The Honourable John Horgan Premier of British Columbia The Honourable George Heyman
Minister, Environment and Climate Change

The Honourable Carole James Minister, Finance

June 12, 2020

Dear Premier Horgan, Minister Heyman, and Minister James

RE: Climate Solutions Council recommendations to government on economic recovery and stimulus

The Climate Solutions Council would like to thank you for the opportunity to continue to provide advice on opportunities for stimulus and economic recovery as B.C. responds to the COVID-19 crisis. The work you have done to flatten the curve and the careful step-by-step process of the BC Restart Plan puts B.C. in good stead to recover from the impacts of the pandemic. Your assertion on May 6 that the province must recommit to putting CleanBC at the center of our recovery affirms B.C.'s climate leadership.

We continue to urge the government to apply a climate and equity lens to all stimulus and recovery measures, building on the objectives, values and actions of CleanBC. This includes ensuring short-term actions are consistent with our longer-term transition to a sustainable low-carbon society and economy, and when it comes to stimulus, seeking out specific projects that are both "shovel ready" and "shovel worthy."

A growing number of jurisdictions have begun rolling out economic recovery plans, and those that have historically led on climate action continue to do so by aligning recovery efforts with ongoing innovation and deployment of climate solutions. Germany, for example, has committed nearly one-third of its 130 billion euro recovery budget. The European Commission's planned recovery similarly includes a focus on climate action, including significant multi-year investments in building renovations (prioritizing schools, hospitals, and social housing), clean hydrogen, renewable energy, and clean transportation. In California, Governor Newsom has appointed a task force to help California recover as fast and safely as possible, creating a fair, green, and prosperous future.

The rationale for this approach is as much about the economy as it is about the environment. In a recent study, prominent economists note that properly-designed clean stimulus policies can have advantages over traditional fiscal stimulus, delivering climate benefits, strong economic results, and other co-benefits to society. The study surveyed 231 experts from central banks, finance ministries, and other economic experts from G20 countries and found that green fiscal recovery packages can act to

¹ K. Abnett. May 27, 2020. "Key climate spending in EU's 'green recovery' plan." Reuters. https://www.reuters.com/article/us-eu-budget-recovery-climate-factbox/factbox-key-climate-spending-in-eus-green-recovery-plan-idUSKBN2331RB

² Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and Zenghelis, D. (2020), 'Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?', Smith School Working Paper 20-02. (Forthcoming in: Oxford Review of Economic Policy 36(S1)) https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf

decouple economic growth from greenhouse gas (GHG) emissions, while also reducing existing welfare inequities.

Building on learnings from these other jurisdictions, and our advice letters from April 15 and May 11, we would like to provide the following advice to support the B.C. government's design of an economic recovery plan and allocation of stimulus. We have divided our latest advice into three areas: (1) a set of principles that we recommend government adopt to put CleanBC at the centre of an economic recovery plan, (2) criteria that can be used evaluating proposed immediate stimulus initiatives within the allocated \$1.5 billion, and (3) our advice on stimulus investments, which meet the criteria and are consistent with the principles.

Recommended Principles for B.C.'s Economic Stimulus

Benefit every part of British Columbia

Reduce inequality and create opportunity for all British Columbians, including vulnerable populations disproportionately impacted by climate change and COVID-19.

Create sustainable jobs

Target investments in areas that will create sustainable jobs and grow businesses that produce low carbon goods and services. For example, take advantage of high job multipliers in the retrofits and clean economy sectors. Improve skills and employability of the workforce in partnership with post-secondary and apprenticeship programs, and support a just transition.

Accelerate progress on CleanBC and climate action

Drive transformative change by investing in low carbon pathways such as electrification, renewable fuels, hydrogen, zero emissions transportation, low carbon and energy efficient buildings. Remove barriers and support B.C. businesses and industries to enhance competitiveness and enable production of low carbon goods and services.

Advance Indigenous peoples

Affirm and implement BCDRIPA, with priority for advancing Indigenous peoples, rights, and reconciliation.

Increase resilience to climate impacts

Incorporate climate resilience into COVID-19 recovery and rebuilding plans, informed by BC's Strategic Climate Risk Assessment and future climate conditions, and delivered in communities across B.C.

Maximize local impact and local benefit

Focus on stimulus that will revitalize and grow local economies.

Criteria

In order to assess potential stimulus projects or programs, we have developed five criteria that relate to the above principles. Given the need to be nimble and recognizing challenges in securing reliable and consistent data, these are qualitative "yes/no/neutral" criteria that can be used for an initial screen. To qualify for near term stimulus, potential investments should be scored yes or neutral for all of the criteria. More detailed scrutiny, including use of quantitative data where available, could subsequently be applied to those projects that pass initial screening.

Objective	Criterion	Measure / Indicators	Data Sources
Economic stimulus	Jobs, business reopening, improves private and public sector financial stability	Increases hours worked, reduces unemployment, business reopening, reduces bankruptcies, reduces GDP loss, stimulates investment	Economic models, economic data (StatCan- labour force surveys), industry surveys
Environment quality	- Supports CleanBC goals - Reduces GHGs; Supports transition to low C economy - Increases climate resilience	- GHGs trend down - Does not increase carbon-intensity	- Fuel consumption in short term - GDP - GHGs
Government capacity	Institutional/implementation capacity and within budget, consistent with federal priorities and programs	- Cost within stimulus budget - Available delivery mechanisms - Supports discussions with federal government	- Program costs - Data from pilot programs - Other jurisdictions' experience
Equity	Reduces inequality and addresses affordability in identified groups	Identify groups: low income, regional, marginalized, racialized, not male dominated; inequality ideally reduced, but at least none worse off	- Follows from type of program - Descriptive
Reconciliation	Supportive of truth and reconciliation, UNDRIP	Inclusion of Indigenous peoples and principles in decision making	- Follows from type of program; descriptive

Strategic Stimulus Initiatives

With the above principles as our guide, and having applied the screening criteria, we have assessed which initiatives align with CleanBC priorities—making them both shovel ready and shovel worthy. To ensure that CleanBC is at the heart of B.C's economic response, we recommend at least \$500M of the \$1.5 billion committed by the government to economic stimulus be directed to the following initiatives: (additional details are available for each recommendation in Appendices 1 to 4):

DRIVE TO ZERO: CLEAN TRANSPORTATION. (Appendix 1) B.C. has effectively positioned itself among leaders in transitioning to zero emission vehicles, creating new jobs and economic activity, and cutting pollution in the process. Leveraging its existing policy framework—the ZEV and Low Carbon fuel standards)—further progress can be made in supporting personal and business decisions to switch to ZEVs (light, medium and heavy-duty), and to increase the supply of cleaner fuels. With public transit ridership suffering a near-term decline, and building on the province's Active Transportation Strategy,

strategic investments in support of the province's Active Transportation Strategy can enable more British Columbians to get around by foot and bicycle. We recommend the government:

- 1. **Accelerate EV charging and hydrogen refueling infrastructure** build-out within and in-between B.C.'s towns and cities, through additional and/or enhanced support.
- 2. Adopt measures to increase the production of liquid clean fuels in B.C. through targeted support to spur new and/or expanded supply.
- 3. **Create safe, active transportation opportunities** by offering additional support to (i) convert some of the available road space for safe active transportation and (ii) expand incentives that encourage active transportation use.

