

Issue: Forest Fibre Utilization and the Bioeconomy

- B.C.'s forest sector has relied on high volumes of harvesting to manufacture conventional forest products (e.g. dimensional lumber, primary pulp & paper products) that have small profit margins and therefore need to produce high volumes of products to remain viable.
- These conventional forest products are extremely sensitive to fibre supply costs and market risk. When markets go down and/ or fibre supply costs rise due to geography and other variables forest sector manufacturers struggle with competitiveness.
- In addition, our fibre supply is changing both in quantity and quality due to wildfire, pests, climate and there are further constraints on supply due to things like wildlife protection measures.
- This means B.C. must transition to a model that relies on less harvesting and fibre supply but more on manufacturing higher value products to ensure long term economic sustainability (i.e. do more with less).
- This can be achieved by concentrating manufacturing on higher value products (engineered wood, next generation products like wood-based plastics composites and textiles) that provide significantly greater profit margins while at the same time requiring less feedstock to be viable.

Background:

- B.C. has the highest fibre supply costs in Canada, largely a function of geography. These underlying economics can impact the ability of forest manufacturers to utilize forest fibre
- The Ministry is working on several initiatives in cooperation with external stakeholders to improve the access to and use of BCs wood biomass (e.g. Coast Forest Revitalization and Interior Forest Renewal).
- One important program supporting these provincial initiatives is the concept of a forest bioeconomy. A forest bioeconomy takes a broader view than conventional forestry to consider high value products like bioplastics and new building products like biomass-based foam insulation for buildings. Jurisdictions in northern Europe have relied on a forest bioeconomy to transform their forestry sectors to be more globally competitive while maximizing the economic benefits for their jurisdictions.
- This note outlines bioeconomy opportunities that enable B.C. to maximize economic, social and environmental value of our forest resource by ensuring the whole is tree used and that that the right component of the 'tree' gets to the right manufacturing facility and ultimately produces the highest value forest products. Under this model,, we can do more with less.

Issue/Opportunity:

- There is an opportunity to transition the forest sector to maximize the economic, social and environmental value of forest biomass by manufacturing a portfolio of next-generation forest products. This more holistic approach relies more on value creation than high volume manufacturing.
- B.C.'s emerging forest bioeconomy provides a pathway for transitioning to a value proposition that creates high-value products that are less susceptible to fibre supply costs.

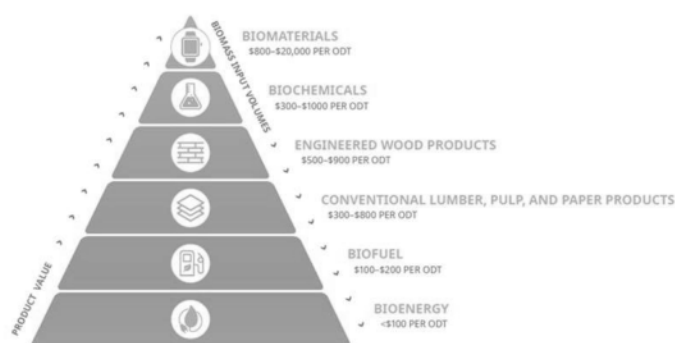


Figure 1: Bioeconomy economic-value pyramid as a representation of product value per unit of feedstock measured in oven dried tonnes (odt)

- Referring to figure 1, forest bioproducts at the top of the pyramid provide significantly more economic value than those on the bottom. In addition, the top 3 bioproduct categories do not require significant volumes of fiber to be economically viable. Market analysis indicates there is significant growth potential for these products, so they are not limited to small-scale production. They can also be scale-able to numerous locations across the province and enhance fibre utilization across B.C.

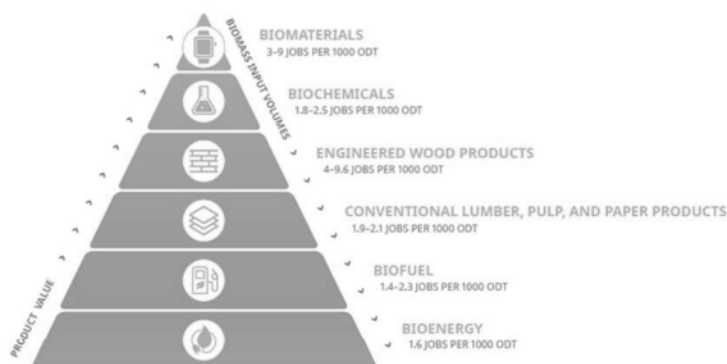


Figure 2: Bioeconomy social-value pyramid as a representation of job creation potential per unit of feedstock measured in odt

