

# Rebuilding B.C.'s Coast Forest Sector

Keeping the Wealth in B.C.

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Ministry of  
Forests, Lands, Natural  
Resource Operations  
and Rural Development





## Message from the Minister

The Coastal Forest Sector is a major economic driver for B.C., employing more than 24,000 people and generating over \$3.1 billion in GDP in 2017.

However, over most of the last two decades, we've seen declining Crown timber harvest, diminishing lumber and pulp production, reduced employment, significant increases in log exports and shrinking communities.

We need to reverse that trend. My ministry is taking the lead on a series of concrete actions over the next couple of years that will revitalize our coastal forest sector.

This government's vision is for a sustainable coastal industry that includes successful and innovative large and small companies that can create and maintain good jobs and generate wealth from our forests to support healthy communities.

As part of government's commitment to the United Nations Declaration on the Rights of Indigenous Peoples, we're going to create new and better opportunities for First Nations, to support their communities and give them a direct role in managing the resource.

We're at the beginning of a reconciliation process with First Nations to ensure they can better benefit from forestry activities in their traditional territories.

The Coast Forest Sector Revitalization has five main goals:

- Rebuilding solid wood and secondary industries to ensure more of our logs and fibre are processed in B.C.
- Improving harvest performance to ensure more fibre is available for domestic mills, including the pulp and paper sector.
- Maintaining a credible auction system by taking steps to ensure bids on timber sale licences are independently made
- Fostering stronger business-to-business relationships between BC Timber Sales, major licensees and First Nations
- Restoring public confidence

A renewed approach to management will ensure the people of British Columbia get the maximum benefits from our amazing forests. We owe it to future generations to responsibly manage our forests and the benefits they provide now.

**The Honourable Doug Donaldson**

Minister of Forests, Lands and Natural Resource Operations and Rural Development

## Storied past, exciting future

### Background / history—then and now

Forestry on British Columbia's coast has a long and proud history. A driving force behind the province's early economic development, forestry and its economic spinoffs remain the economic backbone of many coastal communities.

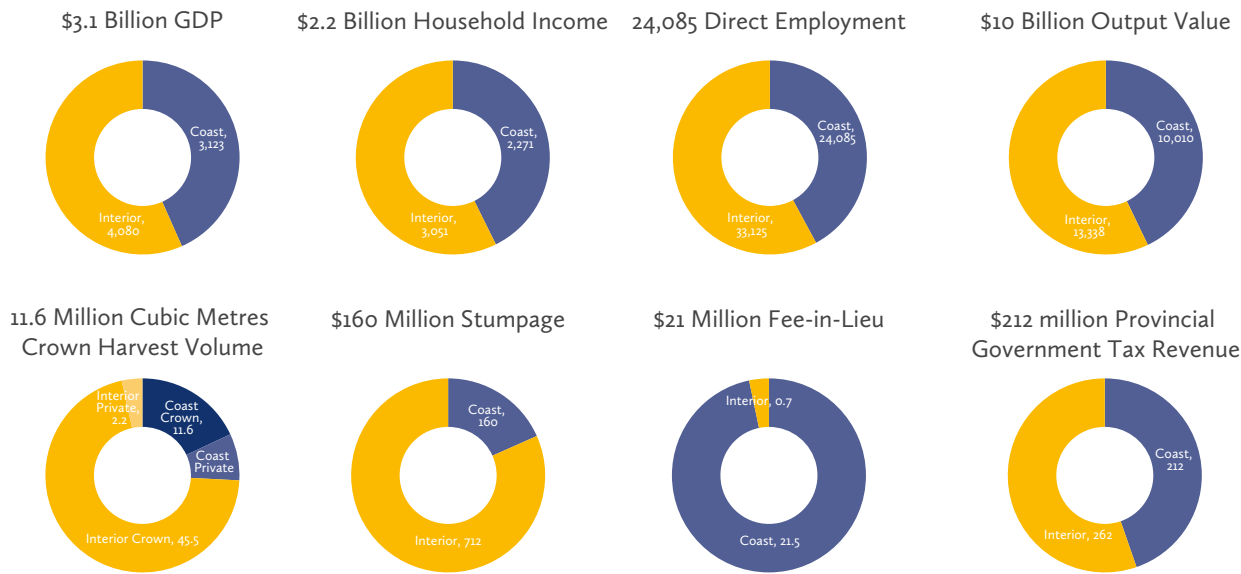
While the coast harvest is just over one-quarter of the total volume, the region generates about 45% of the province's total forestry GDP, a much greater value per cubic metre to the provincial economy than the Interior (see coast forest sector economic contribution graph). This is partly due to higher-value timber and established secondary manufacturing activities in the coastal region, including 35% of the province's pulp capacity and 87% of the province's paper capacity.