CLEAN INDUSTRY INNOVATION. (Appendix 2) B.C.'s industrial sector offers several opportunities to create jobs, unlock innovation, accelerate the objectives of CleanBC and strengthen the adaptability, resilience and competitiveness of BC's post-Covid economy. Provincial investment in Clean Industry Innovation projects will unlock additional private and federal capital, resulting in a significant acceleration of the economic recovery impact in the near-term as well as delivering substantial GHG reductions in the medium-term. Opportunities exist to support small, medium-sized and large businesses through the following priority recommendations:

- Create a program that helps B.C.'s small and medium-sized enterprises adopt technologies to
 measure and reduce their GHGs, increasing resilience to maintain and grow jobs as well as
 support homegrown BC technology SMEs with market validation and business growth.
- 2. **Create a CleanBC Industry Innovation Recovery Fund** that stimulates private sector investment in emissions reductions projects such as:
 - a. the collection, transportation, and processing of harvest residuals to **create biofuels and renewable gas.** Note this aligns with Climate Resilience item #2 below.
 - b. emissions reductions projects for large industrial operations.
 - c. early development activities for industrial electrification projects. This opportunity would focus on identifying and executing activities (such as planning, surveying, screening, field assessments) and has potential to leverage federal electrification funding.

BETTER BUILDINGS. (Appendix 3) To curb carbon pollution from buildings by at least 80% by 2050, we need to encourage fuel switching and comprehensive retrofits in existing buildings and to construct low-carbon energy-efficient new buildings using wood where possible. These investments can significantly reduce GHG emissions, generate savings in energy costs over time, and increase comfort levels. Installing electric space and/or water heating systems in homes and buildings and energy efficiency improvements such as increased insulation, sealing off leaks, and installing better windows and doors will be critical. Integrating EV charging infrastructure in retrofits will also support zero emissions transportation. We recommend the following:

Raise incentive caps on retrofits in homes and buildings, including social and Indigenous
housing and public buildings by increasing the amounts in existing programs, including CleanBC
Indigenous Community Energy Coach, and CleanBC Indigenous Community Heat Pump Incentive
programs, to support more extensive retrofits to generate deeper reductions in GHGs.

- 2. **Increase funding for new social and Indigenous housing** allocated under existing programs including the Community Housing Fund and Indigenous Housing Fund.
- 3. Grow and train the workforce and develop the supply chain. Upskill and grow the workforce to build and renovate low-carbon homes and buildings. Increasing grants and caps through the CleanBC Building Innovation Fund to accelerate demonstration projects and to stimulate local supply and manufacturing of low carbon building components will grow the number of B.C. suppliers to domestic markets and beyond.

CLIMATE RESILIENCE. (Appendix 4) B.C. is vulnerable to many climate risks as identified in its Strategic Climate Risk Assessment. Increased funding for programs that reduce these risks and help invest in and restore natural assets is needed throughout the province. We recommend the government:

- 1. **Invest in Community Flood Hazard Mitigation**, increasing funding for flood plain mapping and for replacing, restoring, and improving bridges, culverts, and roads, including resource roads to reduce flooding vulnerability of vital supply routes and access to communities across B.C.
- 2. Increase funding for policies and programs across the province that increase climate resilience, invest in and regenerate natural assets, and can have the dual benefit of reducing GHG emissions. Each of these could employ youth and other demographics with high levels of unemployment associated with COVID-19's economic impacts. These include slash removal, protecting cultural heritage sites, and improving ecosystem resilience in B.C. parks.
- 3. **Increase funding for B.C.'s farms** to invest in beneficial management practices (BMPs) that improve climate resilience and reduce GHG emissions.

We appreciate that the economic recession wrought by COVID-19 is unlike previous downturns, with greater job losses and diminished employment prospects for women and youth, and thus requires targeted solutions. We are supportive of immediate training programs that could be in place in the near term, targeted at youth and those out of work, to build the skills that support achieving relevant CleanBC initiatives and increase climate resilience. We recognize that the stimulus investments we've identified won't come close to fully addressing these challenges and that complementary programs and investments will need to be part of the overall plan.

To achieve its intended outcomes, stimulus investments will need to be made in a timely manner, while also acknowledging that potential recipients—including businesses, municipalities, and First Nations—are already strained. Consequently, it will be important to find the right balance between due diligence and the need to be nimble in making decisions with minimal administrative burden, similar to how the government has approached emergency relief programs. By focusing wherever possible on existing programs and delivery agencies, the government will be able to ensure a short timeline from decision to delivery of resources and resultant economic activity.

Conclusion

In closing, by keeping CleanBC at the centre of B.C.'s recovery, we have the opportunity to ensure we build B.C. back better, to be a more equitable province that is better positioned to thrive in the world as it continues to confront climate disruption. This includes ensuring short-term actions are consistent with

our longer-term transition to a sustainable low-carbon society and economy, and when it comes to stimulus, seeking out specific projects that are both "shovel ready" and "shovel worthy."

The council also continues to work on medium to longer term opportunities that support B.C.'s economic recovery and will provide subsequent advice to the government on Budget 2021. While the intent of stimulus is to create near-term economic activity, we believe coupling financial support with complementary policy and regulations can deliver more effective stimulus. We reiterate our advice to continue moving ahead with programs, policies, and regulations committed to in Phase 1 of CleanBC, as well as delivering on other commitments. Key actions from Phase 1 of CleanBC include strengthening the low-carbon fuel standard, implementing Zero Emission Vehicle Act regulations, and the development of a low-carbon industrial strategy.

It must be acknowledged that achieving a sustained economic recovery requires ongoing effort by the B.C. government. Consequently, we see the above stimulus recommendations as consistent with the government's existing commitment to CleanBC, and initiatives that will advance progress on government's existing goals and plans.

Again, thank you for the opportunity to share our advice. We are hopeful that the government sees the value in these ideas and prioritizes them as core stimulus initiatives. We look forward to meeting with you again to discuss these ideas in detail and answer any questions you may have.

Sincerely,

Merran Smith

Merran Smith
Executive Director
Clean Energy Canada
Co-Chair, BC Climate Solutions Council

Colleen Giroux-Schmidt
Vice President, Corporate Relations
Innergex Renewable Energy

Co-Chair, BC Climate Solutions Council

BC Climate Solutions Council members:

David Black, President, MoveUP
Lee Brain, Mayor, City of Prince Rupert
Ian Bruce, Chief Operating Officer, David Suzuki Foundation
Matt Horne, Climate Policy Manager, City of Vancouver
Lydia Hwitsum, First Nations Summit Political Executive
Mark Jaccard, Professor, School of Resource and Environmental Management, SFU
Khelsilem, Councillor, Squamish Nation Council
Adriana Laurent, Co-Founder and Project Administrator, UBC Climate Hub

Skye McConnell, Manager of Policy and Advocacy, Shell Canada
Kurt Niquidet, Vice President, Council of Forest Industries
Nancy Olewiler, Director of the School of Public Policy, Simon Fraser University
Josie Osborne, Mayor, District of Tofino
Danielle (DJ) Pohl, President, Fraser Valley Labour Council
Tom Syer, Head of Government Affairs, Teck Resources
Karen Tam Wu, Regional Director for British Columbia, Pembina Institute
Jill Tipping, President & Chief Executive Officer, BC Tech Association
Joie Warnock, Assistant to the President, Unifor

CC.

