

RE: Enquiry seeking forest investment opportunities

From: Nicholls, Diane R FLNR:EX
: s.15
To: Begon, Stacey FLNR:EX
Sent: December 9, 2020 4:18:16 PM PST

Vera, and me, Melissa and someone to support her on this please.

Diane Nicholls, RPF

Assistant Deputy Minister, Chief Forester
BC Provincial Government
"Caring for BC's Forests"

From: Begon, Stacey FLNR:EX
Sent: December 9, 2020 4:17 PM
To: Nicholls, Diane R FLNR:EX
Subject: RE: Enquiry seeking forest investment opportunities

I will work on finding a date

Who do you want me to invite from our end? James? Vera? Melissa?

I will also ask Melissa's office if there are others in her shop to invite – I just don't know how big we want this group to get right now 😊

From: Nicholls, Diane R FLNR:EX <Diane.Nicholls@gov.bc.ca>
Sent: December 9, 2020 3:48 PM
To: Begon, Stacey FLNR:EX <Stacey.Begon@gov.bc.ca>
Subject: FW: Enquiry seeking forest investment opportunities
Diane Nicholls, RPF

Assistant Deputy Minister, Chief Forester
BC Provincial Government
"Caring for BC's Forests"

From: Nicholls, Diane R FLNR:EX
Sent: December 9, 2020 3:48 PM
To: Kan, Paul JEDC:EX <Paul.Kan@gov.bc.ca>
Cc: Lam, Jeanette JEDC:EX <Jeanette.Lam@gov.bc.ca>; Horsman, Jennifer JEDC:EX <Jennifer.Horsman@gov.bc.ca>; Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>
Subject: RE: Enquiry seeking forest investment opportunities
Interesting! Maybe a few folks could get on a call to find out a bit more on this and see what ideas come forward. I have some but would want a discussion on this prior to offering.
Can we set up a call to discuss?

Diane Nicholls, RPF

Assistant Deputy Minister, Chief Forester
BC Provincial Government
"Caring for BC's Forests"

From: Kan, Paul JEDC:EX <Paul.Kan@gov.bc.ca>
Sent: December 7, 2020 2:38 PM
To: Nicholls, Diane R FLNR:EX <Diane.Nicholls@gov.bc.ca>
Cc: Lam, Jeanette JEDC:EX <Jeanette.Lam@gov.bc.ca>; Horsman, Jennifer JEDC:EX <Jennifer.Horsman@gov.bc.ca>
Subject: Enquiry seeking forest investment opportunities

Dianne,
s.13; s.17; s.21

Regards,

Paul Kan

Senior Manager, Export Markets and Investor Services

Ministry of Jobs, Economic Recovery and Innovation

Trade and Industry Development Division

T: 604 775-2198

[730-999 Canada Place, Vancouver, BC, CANADA V6C 3E1](#)

RE: Request for Q&A about mass timber and old growth

From: Nicholls, Diane R FLNR:EX
s.15
To: Sanderson, Melissa FLNR:EX
Sent: December 14, 2020 4:47:21 PM PST
Attachments: image001.jpg

Let me know if you need help answering....these are loaded questions – some of them at least.....

Diane Nicholls, RPF

Assistant Deputy Minister, Chief Forester
BC Provincial Government
"Caring for BC's Forests"

From: Sanderson, Melissa FLNR:EX
Sent: December 14, 2020 4:45 PM
To: Nicholls, Diane R FLNR:EX
Subject: Fwd: Request for Q&A about mass timber and old growth
Just an FYI

Sent from my iPhone

Begin forwarded message:

From: "Vasey, Jeff MAH:EX" <Jeff.Vasey@gov.bc.ca>
Date: December 14, 2020 at 4:09:04 PM PST
To: "Sanderson, Melissa FLNR:EX" <Melissa.Sanderson@gov.bc.ca>
Cc: "Hutchinson, Jarrett MAH:EX" <Jarrett.Hutchinson@gov.bc.ca>
Subject: FW: Request for Q&A about mass timber and old growth

Melissa

It's come to our attention that staff working on the Royal BC Museum Modernization Project have questions and concerns about the role of old growth in mass timber construction. We expect this might come up again as mass timber implementation advances and it would be great to prepare with facts and messaging.

