne and Jeff:

I am reaching out to you as Urban Development Institute is a key partner in the building regulatory system in British Columbia. The Building and Safety Standards Branch (the Branch) is exploring the possibility of revising the code inquiry service to ensure that code users get the best value for this service and consistent guidance regarding the BC Codes.

The question has been raised if there is better value and service if Urban Development Institute members work through their associations when they have feedback or questions about the BC Codes. The Branch remains committed to connecting at an organization level, especially for BC Codes questions that are not resolved for your members.

I would appreciate the opportunity to meet and discuss our ideas for streamlining the code inquiry process further and will be following up shortly. You are also welcome to reach out to me at any time through any of the means below.

Sincerely,
Jun'ichi Jensen

2021-11-30 UDI Meeting
AC Notes

• UDI members; build range of products (primary focus Part 3 - though some members build Part 9 townhomes)
• JF not aware that members used code inquiry service
• Developers typically work through RPs on Part 3 projects / CHBA on Part 9 (JJ shared that some reach out via code questions)
• Jeff was member of past BC Building Policy Advisory Committee
• RACC - Increased responsibility for province to be connected to provincial industry
• JF supports/favours BPAC-type model for industry voice into system (via province) UDI has building policy committee (meets about 4 times per years)
• BPAC was at 30,000 foot level - advised on policy but was not a technical committee (though some members were also technical experts)
• Likely to find need to interact with UDI at both levels (policy and technical) probably at different times
• E.g. BPAC could strike/form technical working groups
• UDI always felt separated from national system (UDI does not have a national body)
• Support
• UDI has a building code committee(?) [perhaps misheard… maybe would consider striking one?]
• UDI Newsletter every 2 weeks to 3000 recipients
• Corporate- hard to count individual members; 900-950 corporate members
• BSSB; could distribute comms for harmonization via newsletter
• BSSB; send links to Accessibility consultation for newsletter
Send to Jeff and Lily at lshieldsanderson@udi.org
• Favours joint (other industry reps) committee such as BPAC (meeting about 2-3 times a year; Feb, May, Oct)
• JF suggests we talk to Applied Scientists, Engineers and Architects and CHBA
• Harmonization; JF asked the question "what do we want done first?" (advice; look at cooling)
Decarbonization basically means heat pumps; heat pumps made viable when cooling is required
• BPAC; what does BC want out of this change process?

2023-02-23
Rick Bortolussi representing UDI
Works for TH Housing Solutions
Used to be CBO for City of Richmond
Member of SC-HSB and SC-EE
Wing of company; non-market housing

CMHC universal requirements
BCH guide
BCBC/NBC
CSA standards
Be consistent

Use quite wide flat stock at multiple heights; 3 sides
Likes medicine cabinet
BCH floor drain; requires additional plumbing $; reason t minimize wet floor slips; suggests should be options for materials that manage water

MURBs have common washrooms with toilet with flush valve
(Common spaces already to be accessible)

Usually not a problem to increase size of front common entrance

Area of refuge… should consider adopting (Rick; should consider bringing back)

Areas in MURBs problematic for builder
If you have accessible unit; requirements for thresholds
Adaptable unit doesn't have height requirements; don't have accessible depth
Accessible catered to, Adaptable not catered to
If they are all the same, they should cost the same

Common areas with laundry areas; common kitchens should be accessible
Appliances cost significantly more (wall oven with swing door very expensive)
Accessible dishwasher (BCH) challenge for height

BC clear which units are applicable for adaptable/accessible/universal

Watch for unrecoverable costs for homeowner

Add on changes for energy and adaptability

AC; DRAFTING; state 3.8.5. not required [applicable] to alterations

Type of doors for laundry; bypass/bifold problematic; cost of maintenance

Reach out to Jeff Fisher and ask about members on code committee to consult

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Microsoft Teams meeting

Join on your computer or mobile app

s.15; s.17

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

UPDATED: Meeting Agenda Attached – Verna

UDI Webinar Moderator is inviting you to a scheduled Zoom meeting.

Topic: Pre-Event Meeting: BC Hydro & Clean BC UDI Webinar
Time: Nov 18, 2021 04:00 PM Vancouver

Join Zoom Meeting
s.15; s.17

Quick chat to share how the first two meetings (BOABC & LGMA) went and brainstorm for ideas to support next meetings (UDI, AIBC and CHBABC already scheduled).