Minister Ralston, Ministry of Energy, Mines and Petroleum Resources
Minister Mungall, Ministry of Jobs, Economic Development and Competitiveness
Don Wright, Deputy Minister to the Premier
Geoff Meggs, Chief of Staff to the Office of the Premier
Kevin Jardine, Deputy Minister, Environment and Climate Change
Lori Wanamaker, Deputy Minister, Ministry of Finance
Fazil Mihlar, Deputy Minister, Energy, Mines and Petroleum Resources
Christine Kennedy, Deputy Minister, Jobs, Economic Development and Competitiveness

Appendix 1: Drive to Zero: Clean Transportation

Drive to Zero: Initiative 1	Accelerating Electric Vehicle Charging and Hydrogen Refueling Infrastructure
Project Description	Additional support to accelerate and expand the network of EV charging and hydrogen refueling infrastructure throughout B.C.
Geographic area of focus	Province-wide—public, home and workplace, highway rest areas, commercial.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	< 3 months to start, with sustained activity for the duration of available funding.
Supported by existing policy/regulation?	Yes—supports ZEV Standard targets and can be delivered via existing GoElectric charging incentive program. Supported by LCFS (Part 3 credit generation). Consistent with B.C.'s "Drive to Zero" pledge.
Opportunity for private/public partnership? Or links to other initiatives?	If coupled with complementary policy signals—notably the 20% by 2030 LCFS target and "right to charge" amendments to the Strata Act—these programs will encourage private sector investment.

Drive to Zero: Initiative 2	Adopt measures to increase the production of liquid clean fuels in B.C. through targeted support to spur new and/or expanded supply
Project Description	Measures to increase the production of liquid clean fuels in B.C.
Geographic area of focus	Existing operations in Delta (Consolidated Biofuels) and Burnaby (Parkland Refinery). Prospective opportunities throughout B.C., including in agricultural and forestry sectors and communities.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	Likely 12+ months for construction (however design/engineering activity could commence in > 3 months).
Supported by existing policy/regulation?	Yes—a prerequisite for attracting new investment is quick passage of amended LCFS legislation to enshrine the 20% target in 2030.
Opportunity for private/public partnership? Or links to other initiatives?	Linkage to ICE fund for supporting pre-commercial technologies.

Drive to Zero: Initiative 3	Create safe, active transportation opportunities
Project Description	Additional support to (1) convert some of the available road space for safe active transportation and (2) expand incentives that encourage active transportation use.
Geographic area of focus	Province-wide: neighbourhoods, communities, and city centres.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	< 3 months from funding decision to execution, for both active transportation infrastructure and incentives.
Supported by existing policy/regulation?	Yes—supports the CleanBC plan and BC's Active Transportation Strategy, which aims to double the percentage of trips taken with active transportation by 2030.
Opportunity for private/public partnership? Or links to other initiatives?	Yes—BC's Active Transportation Infrastructure Grants Program leverages funding from BC communities to provide cost-sharing opportunities for network planning grants and infrastructure grants.

Appendix 2: Clean Industry Innovation

Clean Industry Innovation: Initiative 1	Help B.C.'s small and medium-sized enterprises adopt smart technologies to measure and reduce their GHGs
Project Description	Create programs that support homegrown B.C. technology SMEs to provide green audits and mechanisms to help lower the barriers of implementation of smart solutions. Such programs would provide educational materials, case studies, guidance on best practices and mentorship to increase awareness of the idea that 'clean is the side effect of smart'.
Geographic area of focus	Province-wide.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	9 months for pilot (which can be started immediately).
Supported by existing policy/regulation?	No.
Opportunity for private/public partnership? Or links to other initiatives?	Yes. B.C. Tech's ScaleUP BC partnership leverages funding from industry and federal government to provide training and support to non-tech SMEs on technology adoption.

Clean Industry Innovation: Initiative 2	CleanBC Industry Innovation Recovery Fund
Project Description	Create a fund that stimulates private sector investment in emissions reductions projects. As companies face COVID-19 related capital spending cuts, this additional funding would allow companies to continue with discretionary spend on emissions reductions projects, allocate jobs to process improvements and application of new technology, and drive investment in early phases of larger emissions reductions projects. It would also allow companies to re-engage contractors, including Indigenous partnerships, on projects that may have been recently deferred or cancelled. Three key areas of opportunity are: i) the collection, transportation, and processing of harvest residuals to create biofuels and renewable gas. The collection could start immediately. Initial uptake of the program will likely be bioenergy producers (e.g., biomass power plants, pellet sector). ii) emissions reductions projects for large industrial operations. iii) early development activities for industrial electrification projects. This opportunity would focus on identifying and executing activities such as planning, surveying, screening, field assessments.
Geographic area of focus	Province-wide—especially in key natural resources areas.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	< 3 months for updated program, 6-9 months until start up and or execution of successful projects.
Supported by existing policy/regulation?	Yes—BC Bioenergy strategy, Methane regulations, Federal Emissions Reduction Fund, CleanBC program for Industry (Industry Incentives & Fund).
Opportunity for private/public partnership? Or links to other initiatives?	Yes—Forest Enhancement Society of BC could to help deliver the forest residuals program, Clean Industry Fund, 2019 B.C./Federal Govt MOU for natural gas sector electrification.

Appendix 3: Better Buildings

Initiative	Raise incentive caps for new construction and retrofits and increase training	
Project Description	 a. Increase caps for retrofits in homes and buildings, social and Indigenous housing, and public sector buildings. b. Increase funding for new social and Indigenous housing. c. Grow and train the workforce and develop the supply chain. 	
Geographic area of focus	Province-wide.	
Timing to deliver (execute?) (<3, 6-9 months, 12+ months)	< 3 months to start, with sustained activity for the duration of available funding.	
Supported by existing policy/regulation?	CleanBC Better Homes and CleanBC Better Buildings CleanBC Government Buildings and CleanBC Communities CleanBC Indigenous Community Energy Coach and CleanBC Indigenous Community Heat Pump Incentive Program	
Opportunity for private/public partnership? Or links to other initiatives?	For training: partner with industry associations, training institutions, professional bodies, and trade unions. For training and supply chain: Emerging Economy Task Force report.	

Appendix 4: Climate Resilience

Climate Resilience: Initiative 1	Investing in Community Flood Hazard Mitigation
Project Description	Increase funding for "Climate Proofing'—replacing, restoring, and improving bridges, culverts, roads, and resource roads to reduce flooding vulnerability of vital supply routes and access to communities across B.C. The initial focus could be on projects that have been identified and are ready for funding. Increase funding for flood plain mapping and risk assessment. An important part of this funding would go to skills training to equip residents of these communities to undertake the needed work and incorporate Indigenous and local knowledge.
Geographic area of focus	Province wide, especially rural and remote communities, focusing on First Nations and communities at high risk of flooding and being cut off by road access.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	Immediate funding for work in summer—fall season.
Supported by existing policy/regulation?	Builds on existing programs in MOTI, FLNRD, EMBC as well as municipal and First Nation asset management plans.
Opportunity for private/public partnership? Or links to other initiatives?	Work with Indigenous communities, private sector, university, NGO expertise in flood plain mapping.