It would be helpful if you could provide facts to help to develop Q&As that we could use and also pass to GCPE? You would know best about what questions to expect, but in addition to general messaging, we're interested to know more about things like:

s.13

Respectfully,
Jeff Vasey
Assistant Deputy Minister
Office of Mass Timber Implementation

Jobs, Economic Recovery and Innovation

T: 250.361-6673



Office of
Mass Timber
Implementation



Office of
Mass Timber
Implementation

Page 06 of 18 to/à Page 08 of 18

Withheld pursuant to/removed as

s.12 ; s.13

RE: macKenzie

From: Nicholls, Diane R FLNR:EX
: s.15
To: O'Donoghue, Eamon G FLNR:EX
Sent: February 12, 2021 11:14:15 AM PST

So....there could be an opportunity here – if they want a mass timber production place – we should ensure they are thinking strand mass timber products not CLT – better fit for the fibre that is there. This fits into the BC innovation fund where a similar project was just approved through EMILI.....then we can work on attracting IFIT and Indigenous funds from the Feds for the pulp transformation.....

Wont be quick but would be awesome!

Diane Nicholls, RPF

Assistant Deputy Minister, Chief Forester
BC Provincial Government
"Caring for BC's Forests"

From: O'Donoghue, Eamon G FLNR:EX
Sent: February 12, 2021 10:47 AM
To: Nicholls, Diane R FLNR:EX
Subject: Re: macKenzie

That would be awesome. I know s.13

s.13 It would be interesting to see what kind of business case there could be around the pulp mill.

Eamon O'Donoghue
Assistant Deputy Minister
Regional Operations, North Area

On Feb 12, 2021, at 9:53 AM, Nicholls, Diane R FLNR:EX <Diane.Nicholls@gov.bc.ca> wrote:

Can we use this as an opportunity to convert the pulp mill to a new bio-economy product?!?

Diane Nicholls, RPF

Assistant Deputy Minister, Chief Forester
BC Provincial Government
"Caring for BC's Forests"

From: O'Donoghue, Eamon G FLNR:EX <Eamon.ODonoghue@gov.bc.ca>
Sent: February 12, 2021 8:56 AM
To: Nicholls, Diane R FLNR:EX <Diane.Nicholls@gov.bc.ca>
Subject: RE: macKenzie

Yes, PJH gave clear direction. Option 1, 4 and 5 in the PPT;

1. Flat rate stumpage in the north
2. Community Forest expansion (most prominent from PJH and MKC)
3. Gov buys stressed manufacturing facility and lease to own to community and FNs.

Eamon O'Donoghue

Assistant Deputy Minister
Regional Operations – North Area
Phone (250) 847-7495
Cell (250) 877-1087

**Forests, Lands, Natural Resource Operations
and Rural Development**
(he/him/his)

From: Nicholls, Diane R FLNR:EX <Diane.Nicholls@gov.bc.ca>
Sent: February 11, 2021 2:05 PM

To: O'Donoghue, Eamon G FLNR:EX <Eamon.ODonoghue@gov.bc.ca>

Subject: macKenzie

Did the meeting happen today ?

Diane Nicholls, RPF

Assistant Deputy Minister, Chief Forester

BC Provincial Government

"Caring for BC's Forests"

Re: LCA for mass timber

From: Nicholls, Diane R FLNR:EX <Diane.Nicholls@gov.bc.ca>
To: McKenzie, Leith FLNR:EX
Sent: February 26, 2021 1:55:05 PM PST

Monday can you contact Werner at CFS and see if he has done work?

Sent from my iPhone

On Feb 26, 2021, at 1:31 PM, McKenzie, Leith FLNR:EX <Leith.McKenzie@gov.bc.ca> wrote:

Hi Diane,

We have not done any specific work on LCA of mass timber but there is some information available;

Forest Innovation Investment- <https://www.bcfii.ca/investment-funding/mass-timber-demonstration-program>

FP Innovation- <https://library.fpinnovations.ca/en/permalink/fpipub42951>

Federal government. <https://www.nrcan.gc.ca/our-natural-resources/forests-forestry/forest-industry-trade/forest-products-applications/greening-our-built-environments-wood/16834>

Canadian Wood Council <https://cwc.ca/why-build-with-wood/sustainable/green/life-cycle-assessment/>

Mass Timber Institute <https://www.masstimberinstitute.ca/about-mass-timber>

I asked both Garrett and James for input and James pointed me to FII. Garrett thinks Caren may know more but she is off today.

Let me know if you want me to dig into this further.