Some ideas already on the table:

* Written backgrounder(s) we can share
* Town hall (or perhaps joint meeting with multiple partners..)

Andy

Microsoft Teams meeting
Join on your computer or mobile app
Click here to join the meeting<https://teams.microsoft.com/l/meetup-
s.15; s.17

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Microsoft Teams meeting

Join on your computer or mobile app

s.15; s.17

Meeting:
Building code briefing with CHBA & UDI
Topic/Agenda:
Building code briefing
Date & Time:
Monday Dec 4, 1:00pm-1:45pm
Location/Link:
(Hybrid, MSTeams, in-person)

Teams

Microsoft Teams meeting
Join on your computer, mobile app or room device
s.15; s.17

Meeting Materials

DMO:
Presentation

GCPE:

Do materials need to be sent to anyone once received:
No

Attending from Housing:

MO:
Required: Dave, Mark
Optional: Siân

Ministry:
Required: Bindi & other BSSB staff
Optional: Tracy Campbell

BC Housing:

Attending from another ministry/stakeholder:
Contact:
Please invite Carmina Tupe from CHBA carmina@chbabc.org<mailto:carmina@chbabc.org> & Cassandra Smith from csmith@udi.org<mailto:csmith@udi.org>. They may invite other colleauges which is totally fine.
Notes:

[LocalizedFileNames]
UDI MRK Meeting September 28.docx=@UDI MRK Meeting September 28.docx,0
HSA UDI consult Mar 3.docx=@HSA UDI consult Mar 3.docx,0
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HSA Reg Engagement - Feedback Tracker 03 22 2023.pdf=@HSA Reg Engagement - Feedback Tracker 03 22 2023.pdf,0
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Stakeholder Technical Meeting Notes 2023 05 25.docx=@Stakeholder Technical Meeting Notes 2023 05 25.docx,0
Stakeholder Technical Meeting Notes 2023 05 25.pdf=@Stakeholder Technical Meeting Notes 2023 05 25.pdf,0
Technical Briefing to Expert Group May 25 v2.pdf=@Technical Briefing to Expert Group May 25 v2.pdf,0
UDI Broadway Notes 2023 03 04.docx=@UDI Broadway Notes 2023 03 04.docx,0

RE: Orca light steel manufacturing

To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Friday, January 12, 2024 3:05 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: Orca light steel manufacturing

Hi Zac,

I wonder if you might have any suggestions for follow up or contacts. We just met with Orca- they are on the island and make light steel frame buildings using structural steel studs that are fabricated onsite, and can be assembled quickly by people with minimum construction experience. They were quite upfront that there is no “golden bullet” to solve the housing crisis, but think their product and methods could be of help, and I agree. They seem to have compliance dialed in via certifications and engineering, so I don’t think BSSB can offer more than some good contacts. I plan to reach out to BC Housing and also suggested they do some education on their product via BOABC and perhaps UDI and CHBA. Any additional thoughts or specific contacts you could point me to? I heard Lisa Helps is at BCH now? Would she be the right person? I was going to send to Wilma just from the education perspective.

Jun’ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: CHBA+UDI Briefings & eApproval logs

To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>, King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>, Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>, Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>, Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>, Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>, Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>, Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>

That's fine with us.

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, December 13, 2023 3:32 PM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Subject: RE: CHBA+UDI Briefings & eApproval logs

Thanks, Indi. I will just flag that the previous (Dec 4) meeting did not provide an opportunity to discuss digitized building codes. It was focused on code adoption. Zac or Nicole may have connected separately so I'll let them chime in.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Wednesday, December 13, 2023 3:24 PM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Brooks, Jessica HOUS:EX <Jessica.Brooks@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; Cabral, Marlinda HOUS:EX <Marlinda.Cabral@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Subject: CHBA+UDI Briefings & eApproval logs

Hi All,

Just reaching out in regards to eApp 131-1054, as there seems to be some confusion. The below meeting that I shared with you is a rapid-fire briefing to CHBA + UDI regarding Bill 44, 46, 47, and STR. There are no references to the building code in the meeting tomorrow.