Climate Resilience: Initiative 2	Ecosystem Resilience and GHG Mitigation: Fires, Floods, Cultural Heritage Protection	
Project Description	 Increase funding for policies and programs across the province that increase climate resilience, invest in and regenerate natural assets, and can reduce GHG emissions. Target employment at youth and other demographics with high levels of unemployment. Potential programs: Slash pile removal initiatives to reduce fire risk and potential conversion to bioenergy. In partnership with the First Peoples' Cultural Council increase funding to document and protect cultural heritage from flooding and fires. Increase funding to BC Parks' programs to sustain and improve ecosystem resilience to climate risks. This can also include programs to treat and protect against invasive species. 	
Geographic area of focus	Province wide, especially rural and remote communities.	
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	Immediate funding for work in summer—fall season and ongoing over next 12 months.	
Supported by existing policy/regulation?	Builds on existing programs in Parks, FLNRD, First Peoples' Cultural Council, and municipal and First Nations plans.	
Opportunity for private/public partnership? Or links to other initiatives?	Work with Indigenous communities, private sector, university, NGO expertise in ecosystem resilience.	

Climate Resilience: Initiative 3	Agricultural Beneficial Management Practices for Climate Resilience and GHG Mitigation
Project Description	Improve GHG management and resilience to climate impacts (e.g., flooding, heat events) through BMPs that will also improve food security. Both infrastructure and operating programs that may include increases in livestock efficiency/grazing projects, soil aeration, manure storage, anaerobic digestion, flood/fire protection, improve natural assets, pest and invasive species management.
Geographic area of focus	Province wide, agricultural lands.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	Immediate funding for work in summer—fall seasons into 2021.
Supported by existing policy/regulation?	Builds on existing programs in Agriculture Ministry, AAFC- Environmental Farm Plans.
Opportunity for private/public partnership? Or links to other initiatives?	Work with private sector, university, NGO expertise in agricultural BMPs, Environmental Farm Plans.



Briefing Note

For: Hon. Bruce Ralston Date: June 19, 2020

Minister of Energy, Mines and Petroleum Resources

Annex: June 25, 2020

By: Tom-Pierre Frappé-Sénéclauze

Director, Buildings and Urban Solutions

Re: CleanBC retrofit programs as channels for economic stimulus

Issue

How to accelerate retrofits of homes and buildings for economic recovery and the growth of B.C.'s clean tech sector.

Summary

- Building retrofits are effective tools for economic recovery and meet multiple government objectives: climate mitigation, housing affordability, public health, and economic diversification.
- As a result of its policy leadership, B.C. has a thriving clean tech sector providing components and design services for low-carbon buildings. B.C. could become a Pacific Northwest supply hub for heat pumps and other building-related clean tech by: (1) growing local demand for deep retrofits through incentives and regulations, (2) establishing best practices through demonstration projects, and (3) providing support for training and supply chain development.
- CleanBC programs administered by MEMPR are the ideal channel for this economic stimulus.

Context

- The depth of carbon reductions achieved at each building, and the rate of retrofits, must be increased if we are to meet our climate objectives. Buildings also need upgrades for climate adaptation (flood proofing, overheating protection, etc.) and seismic protection.
- Deep retrofits are effective tools for economic recovery. They create a high number of jobs per dollar invested (8–27 jobs/\$M), employ a range of skilled labour, use mostly local labour and materials, and create employment where people live.
- Retrofits support multiple government priorities: climate mitigation, housing affordability, public health, and economic diversification.
- B.C. is a leader in green building design and construction, and could become a supply hub for heat pumps and other building clean tech in the Pacific Northwest.

 COVID caused a slowdown in construction and renovation because owners are more reluctant to invest and social distancing complicates on-site work.

Considerations

- **Depth vs. breath**: Instead of attempting to reach many buildings with small measures, stimulus should be focused on deepening carbon reductions and resilience at each site. This will support clean tech firms supplying low-carbon components and materials.
- Connection policy: Electric service upgrades can easily double the cost of heat pump
 installations, making fuel switching uneconomical for larger buildings. The adoption of
 heat pumps in buildings is an effective way to build load and stabilize rates, particularly
 because it creates a new off-peak load for summer and spring cooling.
- Climate adaptation: Improvements to envelopes and heating systems offer
 opportunities to improve the resilience of buildings to climate shocks and stresses.
 Adopting such adaptation measures can save lives and significantly decrease healthcare costs, but even low-cost measures are routinely missed because there is no
 mandate or funding to pursue them.
- **PACE financing**: Investments of the order of \$2B per year will be needed over the next 30 years to decarbonize B.C. buildings. PACE can facilitate these investments.

Recommendations

Opportunities for rapid stimulus

- 1. Increase the maximum grant amount under CleanBC Better Homes and Better Buildings programs to enable deeper carbon reductions. Prioritize a rapid uptake of these offers by social housing and public-service organizations by increasing funding for asset renewal by MAH, MoH, and MoE in F2020 and F2021.
- 2. Provide top-ups for assessment and integration of climate-adaptation measures in CleanBC Custom programs. Add resilience and health improvements as key performance indicators for stimulus investments in the building sector.
- 3. Increase incentives for demonstration projects and supply chain development through the CleanBC Building Innovation Fund.
- 4. Incentivize electric services upgrades through CleanBC or BC Hydro.

Measures to sustain demand

- 5. Enact enabling legislation for commercial and residential PACE programs (in partnership with MAH).
- 6. Accelerate development of retrofit code (with MAH) and heating equipment regulations under the Energy Efficiency Act.

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Annex

Additional information

On the cost of deep retrofits and limitations of current CleanBC custom programs

Better Buildings BC custom programs incentives are **currently capped at \$200,000 per site**. The **incremental cost of a deep retrofit can range from \$25,000 to \$100,000** per unit and the cost of a fuel switch for a medium size multi-unit residential building is in the millions.

- → In the short term, we recommend a limited number of 'top up' grants be made available to demonstration sites combining deep carbon reductions and resilience objectives; design strategies, construction costs, and performance data should be made available to regulators and research groups.
- → In the medium term, grant maximums should be set based on a combination of percentage of incremental cost and a dollar amount per unit retrofitted.

On the need for CleanBC incentives for service connection

Electric service upgrades, when required for connection of a heat pump or EV charging, cost **in the hundreds of thousands of dollars** and create significant delays for retrofits and new construction projects. Zoning rules tend to concentrate multi-unit residential developments alongside arterials which concentrates load in these areas. As a result, projects attempting to electrify heat loads can require connection upgrade at the site level *and* an upgrade of the upstream transformer serving the street.