Leith

-----Original Message-----

From: Nicholls, Diane R FLNR:EX <Diane.Nicholls@gov.bc.ca>

Sent: February 26, 2021 11:29 AM

To: McKenzie, Leith FLNR:EX <Leith.McKenzie@gov.bc.ca>

Subject: LCA for mass timber

Do we have this information? If so please send to me - if not does Werner Kurtz? We are looking at adding something into the wood first act potentially

Diane

Sent from my iPhone

CORPORATE ISSUE/OPPORTUNITY NOTE

Issue: Mass Timber

Background:

- With the reduced mid-term timber supply in B.C. as a result of the Mountain Pine Beetle epidemic, B.C. Government is committed to transitioning the forestry sector to high-value production, over high-volume.
- In 2019, B.C. government announced its intention to encourage the increased use of mass timber products in its capital construction program. Work has been ongoing to identify the options to promote mass timber construction and identify information and research needs.
- In June 2020, Premier John Horgan appointed Ravi Kahlon, Parliamentary Secretary for Forests, Lands, Natural Resource Operations and Rural Development, to lead the expansion and use of mass timber in B.C. buildings.
- The Forest Policy and Indigenous Relations Division has been identified as the ministry lead from Ministry of Forests, Lands, Natural Resource Operations and Rural Development. The division's leadership team has met with Jeff Vasey, Assistant Deputy Minister of Mass Timber Implementation, Ministry of Municipal Affairs and Housing, to identify areas where FLNRORD can contribute.

Issue/Opportunity:

- Mass timber buildings are where the primary load-bearing structure is made of solid or engineered wood. Mass timber construction uses solid wood panels for wall, floor, and roof construction.
- Mass timber products include glue-laminated timber (GLT), cross-laminated timber (CLT), nail-laminated timber (NLT), and dowel-laminated timber (DLT). CLT is the most dominant mass timber product, which is made of at least three layers of softwood lumber boards pressed together crosswise.
- Mass timber has several advantages over other building materials. These include lower carbon footprint, cost effectiveness (faster and easier to build, requires less on-site labour, and weighs one-fifth of comparable concrete buildings), aesthetic value, and utilization of waste wood that would otherwise have been discarded or used as hog fuel.
- According to Forest Economic Advisor, industrial access mats currently account for 70% of the CLT demand in North America, and construction accounts for the remaining 30%. Both applications have plenty of room for growth.
- In North America, mass timber capacity grew 53% in 2019, while the consumption of mass timber in construction grew by 110%. Both capacity and consumption are expected to show strong growth in the next 15-25 years.
- Mass timber construction generally replaces non-wood materials such as concrete and steel, leading to increased demand for softwood lumber.
- The main challenge to growing mass timber construction is to educate architects, builders, specifiers and other key influencers in the industry on the benefits of mass timber and how to work with the material.
- Approximately 75% of North American's CLT construction capacity is in the US Pacific Northwest and B.C.
- B.C., as the leader in mass timber, has made changes to the Building Code to allow 12-storey tall

wood buildings, up from the previous limit of six stories. Thirteen communities in BC have signed on to be early adopters of tall wood buildings using mass timber technology. These communities represented 35% of housing starts in BC in 2018.

- With the mountain pine beetle damage in the North, most of the capacity in B.C. is currently in Southern Interior. It is believed that lumber producers can benefit from expansion into the mass timber market by taking advantage of their integrated lumber production and existing client base. Given that mass timber generally replaces non-wood construction, this can lead to more demand for their lumber products as well. The current main BC mass timber producers are listed below.
 - StructureCraft, headquartered in Abbotsford, primary producer of DLT
 - Kalesnikoff in Castlegar, CLT and GLT
 - Structurlam in Penticton, CLT, glulam plus and GLT
 - Galloway Lumber in Galloway, CLT
 - International Timberframes in Golden, DLT
- Additional legislation could be contemplated to promote a portion of provincial fibre to be used in engineered wood or other higher value manufacture.

FW: As Requested: Life Cycle Assessment - Mass Timber

From: Sanderson, Melissa FLNR:EX ^{s.15}
: ^{s.15}
^{s.15}

To: Kennah, Morgan FLNR:EX
Sent: February 4, 2021 1:26:12 PM PST

From: Hewitt, Jeremy ENV:EX <Jeremy.Hewitt@gov.bc.ca>
Sent: January 26, 2021 3:37 PM
To: Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>
Subject: FW: As Requested: Life Cycle Assessment - Mass Timber
Here's what I got in terms of a report out.