The original CHBA + UDI housing briefing on November 28thth was cancelled, and split into two staff-level briefings without MRK:

1. December 4th on Building Code (eApp 131-3031)
2. December 14th on Bill 44, 46, 47, and STR (eApp 131-2393)

eApp 131-2393 is the correct eApproval log for tomorrow, and it correctly ONLY contains information for bills 44, 46, 47, and STR. Building codes and digitization are not included in tomorrow's briefing. Unfortunately, I believe that eApp 131-1054 was a duplicate eApp log to 131-3031 and can be closed.

Thank you,

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, December 6, 2023 5:01 PM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>; Kelly, Avery HOUS:EX <Avery.Kelly@gov.bc.ca>; Rabinovitch, Hannah R HOUS:EX <Hannah.Rabinovitch@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

Thank you, that was the one I was looking for. We and the digital team have contributed to the e-app already and I've now sent to PLUM to address their items. I now see STR on the list- that may be new as I don't think this has been addressed yet- HPB may also need to look. E-app 131-1054
Thanks, all!
Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Wednesday, December 6, 2023 11:38 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

There is this meeting is happening on December 14th:

Meeting:	CHBA + UDI Housing Briefing (staff only)
Topic/Agenda:	Briefing on Housing legislations (Bill 44, 46, 47 and STR). Rapid fire/quick overview (20 min if possible!) followed by QA.
Date & Time:	Dec 14th, 9:00am -10:30am
Location/Link:	MSTeams

Meeting Materials	**DMO:** Condensed Tech Deck **Do materials need to be sent to anyone once received:** No
Attending from Housing:	**MO:** Nina (required) Mark (required) **Ministry:** Bindi and staff **BC Housing:** No
Attending from another ministry/stakeholder:	No
Contact:	-
Notes:	Once you find the time that works for Bindi's team and MO, Mark will send link to CHBA and UDI.

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, December 6, 2023 10:28 AM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>

Cc: Ruhland, Brian HOUS:EX <Brian.Ruhland@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

Thanks- that one was a different topic and I attended. Nothing upcoming as a reschedule to Nov 28 meeting? Would include PLUM staff.

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

From: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Sent: Wednesday, December 6, 2023 10:09 AM
To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Subject: RE: CHBA request for meeting with MRK

Hi Juni,

There was a CHBA meeting on Monday, but MRK didn't attend. Here's the meeting info:

Meeting:	Building code briefing with CHBA & UDI
Topic/Agenda:	Building code briefing
Date & Time:	Monday Dec 4, 1:00pm-1:45pm
Location/Link: (Hybrid, MSTeams, in-person)	
Meeting Materials	**DMO:** Presentation **GCPE:** **Do materials need to be sent to anyone once received:** No
Attending from Housing:	**MO:** **Required:** Dave, Mark **Optional: Siân** **Ministry:** **Required:** Bindi & other BSSB staff **Optional:** Tracy Campbell **BC Housing:**
Attending from another ministry/stakeholder:	
Contact:	Please invite Carmina Tupe from CHBA carmina@chbabc.org & Cassandra Smith from csmith@udi.org. They may invite other colleauges which is totally fine.
Notes:	

Indiana King | Executive Administrative Assistant
Ph: 250-508-9040 Email: Indiana.King@gov.bc.ca

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Monday, December 4, 2023 4:32 PM
To: King, Indiana HOUS:EX <Indiana.King@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>

Subject: CHBA request for meeting with MRK

Hi Indiana,

Do you know if the meeting CHBA requested with MRK occurred? We had an e-app 131-1054 and sent it to 2 other branches for input and it got stuck, now the meeting date has passed. We're not sure if the meeting occurred on Nov 28 as indicted in the e-app or if it got rescheduled. It's a broad set of concerns they want to discuss related to housing legislation, so I doubt they would have cancelled, (nor been satisfied with other building code related meetings that have since happened).