#### British Columbia Coast Forest Sector





How the Coast Forest Sector Contributes to the Economy of B.C. (Data for 2017)



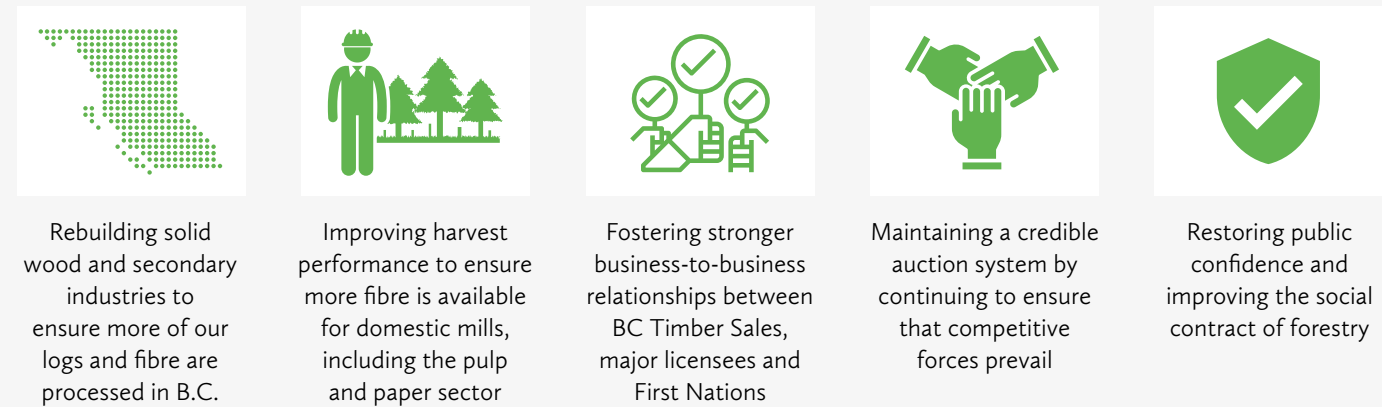
For the past 20 years, forestry on the B.C. coast, and the rest of the province, has been challenged by a variety of factors, including a shrinking supply of easy-to-access timber, rising harvesting costs, the interest in establishing parks and protected areas and the evolving global marketplace.

In that time, coastal lumber production has dropped by 45%, pulp and paper capacity has been cut in half and employment on the coast has declined by about 40%.

Meanwhile, coastal log exports from Crown land have increased nearly ten-fold and the amount of waste fibre left in the woods has more than doubled.

Revitalizing the coast forest sector means optimizing the value of the timber supply and processing as much of the harvest as possible right here at home, to create jobs, encourage investment and support forestry-dependent communities.

The Coast Forest Sector Revitalization Initiative has five main goals:



Waste in the woods

Some level of waste is inevitable in timber harvesting operations, and leaving some fibre, or coarse woody debris, also supports biodiversity.

But in many cases, usable fibre is left in the bush only because it has a higher removal cost and limited economic value to the companies doing the harvesting. This is known as “avoidable” waste, wood waste or residual fibre.