- Figure 2 represents social value in terms of job potential per unit of forest fiber feedstock. Moving to the top of the pyramid provides more jobs per unit of feedstock.
- Next generation forest products such as biomaterials, biochemicals and some engineered wood products provide opportunities for high-value products that do not require saw-log grade material for feedstock.
- Due to their high economic value and social value products towards the top of the pyramids are not nearly as sensitive to fibre supply costs options on the bottom.
- There is an opportunity to establish a program in B.C. to support commercialization of these high-value opportunities to maximize the long-term sustainability and competitiveness of the forest sector.
- The Innovation, Bioeconomy and Indigenous Opportunities Branch of the Ministry is also working with First Nations partners across the province to advance bioeconomy development options and potential partnerships with industry.

CORPORATE ISSUE/OPPORTUNITY NOTE

Issue:

- The State of B.C.'s Forest Sector: Competitiveness, timber supply and revitalization

Background:

- Forestry has contributed to B.C.'s economic development for decades; it provides for many direct, indirect and induced jobs in rural B.C., and in suburban and urban areas like Metro Vancouver.
- Most forestry activity in B.C. occurs on Crown land; however much of this land is within the traditional territory of one or more Indigenous Nations, most of which have assumed but unproven rights and title, or treaty, to the land and its resources including timber.
- B.C.'s forest industry competes globally for wood product market share: lumber, pulp and paper are B.C.'s most prevalent products, followed to a lesser extent with logs, engineered wood (e.g. plywood, structural beams) and pellets. Innovation into new wood fiber-based products is at the market test stage, for new products in bioplastics (e.g. vehicle components) and biochemicals (e.g. paints, cosmetics).
- B.C. is considered an average cost (Interior B.C.) to high cost (coastal B.C.) jurisdiction to produce logs and manufacture, based on numerous variables, including:
 - *Slow Growing*: Native tree species in our climate create high quality wood products because they grow slowly. Compared to other jurisdictions where trees can put on one meter or more a year, B.C.'s trees are in centimeters.
 - *Barriers to Entry*: Most of B.C.'s forested land base is publicly owned, and areas designated for timber harvesting are typically all contractually issued in a mix of short to long term agreements, some being essentially guaranteed to existing operators in perpetuity (replaceable without competition, compensable if revoked). It can be difficult to access fiber. BC Timber Sales (BCTS), a provincial program, does market a portion of timber supply to provide market access for manufacturers while gathering market data for timber pricing purposes.
 - *Land Ownership*: Use of public resources entails resource rent known as stumpage (a material contribution to government revenue), a series of authorizations for activities, and the legal requirement to consult with Indigenous Nations who hold rights and title to the area planned for harvest
 - *Vast Geography*: B.C.'s varied ecosystems, mountain ranges and water bodies creates for more challenging operating conditions than other jurisdictions – logs may have to travel by water, truck and rail just to get to a mill
 - *Trade Dependent*: Being a small, open economy, wood producers' prevalent market is the U.S., with China, Japan and Korea being important offshore trade partners. Small market presence exists in countries like Vietnam and India. For the past 40 years, Canada has had a complicated trade softwood lumber relationship with the U.S. which has included quota-based or tariff-based market access, with multiple rounds of litigation.
- The Crown forest land timber supply is designated into management units. These units are the basis for analyzing timber inventories and issuing allowable harvest levels (allowable annual cuts, or AAC) to those who hold timber harvesting contractual rights. For 2020, the aggregated AAC on

the Coast is 15.045 million cubic meters (Mm³) and is 48.22 Mm³ in the Interior.

- The provincial AAC has decreased over the past few decades for two primary reasons: (1) parks, protected and conserved areas (including for old growth trees), or area-based forest tenure like Community Forests, which are not included in the aggregate AAC, and (2) stand disturbance events like large scale wildfire and forest pest damage salvage operations (mountain pine beetle, and others to lesser extent) mostly impacting the Interior, shifting industry into green timber.
- With a shrinking timber supply, the forest industry has sought to become more efficient. This has led to consolidation in the number and extent of manufacturing facilities operating, and a controlling interest in the timber supply (forest tenure agreements) needed to furnish these facilities. This rationalization has disproportionately impacted some rural communities, which is likely to continue as the short and mid-term timber supply sags further and young forests grow for future use. Important to note, some communities have prospered regardless of a shrinking local forest sector where other industries have prevailed (e.g. Tofino).