Jun'ichi Jensen
Acting Executive Director
Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: notes

To: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>

3 options

s.13

Bundled together for a decision
Bottom line is the same

ELECTION

Best regards,
Aura

From: Jensen, Jun'ichi HOUS:EX <Junichi.Jensen@gov.bc.ca>
Sent: Wednesday, August 2, 2023 3:29 PM
To: Laboucane, Shannon HOUS:EX <Shannon.Laboucane@gov.bc.ca>; McCrae, Aura HOUS:EX <Aura.McCrae@gov.bc.ca>
Subject: notes

KH notes:

[3:25 p.m.] Harding, Kevin HOUS:EX

- Teri up to speed on most of the back and forth
- Juni providing general overview of the two items notable - seismic and accessibility
- s.13
-
-
-
-
-

- s.13
-
-
-
- Briefing set for the 10th
    - Like to pull back the note
    - There was a bit of a mixup - technical decisions made that were too narrow
    - Like to revise these and provide better options in the form of a decision note
    - s.13
    - Other item - going back to UDI and getting a bit more info from them on where they may like to see us land; it is risky because they will not be happy
        - Up to us
        - s.13
        -
        -
    - Framing for the team
        - Accessibility and seismic - when we started, were not in an acknowledged housing crisis
- Move forward as briefed
    - Pull the IBN back and reframe
    - Keep MIN briefing
    - Discuss with him the implications

[3:25 p.m.] Jensen, Jun'ichi HOUS:EX
wow, thank you!!
[3:26 p.m.] Harding, Kevin HOUS:EX
Happy to help! Shannon cancelled our follow-up, but I think that there's value in making sure we focus on understanding a recommendation to delay - s.13
s.13
[3:26 p.m.] Harding, Kevin HOUS:EX
Not sure how to brief that
[3:27 p.m.] Harding, Kevin HOUS:EX
Will likely come some how up in the options - s.13
That may not be the best approach as I write it....
[3:28 p.m.] Jensen, Jun'ichi HOUS:EX
I will report out tomorrow to the team and share this... we'll loop you in as we move forward.
[3:29 p.m.] Harding, Kevin HOUS:EX
Perfect

Jun’ichi Jensen
Director, Codes and Standards

Building and Safety Standards Branch
Ministry of Housing
250 858 1325

RE: Building Code timelines update

Cc: Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>, Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: May, Zachary HOUS:EX
Sent: Friday, July 7, 2023 3:01 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>; Harding, Kevin HOUS:EX <Kevin.Harding@gov.bc.ca>; Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Subject: Building Code timelines update

Building Code update:

What is happening?
s.13

Why is this happening?
s.13

s.22

What does this mean for the public?
s.13

What are we planning to do to mitigate impacts?
s.13

s.13; s.14

Best,

Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

FW: Digital Innovation in Housing Construction

To: Chase, Andy HOUS:EX <Andy.Chase@gov.bc.ca>
Attachments: June 12 What We Heard Summary.pdf
Hi Andy,