BC Hydro can internalize these costs, but this will require a **change in rate design**, a **process that can take up to three years** (e.g. engagement for the 2015 rate design application started in May 2014, and the BCUC decision was released in January 2017) unless this is made a priority and advanced separately from the broader rate design application.

- → We recommend that CleanBC incentives be made available in the meantime to support connection upgrades. For retrofits, these incentives should only be made available after all reasonable electrical efficiency measures have been considered to avoid the upgrade. For new developments, these incentives should only be made available only for projects achieving the higher steps of the BC Energy Step Code.
- → BC Hydro can provide additional data on costs and delays of service upgrades to inform incentive design and clarify non-financial barriers.

On the CleanBC Building Innovation Fund

The program drew 49 applications representing \$13.8 million in funding requests; \$1.8 million were awarded in 2019. There are therefore **at least \$12 million of shovel-ready proposals** that could be rapidly funded in the 2020 intake — likely more.

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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCEC ELECTRICITY AND ALTERNATIVE ENERGY DIVISION

Date: June 25, 2020

PREPARED FOR: Honourable Minister Bruce Ralston, Minister of Energy, Mines and

Petroleum Resources

SUBJECT: Meeting with Property Assessed Clean Energy BC (PACEBC)

BULLET RESPONSE:

- The PACEBC coalition is a group of organizations advocating for Property Assessed Clean Energy (PACE) enabling legislation to allow local governments to create PACE programs.
- PACE is a financing model to accelerate the adoption of energy efficiency, renewable energy technologies, and seismic upgrades in buildings.
- Administered or hosted by local governments, PACE offers long-term loans with a fixed interest rate, is secured by a tax lien on the property (which is transferrable), and is typically repaid through a line item on the municipal property tax bill.
- PACE is currently not authorized under British Columbia (B.C.) legislation.
- Financing tools are needed to achieve long-term building decarbonization goals under CleanBC.
- PACE can address the split incentive barrier to upgrade commercial buildings and multiunit residential buildings (MURBS), as the additional property tax can be recovered in part from tenants under most lease forms.
- For this reason, the Building Owners and Managers Association of BC and the Canada Green Building Council advocate for PACE programs.
- The rationale for PACE financing for homes is less clear.
- The Municipal Finance Authority (MFA) does not support PACE due to increased risk
 exposure to local governments' financial positions, and the utilization of MFA public
 borrowing for private investment. MFA borrowing is intended for public infrastructure
 owned and controlled by local governments (like water treatment plants, fire halls and
 recreation facilities), not for private borrowing.
- However, this borrowing would result in local improvements with a public benefit (greenhouse gas emission reduction).
- The Ministry of Municipal Affairs and Housing (MAH) has also expressed concern with linking PACE lending to the tax system because failure to pay a tax lien can result in a tax sale of an entire property. In some jurisdictions, PACE has resulted in predatory lending practices from contractors.
- While there are risks associated with PACE, EMPR staff advise they can be practically managed through policy design and program supports.
- In the case of commercial buildings and MURBS, there are few other financing tools that address market barriers such as the split incentive.
- MAH is the lead ministry on PACE given their statutory responsibility for the *Community Charter*.

- Honourable Selina Robinson, Minister of Municipal Affairs and Housing made a decision on June 25, 2020, to explore PACE as one option for addressing climate and seismic risks in buildings; however, it is not a priority. A first step will be to engage UBCM by sharing MAH's analysis on risks and opportunities.
- MAH is expected to point to the recently-launched CleanBC Better Homes low-interest financing offer as a current financing solution for the residential sector.

DRAFTED BY:

Katherine Muncaster, A/Dir, EEB

APPROVED BY:

Nat Gosman, Executive Director, BE ✓ Les MacLaren, ADM, EAED ✓ Fazil Mihlar, DM

Ho, Theresa EMPR:EX

From: Karen Tam Wu <karentw@pembina.org>

Sent:June 26, 2020 2:02 PMTo:Robb, Amanda EMPR:EXCc:Cuddy, Andrew EMPR:EXSubject:Follow up info for MBR

Attachments: Briefing-Note-MEMPR-Buildings-rA2 sh.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.

Hi Amanda,

Minister Ralston requested some additional info on a few of our recommendations for buildings. We've updated the briefing note (attached) with that information. Could you please forward on to the Minister and let him know we're happy to answer any further questions.

Many thanks and have a great weekend, Karen

Karen Tam Wu, RPF

Regional Director, British Columbia | Pembina Institute karentw@pembina.org | c: 778-846-5647 Suite 610, 55 Water Street, Vancouver, BC, V6B 1A1 www.pembina.org

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Withheld pursuant to/removed as

s.12; s.13; s.17

Ho, Theresa EMPR:EX

From: MacLaren, Les EMPR:EX Sent: July 8, 2020 11:36 AM

To: Mihlar, Fazil EMPR:EX; Cuddy, Andrew EMPR:EX

Cc: Gosman, Nat EMPR:EX; Amann-Blake, Nathaniel EMPR:EX; Jang, Monica EMPR:EX

Subject: Building Retrofit Expansion

Follow Up Flag: Follow up Flag Status: Flagged

Fazil/Andrew:

Further to the discussion we had yesterday with the Minister on COVID recovery initiatives, please see below the reasoning behind our proposals on building retrofits.

s.13; s.17

Les

Page 035 of 129 to/à Page 059 of 129

Withheld pursuant to/removed as

s.12; s.13; s.17

From: Minister, EMPR EMPR:EX
To: Cochrane, Marlene EMPR:EX

Subject: FW: 111533 Incoming - Planning for Economic Recovery

Date: June 22, 2020 9:37:28 AM

Attachments: Min. Ralston-Creating jobs now to build a better future.pdf

Hi Marlene,

I've been advised to refer this meeting request for a DM/ADM level meeting.

Thank you! Jaelin Ellis

Administrative Assistant

The Office of the Hon. Bruce Ralston

Minister of Energy, Mines and Petroleum Resources

P: 250-953-0900

From: Chris Ballard

Sent: June 18, 2020 2:28 PM **To:** Minister, EMPR EMPR:EX

Cc: Anna Milner

Subject: 111533 Incoming - Planning for Economic Recovery

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.

Good afternoon,

Attached please find a letter and brief proposal for Minister Ralston's consideration. If you have any questions, please don't hesitate to contact me.

Regards,

Chris Ballard

Chief Executive Officer Direct: (647) 325-4777 Office: (778) 265-2744

passivehousecanada.com

Twitter | Facebook | LinkedIn | Instagram

388 Harbour Rd, Suite 200, Victoria, BC V9A 3S1

PASSIVEHOUSE CANADA MAISONPASSIVE





The Honourable Bruce Ralston
Minister of Energy, Mines, Petroleum Resources
Government of British Columbia
EMPR.Minister@gov.bc.ca

June 18, 2020

Dear Minister Ralston,

I am writing this proposal in contribution to the government's planning for economic recovery from COVID-19.

Passive House Canada, a B.C.-based organization, is proposing establishing a revolving fund that would undertake deep energy retrofits of buildings in the province.

This proposal echoes key elements and priorities of your party's previous PowerBC plan, as well as boosting elements of the government's CleanBC program to have greater effect in the near term. In addition to the jobs and economic benefits noted, energy efficient buildings deliver important comfort, health and resiliency benefits to occupants.