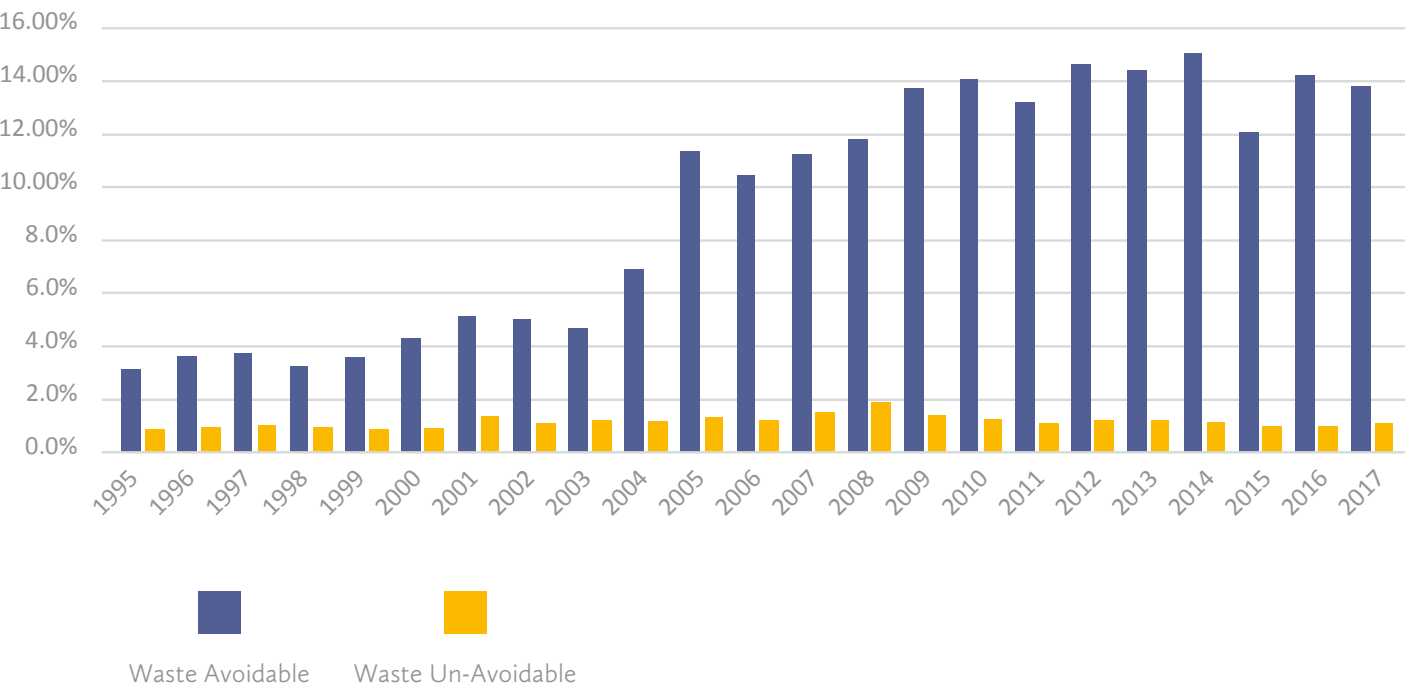
The Ministry of Forests, Lands, Natural Resource Operations and Rural Development sets limits for the amount of allowable waste during timber harvesting, as well as requirements for measurement, reporting and how much companies are billed for the waste they leave behind. These limits are called waste benchmarks.

Prior to 2003, avoidable waste fibre on the coast was less than 5% of the harvest volume, or about 0.8 million cubic metres per year.

By 2017, the waste increased to more than 18% of harvest volume, or approximately 2.4 million cubic metres per year, enough to fill over 800 Olympic-sized swimming pools. In some cut-blocks, the amount of waste fibre was greater than the amount of timber harvested.