From: Riddell, Archie ENV:EX <Archie.Riddell@gov.bc.ca>
Sent: January 26, 2021 2:45 PM
To: Hewitt, Jeremy ENV:EX <Jeremy.Hewitt@gov.bc.ca>
Cc: Moran, Jennifer ENV:EX <Jennifer.L.Moran@gov.bc.ca>; Morton, Anna ENV:EX <Anna.Morton@gov.bc.ca>; Kaye, Erik ENV:EX <Erik.Kaye@gov.bc.ca>; Koski, Chris ENV:EX <Chris.Koski@gov.bc.ca>
Subject: As Requested: Life Cycle Assessment - Mass Timber
Importance: High

Hi Jeremy,

As requested, here are a few bullets. Thanks to Erik for pulling these together on short notice.

- Office of Mass Timber Implementation (OMTI) has teamed up with Forest Innovation Investment Ltd (FII) to fund the [Athena Sustainable Materials Institute](#), a non-profit research collaborative bringing life cycle assessment (LCA) to the construction sector, to improve LCAs in BC (primarily for buildings that use wood and mass timber) and align with the federal LCA² project (for additional details please see email from Jarrett Hutchinson ED, OMTI below)
- It would appear that FLNRORD has no direct role in the Athena contract but are aware of and support OMTI's work with Athena. One of the deliverables for the Athena contract is to better understand how forest carbon modeling, which FLNRORD is heavily involved in, might one day affect LCAs and embodied emissions.
- CAS, OMTI and FLNRORD are represented on the Natural Research Council's LCA² project. The LCA² initiative is a collaboration between the NRC and other federal government departments, academia, non-government organizations, industry partners, and low-carbon asset experts from across Canada. The priorities of LCA² are as follows:
 - raise awareness of life cycle assessment and life cycle inventory in industry and government
 - build capacity for LCA analysis
 - develop and launch a Canadian LCI database
 - conduct pilot projects
 - coordinate the management of existing environmental product declaration programs to support this initiative
 - develop a framework for LCA and total cost of ownership (TCO) estimation, as well as guidance methodologies and documents for specific categories of assets
 - support or propose new LCA tools, or revise existing tools, that use the above framework and methodologies to create comparable whole-life carbon and TCO assessments for built assets

Please let me know if you have any questions or would like more information.

Best,
Archie

Kindness matters...

Archie Riddell | Executive Director, Resilience and Clean Government
Climate Action Secretariat – Ministry of Environment & Climate Change Strategy

Cell/Text: 250-413-7329 | Email: archie.riddell@gov.bc.ca

Our Vision at the Climate Action Secretariat: A Clean, Competitive, Climate-Ready B.C.

I respectfully acknowledge the Lekwungen People, known today as the Esquimalt and Songhees Nations, and all the Indigenous Peoples of British Columbia. I am grateful to be able to work, live, and grow in their territories.

From: Hutchinson, Jarrett MAH:EX <Jarrett.Hutchinson@gov.bc.ca>

Sent: December 16, 2020 4:42 PM

To: Wood, Robert B JEDC:EX <Robert.Wood@gov.bc.ca>; Dobson, Neil ENV:EX <Neil.Dobson@gov.bc.ca>; Peyman, Hurrian ENV:EX <Hurrian.Peyman@gov.bc.ca>; Gosman, Nat EMPR:EX <Nathaniel.Gosman@gov.bc.ca>; Muncaster, Katherine EMPR:EX <Katherine.Muncaster@gov.bc.ca>; White, Thomas FLNR:EX <Thomas.White@gov.bc.ca>; Sandland, James FLNR:EX <James.Sandland@gov.bc.ca>; Jacobsen, Peter W FLNR:EX <Peter.Jacobsen@gov.bc.ca>; Storen, Jackie JEDC:EX <Jackie.Storen@gov.bc.ca>; Finkelstein, Ben ENV:EX <Ben.Finkelstein@gov.bc.ca>

Cc: Hoffman-McGaw, Trilby MAH:EX <Trilby.Hoffman-McGaw@gov.bc.ca>; Caradonna, Jeremy MAH:EX <Jeremy.Caradonna@gov.bc.ca>

Subject: RE: Time sensitive: Carbon accounting

Hi all,

I'd like to circle back to our email chain from early November about carbon accounting in buildings constructed with mass timber.