This program would:

- Provide near term direct and indirect jobs, which can be focused towards young people and equity groups who have been hit hardest by this downturn;
- Contribute considerably towards meeting the province's climate goals, immediately and over the long term as the CGL LNG project comes online; and
- Provide a basis for the growth of associated manufacturing industries, including windows, doors and engineered wood products, supplying BC, Canada and the world.

The tool of using a revolving fund has been successful in other jurisdictions, and if the government wishes to consider this proposal further, Passive House Canada can convene a government-industry working group to have the concept developed and ready for implementation this fall. The document attached sets out the proposal in a bit more detail. I would be happy to discuss with you at any time.

Sincerely,

Chris Ballard

Chief Executive Officer

chris.ballard@passivehousecanada.com

Attch.





Creating Jobs Now to Build a Better Future

June 18, 2020

Proposal

Establish a \$50M revolving fund for deep energy, low carbon materials, building retrofit projects around the province. Fund would be evergreen, replenished though repayment by owners through a portion of their energy savings. Fund could be augmented by up to 100 per cent through the contribution of large institutional players. Case studies and communications would amplify the benefits of the program to the public and business.

Benefits

Training and employment: training in high-performance retrofits to produce high efficiency buildings is lagging the need. This fund will be able to include training for construction personnel (focus on new and recent trainees/grads), and project delivery using those trained workers. Those workers will then be able to use those skills going forward, post-recovery. Training is readily available across B.C. through networks established with Passive House Canada.

Immediate implementation & lasting impact: Local, regional and provincial government building stock will provide an initial source of "shelf ready" projects for immediate impact. Large commercial and residential buildings can provide the second wave of work well into the future using the revolving fund. The permanent nature of this fund will allow for the sustained cross provincial work necessary to drive down carbon emissions.

Climate change: Upgrading existing building stock is essential to meeting climate change goals. Financing and project management roadblocks for owners mean it often doesn't happen. Deep energy retrofits can reduce energy use by up to 70 per cent in existing buildings and make them resilient in the face of climate change. Retrofits would aim to achieve net zero energy consumption and low Carbon Use Intensity.

Industry development: Investing in these specialized retrofits will reinforce and grow BC jobs and businesses as the leader in Canada in manufacturing high performance windows, doors and construction components, including engineered wood, panelized systems and prefab houses. It would help stimulate the growth of low embodied carbon emission building products.

Equity and diversity: Having a structured fund with a long-term horizon allows fund managers to create streams that drive jobs to young people, women and other equity groups.

Jobs

A European study found that jobs generated per €1 million investment in building energy efficiency range from 6 to 60, depending on the design of the program. A Canadian government estimate during following the 2008 economic crisis estimated 20 jobs per \$1M invested, and the IEA noted the US experience "more than USD \$11 billion in stimulus funding was made available for building upgrade programmes in the United States from 2009 to 2011...these programmes delivered about USD \$2 in energy cost savings for every USD \$1 invested and more than 200 000 jobs were created across the country as a result."





Revenue to government

Research by JW Bankengruppe showed that for every €1 of public funds spent on its Energy Efficient Construction and Refurbishment program in 2010, the government received €5 in tax revenue through companies and employees.

Within government

B.C. Ministries of Environment; Municipal Affairs and Housing; Energy; Finance (fund structure); Advanced Education and Training; Citizen's Services (government building stock).

Federal government: Canada's Action on Climate Change (Departments of Environment and Climate Change, Health Canada, Innovation, Science and Economic Development, Natural Resources Canada, Indigenous and Northern Affairs Canada, Infrastructure Canada).

NGOs

Passive House Canada (program management, training, policy development); Vancity, Efficiency Canada, British Columbia branch of the Canadian Home Builders Association, B.C. Building Officials Association, colleges, universities and private education organizations for delivering education (i.e. Camosun, BCIT, UNBC, University of Victoria, University of British Columbia).

Contact:

Chris Ballard, CEO chris.ballard@passivehousecanada.com

De Champlain, Rhonda EMPR:EX

From: MacLaren, Les EMPR:EX <Les.MacLaren@gov.bc.ca>

Sent: July 16, 2020 4:34 PM

To: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Subject: RE: Q from TBS re two submissions - timing

s.12; s.13; s.17

Reallocations within approved base program budgets and small access to notional contingencies should not be a full TB item.

Les

From: De Champlain, Rhonda EMPR:EX < Rhonda. De Champlain@gov.bc.ca >

Sent: July 16, 2020 4:19 PM

To: MacLaren, Les EMPR:EX < Les. MacLaren@gov.bc.ca >

Cc: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Subject: Q from TBS re two submissions - timing

Hello Les,

I checked in with Faiyaz regarding the two submissions you mentioned this morning -s.12; s.13; s.17 s.12; s.13; s.17

There is a minor and major around first week of August and until further drafts of the submissions are received Faiyaz cannot advise which meeting these will go to.

He has advised that there are a lot of items trying to get on those agendas and it may not be possible to have these proceed before summer break. Also depending on what meeting they proceed to a signed submission would be due next week.

Faiyaz is asking whether these can wait until September.

Thank you.

Rhonda

De Champlain, Rhonda EMPR:EX

From: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Sent: July 17, 2020 3:04 PM

To: Talukdar, Faiyaz FIN:EX <Faiyaz.Talukdar@gov.bc.ca>

Cc: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Subject: RE: Q please re upcoming TB Submission?

Understood. Seems like these are just a bit too late for August, which was my initial thought when I heard about them earlier in the week.

I will raise this with the DM at our DM/ADM check in on Monday morning and get his thoughts on this as well.

Thank you for all your help.

Have a great weekend!

Rhonda

From: Talukdar, Faiyaz FIN:EX <Faiyaz.Talukdar@gov.bc.ca>

Sent: July 17, 2020 3:00 PM

To: De Champlain, Rhonda EMPR:EX < Rhonda.DeChamplain@gov.bc.ca >

Subject: RE: Q please re upcoming TB Submission?

Hi Rhonda,

Thanks for the followup. I will have to check in with my supervisor on this. \$.22 advise accordingly by early next week, thanks.

I will be able to

Theoretically, the final/signed submissions would need to come in atleast 2 weeks before the TB Major/Minor date. FYI that I have advised Nat Gosman (ED from Les' program area) this morning that there are already quite a few signed submissions in place for TB review in early August.

Best, Faiyaz

From: De Champlain, Rhonda EMPR:EX < Rhonda. De Champlain@gov.bc.ca>

Sent: July 17, 2020 2:52 PM

To: Talukdar, Faiyaz FIN:EX <Faiyaz.Talukdar@gov.bc.ca>

Cc: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Subject: RE: Q please re upcoming TB Submission?

Hello,

Below is the response from Les about waiting until September.

s.12; s.13; s.17

For now, I will add these to the dashboard for August (I was not aware of them), until timing can be sorted out/confirmed.

IF these did proceed early August, I am assuming you would need signed submissions next week?

Thank you for your help.