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: May, Zachary HOUS:EX
Sent: Friday, June 30, 2023 4:19 PM
To: 'pbogunovic@abbotsford.ca' <pbogunovic@abbotsford.ca>; 'pcaraher@ahma-bc.org' <pcaraher@ahma-bc.org>; 'sfralin@ahma-bc.org' <sfralin@ahma-bc.org>; XT:Irg, Mike Alberni-Clyoquot Regional District EAO:IN <mirg@acrd.bc.ca>; 'jjung@asttbc.org' <jjung@asttbc.org>; 'katy.fairley@bccassn.com' <katy.fairley@bccassn.com>; 'saafrin@bchousing.org' <saafrin@bchousing.org>; 'srutherford@bchousing.org' <srutherford@bchousing.org>; 'jpatel@bchousing.org' <jpatel@bchousing.org>; 'tyler.wightman@boabc.org' <tyler.wightman@boabc.org>; 'Jason.berlin@rdbn.bc.ca' <Jason.berlin@rdbn.bc.ca>; 'jason.llewellyn@rdbn.bc.ca' <jason.llewellyn@rdbn.bc.ca>; 'jason.watt@burnaby.ca' <jason.watt@burnaby.ca>; 'Trevor.Sweeney@campbellriver.ca' <Trevor.Sweeney@campbellriver.ca>; 'carmina@chbabc.org' <carmina@chbabc.org>; 'cassidy@3rdgenhomes.com' <cassidy@3rdgenhomes.com>; 'pauline@chbabc.org' <pauline@chbabc.org>; 'jmitchell@coquitlam.ca' <jmitchell@coquitlam.ca>; King, David J M JEDI:EX <David.King@gov.bc.ca>; 'esangster@daustudio.ca' <esangster@daustudio.ca>; 'mbarros@daustudio.ca' <mbarros@daustudio.ca>; 'TSwardh@delta.ca' <TSwardh@delta.ca>; 'msangret@delta.ca' <msangret@delta.ca>; 'sGervais@digitalsupercluster.ca' <sGervais@digitalsupercluster.ca>; 'spaish@digitalsupercluster.ca' <spaish@digitalsupercluster.ca>; 'afehr@egbc.ca' <afehr@egbc.ca>; 'jmunroe@fninspector.ca' <jmunroe@fninspector.ca>; 'bharasimiuk@rdffg.bc.ca' <bharasimiuk@rdffg.bc.ca>; 'kjonkman@rdffg.bc.ca' <kjonkman@rdffg.bc.ca>; 'diana@havan.ca' <diana@havan.ca>; 'ron@havan.ca' <ron@havan.ca>; 'george.hemsley@introba.com' <george.hemsley@introba.com>; 'brad.walton@jensenhughes.com' <brad.walton@jensenhughes.com>; 'tpollock@kimberley.ca' <tpollock@kimberley.ca>; 'jkassel@lakecountry.bc.ca' <jkassel@lakecountry.bc.ca>; 'jdelrosario@langleycity.ca' <jdelrosario@langleycity.ca>; Anthony, Jennifer WLRS:EX <Jennifer.Anthony@gov.bc.ca>; Williams, Megan WLRS:EX <Megan.Williams@gov.bc.ca>; 'max@naikoon.ca' <max@naikoon.ca>; 'Abe.lang@nanaimo.ca' <Abe.lang@nanaimo.ca>; 'Darcy.fox@nanaimo.ca' <Darcy.fox@nanaimo.ca>; 'jeremy.holm@nanaimo.ca' <jeremy.holm@nanaimo.ca>; 'reed.botwright@nanaimo.ca' <reed.botwright@nanaimo.ca>; 'pthompson@rdn.bc.ca' <pthompson@rdn.bc.ca>; Macdonald, Iain <Iain.Macdonald@nrc-cnrc.gc.ca>; 'amcintyre@nelson.ca' <amcintyre@nelson.ca>; 'echow@cnv.org' <echow@cnv.org>; 'tryce@cnv.org' <tryce@cnv.org>; 'aboel@oakbay.ca' <aboel@oakbay.ca>; 'HStewart@oakbay.ca' <HStewart@oakbay.ca>; 'rmacleod@portmoody.ca,' <rmacleod@portmoody.ca,>; 'Wil.Wedel@princegeorge.ca' <Wil.Wedel@princegeorge.ca>; 'tturner@quesnel.ca' <tturner@quesnel.ca>; 'ftewfik@richmond.ca' <ftewfik@richmond.ca>; 'lindsay.chase@saanich.ca' <lindsay.chase@saanich.ca>; 'hgoodland@scius.ca' <hgoodland@scius.ca>; 'psorfleet@sparwood.ca' <psorfleet@sparwood.ca>; 'bdollevoet@summerland.ca' <bdollevoet@summerland.ca>; 'RDube@surrey.ca' <RDube@surrey.ca>; 'richards@syncraconstruction.com' <richards@syncraconstruction.com>; 'nbrooks@terrace.ca' <nbrooks@terrace.ca>; 'sean.mckinnon@tn-bc.ca' <sean.mckinnon@tn-bc.ca>; 'p.zadeh@civil.ubc.ca' <p.zadeh@civil.ubc.ca>; 'ssf@civil.ubc.ca' <ssf@civil.ubc.ca>; 'jfisher@udi.org' <jfisher@udi.org>; 'Amy.Vilis@vancouver.ca' <Amy.Vilis@vancouver.ca>; 'andrew.wroblewski@vancouver.ca' <andrew.wroblewski@vancouver.ca>; 'Rebecca.Doel@vancouver.ca' <Rebecca.Doel@vancouver.ca>; 'cgray@victoria.ca' <cgray@victoria.ca>; Thomson, John HOUS:EX <John.Thomson@gov.bc.ca>
Cc: Wong, Hugo HOUS:EX <Hugo.Wong@gov.bc.ca>; Vukosavljevic, Nicole HOUS:EX <Nicole.Vukosavljevic@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Schmidt, Heike HOUS:EX <Heike.Schmidt@gov.bc.ca>; Leggett, Julia HOUS:EX <Julia.Leggett@gov.bc.ca>; Menke, Katie 1 CITZ:EX <Katie.1.Menke@gov.bc.ca>; Finn, Brian CITZ:EX <Brian.Finn@gov.bc.ca>; Lai, Adrienne CITZ:EX <Adrienne.Lai@gov.bc.ca>; Remacle, Heather CITZ:EX <Heather.Remacle@gov.bc.ca>; 'will.grass@gov.bc.ca' <will.grass@gov.bc.ca>
Subject: Digital Innovation in Housing Construction

Greetings everyone,

Thank you again for participating in the Ministry of Housing's June 12th engagement on digital innovation in housing construction.