Since then, OMTI has teamed up with FII to fund Athena to make important data and other upgrades to improve life-cycle assessment in BC (primarily for buildings that use wood and mass timber), and align with the federal LCA² project. We are eager to move ahead with this project because we believe it will help Athena create an even better (Canadian-based) LCA tool, and one that is relevant to conditions in BC and well poised to be included in building regulations should that day ever come. Included in the scope of work are several tie-ins between Athena's deliverables and the ongoing research and development for LCA². The changes to Athena's tool will be of use and interest both to government and the construction industry. The email exchanges we had previously highlighted the need for a strategic discussion about LCA. Our work is not intended to preclude that or jump to the ultimate solutions.

Before we press go early next week, I wanted to share summary information about the project components and request feedback if you have any by end of day Thursday. Only feedback that may alter our contract ToR is urgent. I apologize for the quick turnaround. I can have Jeremy Caradonna from my office provide more details on the components if you like. The plan is for Athena to complete the first 2 projects this fiscal, and the remainder in 2021/22.

1. LCA and EPD development for BC lumber and CLT

Develop BC-specific life cycle assessments (LCAs) and environmental product declarations (EPDs) for lumber and CLT.

2. Embodied carbon pathfinder web tool

Create a simple LCA-based free web tool for experimenting with embodied carbon implications of various design decisions for BC archetype residential buildings.

3. Harmonize material data in the Impact Estimator

Harmonize data behind the free whole-building LCA software tool, the Athena Impact Estimator, to ensure a level playing field for all materials within Canada's national effort to create databases, methods and other resources to support wider and better use of LCA (the LCA² initiative).

4. New LCA/Impact Estimator training and certification program

Develop a new training and certification program for whole-building LCA and the Athena Impact Estimator software tool and enable this for remote learning.

5. BC building benchmark database

Create a database for BC buildings that will enable whole-building LCA benchmarking.

6. End-of-life scenario modeling

Model various scenarios for end-of-life impacts and uses of wood, including assumptions about design for building deconstruction, reuse and recycling, updating landfill methane assumptions, scenarios, and methodologies, and options for calculating negative emissions from pyrolysis and other technologies.

7. Forest scenario modeling

The Impact Estimator currently makes simple assumptions about forest carbon. This deliverable would constitute a "scoping" document that would outline the key differences for different forest modeling approaches that could be undertaken to improve LCA methodologies down the line.

8. BC wood product LCA and EPDs

Develop additional BC industry-average life cycle assessments (LCAs) and environmental product declarations (EPDs) for up to four wood products. Potential products include plywood, OSB, LVL, glulam, and I-joists. Costs will be verified by a third-party program operator.

9. Integrate BC data into the Impact Estimator

Integrate the proposed BC product LCI data and end-of-life research into Athena's Impact Estimator for Buildings. The goal is to have Athena become the most up-to-date LCA tool in Canada, and also for the various deliverables to inform the work of LCA².

Respectfully,

Jarrett Hutchinson | Executive Director

Office of Mass Timber Implementation

250-208-7277

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.

BRIEFING NOTE FOR DECISION

DATE: February 12, 2021

PREPARED FOR: Honourable Katrine Conroy, Minister of Forests, Lands, Natural Resource Operations and Rural Development

ISSUE: Seeking policy direction regarding approach to make wood (mass timber) a priority in public buildings (mandate letter commitment).

RECOMMENDED OPTION:

s.12; s.13

BACKGROUND:

- Current legislation, the *Wood First Act*,¹ promotes the use of wood in public buildings²; however, with no specifics on how much wood or what type of wood material to use and no accountability mechanisms or guidance for implementing this expectation, the legislation has not been effective.
- Several ministries have an interest in government's objective for mass timber use in public buildings, including JERI (the Office of Mass Timber Implementation (OMTI)³), ENV (CleanBC building standards) and FIN (Treasury Board criteria for supporting government objectives, like mass timber).
- Wood use not only aids in forest sector manufacturing transformation but also contributes to provincial objectives to mitigate climate impacts.

DISCUSSION:

s.12; s.13

¹ *Wood First Act*, SBC 2009, c. 18.

² Refers to buildings that receive provincial government funding.

³ Part of the Ministry of Jobs, Economic Recovery and Innovation.

⁴ In this context, embodied carbon is the carbon footprint of a building.



s.12; s.13

OPTIONS:

s.12; s.13

Approved / Not Approved

Signature
Honourable Katrine Conroy, Minister of
FLNRORD

Date

PREPARED BY:

Lesley Scowcroft
Director, Legislation
Legislation Branch
(778) 698-3469

REVIEWED BY:

Title	Initials	Date
DM	JA	02/26/2021
ADM, FPIR	MS	02/26/2021
ED, SPG	MK	02/12/2021
Director, Leg.	LS	01/29/2021