Rhonda De Champlain
Director
Cabinet and Legislative Initiatives
and Executive Operations
Deputy Minister's Office
Ministry of Energy, Mines and
Petroleum Resources
(778) 698-7188

From: Talukdar, Faiyaz FIN:EX <Faiyaz.Talukdar@gov.bc.ca>

Sent: July 16, 2020 1:10 PM

To: De Champlain, Rhonda EMPR:EX < Rhonda. De Champlain@gov.bc.ca>

Subject: RE: Q please re upcoming TB Submission?

Hi Rhonda, s.12; s.13; s.17

Best, Faiyaz

From: De Champlain, Rhonda EMPR:EX < Rhonda. De Champlain@gov.bc.ca>

Sent: July 16, 2020 12:55 PM

To: Talukdar, Faiyaz FIN:EX <Faiyaz.Talukdar@gov.bc.ca>

Cc: De Champlain, Rhonda EMPR:EX < Rhonda. De Champlain@gov.bc.ca>

Subject: Q please re upcoming TB Submission?

Hello,

During a check in with our DM and ADMs this morning I went over all the remaining items EMPR has before summer break.

s.12; s.13; s.17

Are you able to confirm this and when it might be proceeding so that I can ensure a DM approved and Minister signed submission to meet your timelines.

Thank you for your help.

Rhonda De Champlain Director Cabinet and Legislative Initiatives and Executive Operations Deputy Minister's Office Ministry of Energy, Mines and Petroleum Resources (778) 698-7188

De Champlain, Rhonda EMPR:EX

From: Talukdar, Faiyaz FIN:EX <Faiyaz.Talukdar@gov.bc.ca>

Sent: July 22, 2020 1:55 PM

To: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Subject: s.12; s.13; s.17

Hi Rhonda,

Wanted to share some info that we've given s.12; s.13; s.17

s.12; s.13; s.17 Not sure if this is in the works right now, but thought I should flag in case something is coming your way shortly. Please let me know if EMPR still wishes to proceeds.12; s.13; s.17

s.12: s.13: s.17

Best, Faiyaz

From: Talukdar, Faiyaz FIN:EX Sent: July 22, 2020 11:36 AM

To: Muncaster, Katherine EMPR:EX < Katherine.Muncaster@gov.bc.ca>

Cc: Gosman, Nat EMPR:EX < Nathaniel.Gosman@gov.bc.ca>

Subject: s.12; s.13; s.17

Hi Katherine,

Thanks for the followup. Had a chat with Colin - think the draft is looking OK to proceed through the channels on your end, thanks.

Best, Faiyaz

From: Muncaster, Katherine EMPR:EX < Katherine. Muncaster@gov.bc.ca>

Sent: July 21, 2020 3:45 PM

To: Talukdar, Faiyaz FIN:EX <Faiyaz.Talukdar@gov.bc.ca>

Cc: Gosman, Nat EMPR:EX < Nathaniel. Gosman@gov.bc.ca >; MacLaren, Les EMPR:EX < Les. MacLaren@gov.bc.ca >;

Parmar, Ranbir S CSNR:EX <Ranbir.Parmar@gov.bc.ca>

Subject:s.12; s.13; s.17

Hi Faiyaz,

See responses below in green.

Katherine

Katherine Muncaster | A/Director, Energy Efficiency Branch | Electricity and Alternative Energy Division | BC Ministry of Energy, Mines and Petroleum Resources | Tel 778-698-7180 | katherine.muncaster@gov.bc.ca

From: Talukdar, Faiyaz FIN:EX < Faiyaz. Talukdar@gov.bc.ca >

Sent: July 20, 2020 4:59 PM

To: Muncaster, Katherine EMPR:EX < Katherine.Muncaster@gov.bc.ca

Cc: Gosman, Nat EMPR:EX < Nathaniel.Gosman@gov.bc.ca >

Subject: s.12; s.13; s.17

Hi Katherine,

Happy Monday! Just had a chat with Colin and wanted to loop back in and follow-up on a couple of things:

s.12; s.13; s.17

Many thanks in advance for helping to flesh the details out.

Best,

Faiyaz

From: Gosman, Nat EMPR:EX < Nathaniel.Gosman@gov.bc.ca >

Sent: July 17, 2020 7:41 AM

To: Talukdar, Faiyaz FIN:EX < Faiyaz. Talukdar@gov.bc.ca >; Ward, Colin FIN:EX < Colin. Ward@gov.bc.ca >

 $\textbf{Cc:} \ \ \mathsf{MacLaren, Les EMPR:EX} < \underline{\mathsf{Les.MacLaren@gov.bc.ca}} >; \ \mathsf{Parmar, Ranbir S CSNR:EX} < \underline{\mathsf{Ranbir.Parmar@gov.bc.ca}} >; \\ \mathsf{Parmar S CSNR:EX}$

Muncaster, Katherine EMPR:EX < Katherine.Muncaster@gov.bc.ca >; Amy, Chris EMPR:EX < Chris.Amy@gov.bc.ca >

Subject:s.12; s.13; s.17

Hi Faiyaz,

Thanks for your questions. See my responses below in red.

s.12; s.13; s.17

Regards, Nat



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: Talukdar, Faiyaz FIN:EX < Faiyaz. Talukdar@gov.bc.ca >

Sent: July 16, 2020 5:30 PM

To: Gosman, Nat EMPR:EX < Nathaniel.Gosman@gov.bc.ca >; Ward, Colin FIN:EX < Colin.Ward@gov.bc.ca > **Cc:** MacLaren, Les EMPR:EX < Les.MacLaren@gov.bc.ca >; Parmar, Ranbir S CSNR:EX < Ranbir.Parmar@gov.bc.ca >; Muncaster, Katherine EMPR:EX < Katherine.Muncaster@gov.bc.ca >; Amy, Chris EMPR:EX < Chris.Amy@gov.bc.ca >

Hi Nat,

Happy Thursday! Had a couple of questions as I work through the draft:

s.12; s.13; s.17

Subject: \$.12; \$.13; \$.17

Many thanks for helping to flesh out the details.

Best, Faiyaz

From: Talukdar, Faiyaz FIN:EX Sent: July 15, 2020 9:20 AM

To: Gosman, Nat EMPR:EX < Nathaniel.Gosman@gov.bc.ca >; Ward, Colin FIN:EX < Colin.Ward@gov.bc.ca > **Cc:** MacLaren, Les EMPR:EX < Les.MacLaren@gov.bc.ca >; Parmar, Ranbir S CSNR:EX < Ranbir.Parmar@gov.bc.ca >;

Muncaster, Katherine EMPR:EX < Katherine.Muncaster@gov.bc.ca >; Amy, Chris EMPR:EX < Chris.Amy@gov.bc.ca >

Subject: \$.12; \$.13; \$.17

Hi Nat,

Thanks for this. Will review the draft and provide feedback soon, thanks.