Attached is the *Ministry of Housing – Digital Innovation in Housing Construction, What We Heard Summary*. It also includes the Ministry's key engagement activities planned over the summer as we prepare to move into our product development stage this fall.

We really appreciated your participation and look forward to continuing to collaborate on this important work.

Wishing you all a safe and happy weekend!

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

RE: Digital Permitting Update

To: Tyler Wightman <tyler.wightman@boabc.org>
Attachments: image001.png, image002.png
Hi Tyler,

BOABC will be involved. We have reached out to LGs and Indigenous communities. We will also be connecting with BOABC, AIBC, EGBC, UDI, CHBABC… in the coming weeks.

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Tyler Wightman <tyler.wightman@boabc.org>
Sent: Thursday, May 18, 2023 12:58 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: Digital Permitting Update
Importance: High

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Zac,

A member indicated that an email went out a few days ago asking for organizations to identify whether they are interested in participating.

I don't believe that the Association itself received an invite to participate, but we'd very much like to be involved. Being involved will help us provide the province with feedback but also communicate out to officials, local governments and others who might contact us looking for information.

Can you let me know how we can be engaged in this work so that I can let our Executive know what is required?

Tyler Wightman
Executive Director & Registrar
boabc
Office: 604-690-0751
Promoting Building Safety and Professionalism
Digital Partner Cloudpermit

RE: Contacts for digital permitting roundtable

To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Thanks Mark. Are

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Thursday, April 6, 2023 8:04 AM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Zach,

Thanks for letting me know. I will send the invite now.

Cheers,

Mark

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Wednesday, April 5, 2023 9:59 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Mark,

I just heard that our contact for the City of North Vancouver is out of the office and would have missed the invite. Any chance we can add Tim Ryce, Chief Building Official from City of North Vancouver? tryce@cnv.org

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 4:29 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Zach,

Thank you so much for the contact details.

All the best,

Mark

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, April 3, 2023 4:02 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Proposed Invite List
Digital Permitting Round Table (Thursday, April 6)

Organization	Name, Role, and Contact Information	Status
Authorities Having Jurisdiction		
Comox Valley (Regional District)	John Crockford, Planning and Development Service Branch jcrockford@comoxvalleyrd.ca	Participated in the user research in April 2023
City of Kelowna	Lindsey Paley, Permitting Supervisor lpaley@kelowna.ca Mo Bayat, Director Development Services Department. mbayat@kelowna.ca	Participated in the user research in April 2023
	Terry Kowal, Building Inspection and Licensing Manager tkowal@kelowna.ca	Initial discussion on digitization
City of Nanaimo	Darcy Fox, Manager, Building Inspections Darcy.fox@nanaimo.ca Abe Lang, Manager Application Services Abe.lang@nanaimo.ca	Participated in the user research in April 2023
City of North Vancouver	Richard Mathews, Assistant Chief Building Official rmathews@cnv.org	Participated in the user research in April 2023
City of Surrey	Ron Gill, Acting General Manager, Planning and Development RGill@surrey.ca	
City of Vancouver	Andrea Law, General Manager of Development, Buildings, and Licensing andrea.law@vancouver.ca	
City of Victoria	Alison Meyer, Assistant Director of Development Services ameyer@victoria.ca	
	Calvin Gray, Chief Building Inspector cgray@victoria.ca	Initial discussion on digitization
City of Port Coquitlam	Bruce Irvine, Director of Development Services irvineb@portcoquitlam.ca	
City of Burnaby	Patrick Shek, Chief Building Inspector building@burnaby.ca	
Registered Professionals		
Introba	Gordon McDonald, Senior Principal gordon.mcdonald@introba.com Keith Davidge, Mechanical Designer Keith.davidge@introba.com	Participated in the user research in April 2023
ZGF Architects	Dennis Goff, Design Technology Manager dennis.goff@zgf.com	Participated in the user research in April 2023
Dau Studio	Mike Barros, Architect mbarros@daustudio.ca Mark Zupan, Architect mzupan@daustudio.ca	Participated in the user research in April 2023
Focal Engineering	Riley Beise, Principal riley@focaleng.com	