Issue/Opportunity:

- Revitalizing the forest sector has been a policy and program focus for the many years as the sector has realigned its overcapacity with changing timber supply and public interest.
- Forests, forestry and wood products are increasingly being understood as a carbon friendly sector that can substitute heavier emitting sectors and create durable and aesthetic consumer and commercial products.
- In the past few years, changes made have been incremental and largely have not materially changed the forest sector (e.g. log export policy changes).
- Consideration must include measures to contribute to competitiveness, consider timber supply reductions and changes (both in solid wood or “non sawlog” forms), diverging support and interest in forestry activities and land use, sometimes framed as the rural-urban divide (e.g. rural economic activity, more conserved areas, watershed and old growth protections), and reconciliation with Indigenous Nations and Peoples
- A couple initial legislative changes are under development to support revitalization, including substantive enhancements to the *Forest and Range Practices Act* (B.C.’s forest management statute) and new tools within the *Forest Act* to allow for forest tenure to be reassigned to new entrants, like Indigenous and non-Indigenous communities, to have a decision-making role in forest ecosystems that surround them (which could be timber harvesting and could mean conservation, or both).
- Future policy focus to stimulate a sector shift could consider people, planning and product solutions:
 - *Connecting communities to their forests*, through an expedited implementation of changes to the *Forest and Range Practices Act* to replace existing forest stewardship plans with Forest Landscape Plans and redistributing an increased proportion of timber supply under tenure to communities
 - *Increasing Indigenous participation*, through a series of pilot projects introducing strategic and tactical shared decision making, and working together, on landscape- to watershed- level decisions where a comprehensive reconciliation agreement exists or is under development
 - *Sharing resource rents from forest activities*, starting with B.C. Timber Sales; and
 - *Investing in new product development and production*, to help manufacturers diversify into new wood product opportunities, to improve competitiveness, lower trade barriers and increase wood use and revenue opportunities domestically. For instance, bioplastics to substitute single use plastics that can be composted.

RE: FLNRO Media Request: Alberni Valley and San Group

From Sanderson, Melissa FLNR:EX s.15
:

To: Eckardt, Dana R FLNR:EX
Cc: Neal, Mikayla FLNR:EX
Sent: June 3, 2021 2:36:38 PM PDT

Looks good – just send it over. I made one change

From: Eckardt, Dana R FLNR:EX <Dana.Eckardt@gov.bc.ca>
Sent: June 3, 2021 2:36 PM
To: Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>
Cc: Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>
Subject: RE: FLNRO Media Request: Alberni Valley and San Group
How about something like this.....
s.13

Let me know your thoughts.
d.

From: Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>
Sent: June 3, 2021 1:39 PM
To: Eckardt, Dana R FLNR:EX <Dana.Eckardt@gov.bc.ca>
Cc: Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>
Subject: FW: FLNRO Media Request: Alberni Valley and San Group
Dana – can you deal with this – I would assume they would have the ability to pull from the news release.

From: Haslam, David GCPE:EX <David.Haslam@gov.bc.ca>
Sent: June 3, 2021 1:38 PM
To: Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>; Hooper, Tyler GCPE:EX <Tyler.Hooper@gov.bc.ca>; Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>
Subject: RE: FLNRO Media Request: Alberni Valley and San Group
We're pretty swamped. Make the edits and kick back. Thx

From: Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>
Sent: June 3, 2021 1:36 PM
To: Hooper, Tyler GCPE:EX <Tyler.Hooper@gov.bc.ca>; Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>
Cc: Haslam, David GCPE:EX <David.Haslam@gov.bc.ca>
Subject: RE: FLNRO Media Request: Alberni Valley and San Group
I am sorry –s.13
s.13

From: Hooper, Tyler GCPE:EX <Tyler.Hooper@gov.bc.ca>
Sent: June 3, 2021 1:34 PM
To: Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>
Cc: Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>; Haslam, David GCPE:EX <David.Haslam@gov.bc.ca>
Subject: RE: FLNRO Media Request: Alberni Valley and San Group
Hey Mikayla,

Can you please make the edits Melissa is suggesting into this statement below?