Waste as a share of total billed harvest—Coast







## Chip demand outstrips supply

Increasing the amount of wood recovered from logging operations will help address an ongoing shortage of fibre for use in the pulp and paper industry. In 2016, there were nine mills operating in the coastal area, requiring about eight million cubic metres of fibre a year to operate. But less than 60% of that is supplied by coastal mills and manufacturers. About 42% of the pulp and paper fibre supply comes from wood chips shipped from B.C.'s Interior and imported from Alaska and Washington and Oregon.



Revised waste benchmarks, a new Fibre Recovery Zone and increased waste rates (penalty) for forest tenure holders who exceed limits on waste wood within the Fibre Recovery Zone will encourage business-to-business agreements between forest tenure holders and secondary manufacturers and ensure that better use is made of waste fibre.

It is anticipated that much of the additional wood waste recovered from coastal timber harvesting operations will be purchased by pulp and paper producers and the bio-products and bioenergy sector.

These efforts will also support CleanBC's renewed bioenergy strategy, which calls for the increased conversion of wood and plant biomass into clean power and other products to grow B.C.'s forest bio-economy.

The long-term goals of B.C.'s renewed bioenergy strategy include diverting 95% of organic agricultural, industrial and municipal waste from the province's landfills and using up to 75% of landfill gas as a source of renewable energy.

Many B.C. sawmills and pulp and paper producers are already using residual wood fibre—bark, branches, wood chips, small trees, sawdust—to generate heat and electricity.

There are numerous opportunities to manufacture new value-added products from these biomass resources to advance B.C.'s forest bio-economy.

Over time, it is expected that stronger waste recovery standards will make up to 350,000 cubic metres per year of additional residual fibre available to pulp and paper producers. This residual fibre can help increase forest product diversification by generating high-value, advanced bio-products from otherwise wasted forest resources.

## New waste reduction policies

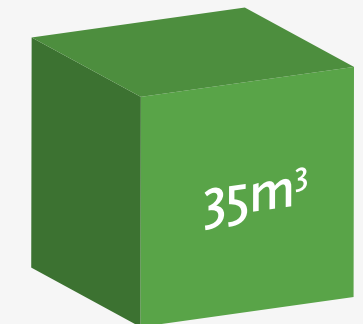
As part of Coast Forest Sector Revitalization Initiative, the Province will be implementing new waste benchmarks for mature stands that vary depending on the method of harvest.

Cable harvesting operations will be permitted to leave 25 cubic metres of residual fibre per hectare, while the level of allowable waste fibre for conventional ground harvesting operations will be set at 10 cubic metres per hectare.

In addition, the Province will be developing a new system to improve the accuracy of waste measurement and imposing new penalties on tenure holders who fail to submit their waste surveys in a timely fashion.

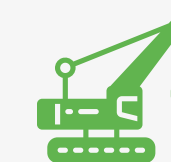
### Allowable Wood Waste

#### Helicopter logging



35m<sup>3</sup>

#### Cable harvesting



25m<sup>3</sup>

#### Conventional ground harvesting



10m<sup>3</sup>



## Fibre Recovery Zone

Fibre recovery zones are timber-harvesting areas where increased waste rates will be applied when the amount of residual fibre left behind exceeds the Province's revised waste benchmarks.

Coast Fibre Recovery Zone will be created on portions of Vancouver Island and the mainland coast where enhanced fibre recovery is more economical. Tenure holders that exceed waste fibre benchmarks, post-harvest, in this zone will have to pay triple the stumpage rate or \$2 per cubic metre, whichever is greater, for every piece of avoidable waste left in the woods.

These increased waste rates are designed to encourage business-to-business agreements between timber harvesters and secondary manufacturers, such as pulp and paper producers, to ensure that better use is made of waste fibre.





## New scaling and pricing policies

New scaling and pricing policies will allow logs and residual fibre to be removed from harvest sites at the same time. This will break down cost and administrative barriers for operators to move residual fibre to market more quickly and increase the amount of material available for secondary manufacturers.

In 2019, new system of calculating stumpage rates called the post-harvest appraisal reconciliation model, or PHARM, will start applying to cutting permits issued on the Coast.