Planning Institute of British Columbia	David Crossley, Executive Director Dave.crossley@pibc.bc.ca	
Pacific Land Group	Laura Jones, Senior Development Planner info@pacificlandgroup.ca	
Builders & Developers		
Adera Development	Rocky Sethi, Chief Operating Officer s.22	Participated in the user research in April 2023
Naikoon Contracting	Max Tighe, Head of Digital Transformation and Innovation max@naikoon.ca	Participated in the user research in April 2023
Townline	Rick Bortolussi,Director of Technical Services Rick.bortolussi@townline.ca	Participated in the user research in April 2023
Urban Development Institute	Jeff Fisher, Vice President and Senior Policy Advisor jfisher@udi.org	
Aryze Development	Luke Mari luke@aryze.ca	Participated in the DAPR engagement
Canadian Home Builders Association	Neil Moody, Chief Executive Officer Neilmoody@chbabc.org	
Greater Vancouver Home Builders' Association	Ron Rapp, Chief Executive Officer Ron@havan.ca	
Others		
Greater Vancouver Board of Trade	Bridgitte Anderson, President and CEO ceo@boardoftrade.com	
BC Building Trades	Brynn Bourke, Executive Director info@bcbuildingtrades.org	
Digital Technology Supercluster	Sue Paish, Chief Executive Officer sPaish@digitalsupercluster.ca Shawn Gervais, VP sGervais@digitalsupercluster.ca	

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 12:30 PM
To: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

Hi Zach,

Thanks for following up.

This is a virtual event.

Thanks and all the best,

Mark

From: May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Sent: Monday, April 3, 2023 12:07 PM
To: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>; Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: RE: Contacts for digital permitting roundtable

My team is pulling together relevant contacts.

Will this be a virtual or in-person event?

Best,
Zachary D. May, MBA
Executive Director
(he/him/his)

Building and Safety Standards Branch | Ministry of Housing
Phone: 778-679-9641 | Email: zachary.may@gov.bc.ca

From: Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Sent: Monday, April 3, 2023 12:00 PM
To: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>; Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; May, Zachary HOUS:EX <Zachary.May@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>; Willms, Lori HOUS:EX <Lori.Willms@gov.bc.ca>
Subject: Re: Contacts for digital permitting roundtable

Hi Mark, I'm including Zac May who can help us with this.

Bindi

Get Outlook for iOS

From: Hosak, Mark HOUS:EX <Mark.Hosak@gov.bc.ca>
Sent: Monday, April 3, 2023 11:58:55 AM
To: Papadopoulos, Nikki HOUS:EX <Nikki.Papadopoulos@gov.bc.ca>; Sawchuk, Bindi HOUS:EX <Bindi.Sawchuk@gov.bc.ca>
Cc: Madoc-Jones, Sian HOUS:EX <Sian.MadocJones@gov.bc.ca>
Subject: Contacts for digital permitting roundtable

Hi Nikki and Bindi,
I hope you both are well.
I am reaching out to see if you can help us identify contacts to invite to a digital permitting round table on Thursday, April 6.
We have time held from 3-5 pm that day. It should be an hour. As I understand it, the Minister would like Ministry staff to speak about where we are going as well as the Digital Supercluster. And then open it up to thoughts from the attendees. Below is a list of the stakeholders he'd like to join.
Digital Supercluster
UDI
Homebuilders
Architects
Engineers
Planners
BC Building Trades
GVBOT
North Vancouver – Tim Ryce (Chief Building Official)
Kelowna
Surrey
Vancouver

Victoria
Burnaby
Port Coquitlam
We are hoping to have the list of invitees finalized today so if you can please provide contact details at your earliest convenience that would be amazing.
Thanks for your help and all the best,
Mark
Mark Hosak, *he/him*
Ministerial Advisor to
The Honourable Ravi Kahlon
Minister of Housing
Cell: 250-886-1834