We want to make sure it's tightened up before running it back to the MO.
Thank you!

Tyler.

From: Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>
Sent: June 3, 2021 12:55 PM
To: Hooper, Tyler GCPE:EX <Tyler.Hooper@gov.bc.ca>
Subject: RE: FLNRO Media Request: Alberni Valley and San Group

Hi Tyler,

Feedback from Melissa is that bullets 2 and 3 need to be removed. Language from the Intentions Paper should be used to include a few bullets on value-added manufacturing. We should pivot this response into the Intentions Paper.

Thanks,
Mikayla

From: Hooper, Tyler GCPE:EX <Tyler.Hooper@gov.bc.ca>
Sent: June 3, 2021 9:31 AM
To: Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>
Cc: Eckardt, Dana R FLNR:EX <Dana.Eckardt@gov.bc.ca>
Subject: RE: FLNRO Media Request: Alberni Valley and San Group
Thank you! I tweaked the KMs to be appropriate for the media response. Any issues with this?

s.13

From: Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>
Sent: June 3, 2021 8:58 AM
To: Hooper, Tyler GCPE:EX <Tyler.Hooper@gov.bc.ca>
Cc: Eckardt, Dana R FLNR:EX <Dana.Eckardt@gov.bc.ca>
Subject: RE: FLNRO Media Request: Alberni Valley and San Group

Good morning Tyler,

Attached is a copy of a company profile that MKC used in her meeting with San Group in February of this year.

Thank you,

Mikayla Neal (she/her) | Executive Administrative Assistant to Melissa Sanderson
Assistant Deputy Minister's Office

Ministry of Forests, Lands, Natural Resource Operations and Rural Development
236-478-0491 office | 250-886-6048 cell

I acknowledge, with gratitude, the Lekwungen peoples who are the traditional keepers of the land on which I live and work

From: Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>

Sent: June 3, 2021 8:50 AM

To: Hooper, Tyler GCPE:EX <Tyler.Hooper@gov.bc.ca>

Cc: Eckardt, Dana R FLNR:EX <Dana.Eckardt@gov.bc.ca>; Neal, Mikayla FLNR:EX <Mikayla.Neal@gov.bc.ca>

Subject: Re: FLNRO Media Request: Alberni Valley and San Group

Importance: High

Yes we have a profile on them and a note the Minister used for her meeting. Dana or Mikayla can send it over to you.

Sent from my iPhone

On Jun 3, 2021, at 8:05 AM, Hooper, Tyler GCPE:EX <Tyler.Hooper@gov.bc.ca> wrote:

Good morning,

Glen seems to think one of you might have some info on this request that we could turn into bullets or a statement? Please let me know.

Tyler.

Reporter

Andrew Duffy, Reporter

Times Colonist

aduffy@timescolonist.com

250-380-5342 c: s.22

Deadline Thursday, June 3, 2021 4:00 PM

Request

From reporter: My name is Andrew Duffy, I'm a business writer with the Times Colonist newspaper in Victoria.

I'm working on a story about the San Group and was hoping the minister might have a few thoughts on what that company has done over the last few years in the Alberni Valley between buying up all-but-dead mills and companies and investing heavily in small sawmills and a massive value-added facility?

I can be reached at this email or on my cell s.22

cheers

Andrew

Recommendation

Background

RE: ASAP: QA on log exports

From: Sanderson, Melissa FLNR:EX s.15
:

To: Pierson, Nova GCPE:EX, Kennah, Morgan FLNR:EX
Cc: Harris, Megan FLNR:EX, Plummer, Glen GCPE:EX
Sent: June 23, 2021 12:57:29 PM PDT

Please use this version.

Q. Environmentalists are now protesting log exports – saying that's an important part of protecting old growth. What are you doing to address this?