Best, Faiyaz

From: Gosman, Nat EMPR:EX < Nathaniel.Gosman@gov.bc.ca>

Sent: July 15, 2020 9:17 AM

To: Ward, Colin FIN:EX <Colin.Ward@gov.bc.ca>; Talukdar, Faiyaz FIN:EX <Faiyaz.Talukdar@gov.bc.ca>

Cc: MacLaren, Les EMPR:EX < Les. MacLaren@gov.bc.ca >; Parmar, Ranbir S CSNR:EX < Ranbir.Parmar@gov.bc.ca >;

Muncaster, Katherine EMPR:EX < Katherine.Muncaster@gov.bc.ca; Amy, Chris EMPR:EX < Chris.Amy@gov.bc.ca> Subject: \$.12; \$.13; \$.17

Hello Colin and Faiyaz,

s.12; s.13; s.17

Should you have immediate questions, please reach out to Katherine Muncaster, cc'd here, as I am off today. I will be back tomorrow.

Regards, Nat



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

De Champlain, Rhonda EMPR:EX

From: MacLaren, Les EMPR:EX <Les.MacLaren@gov.bc.ca>

Sent: July 27, 2020 6:34 AM

To: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Cc: Schmidt, Cathy A EMPR:EX <Cathy.Schmidt@gov.bc.ca>

Subject: \$.12; \$.13; \$.17

Good morning Rhonda

s.12; s.13; s.17

Happy to address any questions.

Les

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Withheld pursuant to/removed as

s.12; s.13; s.17

De Champlain, Rhonda EMPR:EX

From: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Sent: July 27, 2020 10:43 AM

To: Flint, Amy EMPR:EX < Amy.Flint@gov.bc.ca>

Cc: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Subject: s.12; s.13; s.17

This is a new TB Submission. It will need a #.

s.12; s.13; s.17

For saving, printing, numbering, proofing please.

Note: Although Les' e-mail indicates this is a revised submission, they did a couple of version within the Division, this is the first one we have seen. I have a couple of e-mails on this that I will forward for the file.

Thank you.

Rhonda

From: MacLaren, Les EMPR:EX < Les. MacLaren@gov.bc.ca>

Sent: July 27, 2020 6:34 AM

To: De Champlain, Rhonda EMPR:EX < Rhonda.DeChamplain@gov.bc.ca >

Cc: Schmidt, Cathy A EMPR:EX <Cathy.Schmidt@gov.bc.ca>

Subject: CleanBC BHBB_Program Updates TB Sub

Good morning Rhonda

s.12; s.13; s.17

Happy to address any questions.

Les

De Champlain, Rhonda EMPR:EX

From: Mihlar, Fazil EMPR:EX <Fazil.Mihlar@gov.bc.ca>

Sent: July 29, 2020 11:40 AM

To: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Cc: Jang, Monica JEDC:EX < Monica. Jang@gov.bc.ca>

Subject: Re: For Approval Please - TB Submission -s.12; s.13; s.17

Approved. Thx.

Sent from my iPhone

On Jul 28, 2020, at 3:24 PM, De Champlain, Rhonda EMPR:EX < Rhonda.DeChamplain@gov.bc.ca > wrote:

Hello,

s.12; s.13; s.17

Document has been approved by Les.

This submission \$.12; \$.13; \$.17 submission was on the Round Table for Minister on Monday.

Les was hoping to get this submission and the s.12; s.13; s.17 before the Chair of Treasury Board in August if possible.

While there is currently no meeting scheduled to review these submissions we wanted to get them to Minister for signature and then to Treasury Board Staff in case another meeting with the Chair is scheduled. While preference is for August, September will work also.

For your approval please.

Thank you.

Rhonda De Champlain
Director
Cabinet and Legislative Initiatives and Executive Operations Deputy Minister's Office
Ministry of Energy, Mines and
Petroleum Resources
(778) 698-7188

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Withheld pursuant to/removed as

s.12; s.13; s.17

De Champlain, Rhonda EMPR:EX

From: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Sent: August 11, 2020 2:13 PM

To: De Champlain, Rhonda EMPR:EX < Rhonda. De Champlain@gov.bc.ca>

Subject: FW: Response - FW: Q from MO - FW: For Minister's Signature - TB Submission - \$.12; \$.13; \$.17

From: De Champlain, Rhonda EMPR:EX < Rhonda. De Champlain@gov.bc.ca >

Sent: August 11, 2020 7:41 AM

To: Cuddy, Andrew EMPR:EX < Andrew.Cuddy@gov.bc.ca >

Cc: De Champlain, Rhonda EMPR:EX < Rhonda.DeChamplain@gov.bc.ca >

Subject: Response - FW: Q from MO - FW: For Minister's Signature - TB Submission - \$.12; \$.13; \$.17

Hello Andrew,

Response below from Les.

Thank you.

Rhonda

From: MacLaren, Les EMPR:EX < Les. MacLaren@gov.bc.ca >

Sent: August 11, 2020 6:37 AM

To: De Champlain, Rhonda EMPR:EX < Rhonda.DeChamplain@gov.bc.ca >

Cc: Gosman, Nat EMPR:EX < Nathaniel.Gosman@gov.bc.ca>

Subject: RE: Q from MO - FW: For Minister's Signature - TB Submission - s.12; s.13; s.17

Hi Rhonda:

Requested response is below.

Les

s.12; s.13; s.17

From: De Champlain, Rhonda EMPR:EX < Rhonda.DeChamplain@gov.bc.ca >

Sent: August 10, 2020 2:03 PM

To: MacLaren, Les EMPR:EX < Les. MacLaren@gov.bc.ca >

Subject: Q from MO - FW: For Minister's Signature - TB Submission -s.12; s.13; s.17

Hello,

Can you please answer question below.

Thank you.

Rhonda

From: Cuddy, Andrew EMPR:EX < Andrew. Cuddy@gov.bc.ca>

Sent: August 10, 2020 1:49 PM

To: De Champlain, Rhonda EMPR:EX < Rhonda. De Champlain@gov.bc.ca >

Subject: RE: For Minister's Signature - TB Submission -s.12; s.13; s.17

Hi Rhonda,

MBR has reviewed this TB sub and has a question...

s.12; s.13; s.17

Thank you,

From: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Sent: July 29, 2020 3:26 PM

To: Cuddy, Andrew EMPR:EX <Andrew.Cuddy@gov.bc.ca>; Fogg, Bruce EMPR:EX <Bruce.Fogg@gov.bc.ca>; Robb, Amanda

EMPR:EX <Amanda.Robb@gov.bc.ca>

Cc: De Champlain, Rhonda EMPR:EX <Rhonda.DeChamplain@gov.bc.ca>

Subject: For Minister's Signature - TB Submission -s.12; s.13; s.17

Hello,

Attached is a Treasury Board Submission s.12; s.13; s.17

Document has been approved by Deputy Minister Fazil Mihlar.

This item was on the Round Table agenda for July 27.

While this submission is not currently scheduled for a minor meeting with the Chair, Treasury Board, the Ministry is hoping to submit a signed submission in case an opportunity comes up to have it proceed to a meeting with the Chair before the summer break. If not, it could proceed in September.

For Minister's consideration and signature please. Please advise if Minister would like to have a briefing on this.

Thank you.

Rhonda De Champlain Director Cabinet and Legislative Initiatives and Executive Operations Deputy Minister's Office Ministry of Energy, Mines and Petroleum Resources (778) 698-7188