- We are committed to building an environmentally and economically sustainable economy that works for all British Columbians.
- On June 1, our government shared its vision to modernize forestry policy in B.C. – to build a new foundation where Indigenous and local interests play a greater role in forest management, and increase our focus on domestic manufacturing, including more higher value product manufacturing.
- While we recognize that log exports play a role in an integrated forest sector, we're committed to getting more value out of every cubic metre of timber harvested.
- We've already taken action to increase the domestic manufacturing on the Coast:
- In 2019 we launched the Coast Forest Sector Revitalization initiative, to reverse the trend under previous governments, where industry became overly reliant on log exports.
- We tightened regulations to increase the level of domestic processing of logs from Crown land in B.C..
 - (In 2020) We now require processing of logs to a maximum size of 12" x 12", meaning more manufacturing here in B.C. Unlike the previous government, companies were literally exporting logs that had barely been squared off.
 - (In 2020) Changes made to the fee-in-lieu of manufacture that is paid on logs exported from Crown land created a more even playing field for domestic mills in competing for fibre.
- These changes ensure domestic manufacturers are better positioned to get the fibre they need to run their mills, and to support good paying jobs here in B.C.
- The Intentions Paper released June 1 builds on this work on log exports, including a new proposed requirement for the province to be able to audit and assess the fee-in-lieu payments, to make sure the Province is receiving appropriate compensation for logs that are exported from Crown lands rather than processed in B.C.
- Our vision is for a forestry sector that is more adaptable, gets more value from our wood products, preserves old growth, and is more inclusive.

From: Pierson, Nova GCPE:EX <Nova.Pierson@gov.bc.ca>

Sent: June 23, 2021 12:30 PM

To: Kennah, Morgan FLNR:EX <Morgan.Kennah@gov.bc.ca>

Cc: Harris, Megan FLNR:EX <Megan.Harris@gov.bc.ca>; Plummer, Glen GCPE:EX <Glen.Plummer@gov.bc.ca>; Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>

Subject: RE: ASAP: QA on log exports

Thanks – Melissa – any concerns? This is needed ASAP.

Much appreciated,

Nova

From: Kennah, Morgan FLNR:EX <Morgan.Kennah@gov.bc.ca>

Sent: June 23, 2021 12:17 PM

To: Pierson, Nova GCPE:EX <Nova.Pierson@gov.bc.ca>

Cc: Harris, Megan FLNR:EX <Megan.Harris@gov.bc.ca>; Plummer, Glen GCPE:EX <Glen.Plummer@gov.bc.ca>; Sanderson, Melissa FLNR:EX <Melissa.Sanderson@gov.bc.ca>

Subject: RE: ASAP: QA on log exports

Hi Nova,

Also including Melissa in here as the ADM responsible for log export policy.

My recommended edits are below.

Cheers,

Morgan

From: Pierson, Nova GCPE:EX <Nova.Pierson@gov.bc.ca>

Sent: June 23, 2021 10:30 AM

To: Kennah, Morgan FLNR:EX <Morgan.Kennah@gov.bc.ca>

Cc: Harris, Megan FLNR:EX <Megan.Harris@gov.bc.ca>; Plummer, Glen GCPE:EX <Glen.Plummer@gov.bc.ca>

Subject: ASAP: QA on log exports

Hi Morgan. We need to a short QA for tomorrow's announcement regarding the protest in Nanaimo regarding log exports. Can you please check this is accurate ASAP?

Much appreciated,

Nova

Q. Environmentalists are now protesting log exports – saying that's an important part of protecting old growth.

What are you doing to address this?

- On June 1, our government shared its vision to modernize forestry policy in B.C. – to build a new foundation where Indigenous and local interests play a greater role in forest management, and increase our focus on domestic manufacturing, including higher value product manufacturing.
- A key part of this is continuing our work to ensure that trees harvested in British Columbia are processed in British Columbia.
- We've already taken action to address log exports:
- In 2019 we launched the Coast Forest Sector Revitalization initiative, to reverse the trend under previous governments, where industry became overly reliant on log exports.
- We tightened regulations to ensure more domestic processing of logs from Crown land occurs in B.C. rather than seeing logs exported.
 - (In 2020) We now require processing of logs to a maximum size of 12" x 12", meaning more manufacturing here in B.C. Unlike the previous government, companies were literally exporting logs that had barely been squared off.
 - (In 2021) We have incented logs economic to be processed in B.C. to be processed here, with changes to the fee-in-lieu of domestic manufacturing.
- These changes ensure domestic manufacturers are better positioned to get the fibre they need to make the forest products the world desires, and to have those jobs here in B.C.
- The Intentions Paper released June 1 builds on this work on log exports, including a new proposed requirement for the province to be able to audit and assess the fee-in-lieu payments made by log exporters, to make sure they are paying the required amount if they choose to export logs from Crown lands rather than process the logs in B.C.
- Our vision is for a forestry sector that is more adaptable, gets more value from our wood products, preserves old growth, and is more inclusive.