Instead of relying on pre-harvest estimates, PHARM uses post-harvest information to more accurately capture the true cost of forest development (e.g. road construction and bridge installation). PHARM has been in use in the Interior forest sector since 2017.



## Log Exports

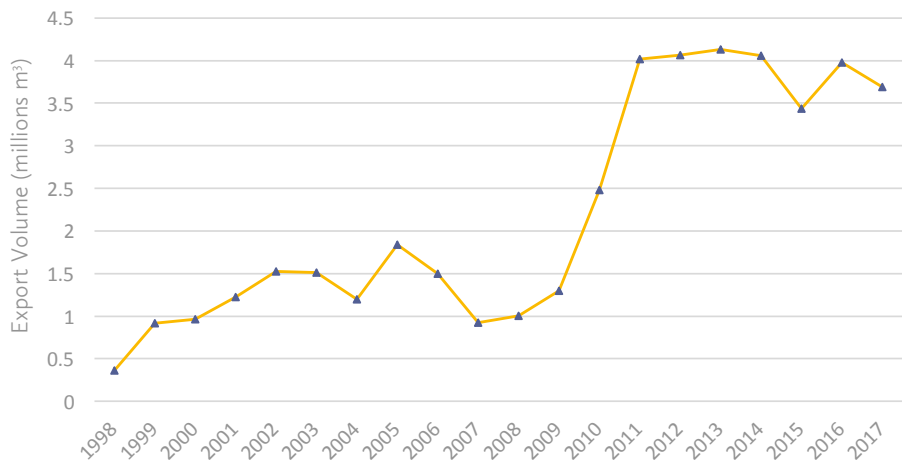
Log exports have always played an important role in B.C.'s coastal forest economy.

The Province's Forest Act requires that timber and timber residuals harvested in the province be used or manufactured in the province, unless an exemption is provided.

Most log exports in B.C. are approved through a "surplus test" whereby potential exporters first advertise the logs for domestic use. Logs approved for export are required to pay a "fee-in-lieu" of manufacturing.

Between 1998 and 2017 log exports increased from about 1% to about 30% of the coastal harvest.

Crown Log Export Volume



Government is making changes to log export policy to increase the amount of timber on the coast.

Effective July 1, 2019, the fee charged for log exports from new timber sales will be based on harvest economics. Export fees for logs from marginal stands will be low, while export fees will be higher for logs that are economical to harvest and process domestically. The new policy will apply to log exports from all tenures in December 2019.



## Strengthening the surplus test

Changes to B.C.'s log export policy will include a revised mandate for B.C.'s Timber Export Advisory Committee (TEAC). TEAC makes recommendations to government about the export of logs from B.C.

Potential exporters first advertise logs for domestic use. If there is no domestic buyer, the logs can be exported.

If a domestic buyer bids on the logs, TEAC determines if the offer reflects fair value and recommends whether an exemption should be granted.

As part of the Coast Forest Sector Revitalization Initiative, the ministry will be reviewing the membership and terms of reference of TEAC to strengthen the surplus test process.





## Rethinking Log Export OICs

Long-established log export Orders in Council (OICs) provide export certainty in areas where harvesting is otherwise uneconomic. The OICs establish a percentage of harvest that can be exported without having to first go through the surplus test.

There are currently five of these OICs in place—North Coast district, Nass Timber Supply Area, Mid-Coast area, Haida Gwaii, and Northwest Interior—all of which are set to expire on July 31, 2019.

The ministry is consulting with First Nations and industry on new economic criteria for OICs in areas where log exports are an essential component of economic timber harvesting. Permitting some log exports from these areas, allows harvesting that would otherwise not occur and increases overall fibre available to the domestic industry.



## Qala:yit Community Forest Agreement breaks new ground

In September 2018, BC Timber Sales and Qala:yit Community Forest proponents formed a unique revenue-sharing partnership.

Under the agreement, BCTS will retain and auction off just under one-quarter of the community forest's 31,000 cubic-metre allowable annual cut to support the Province's market-based pricing system.

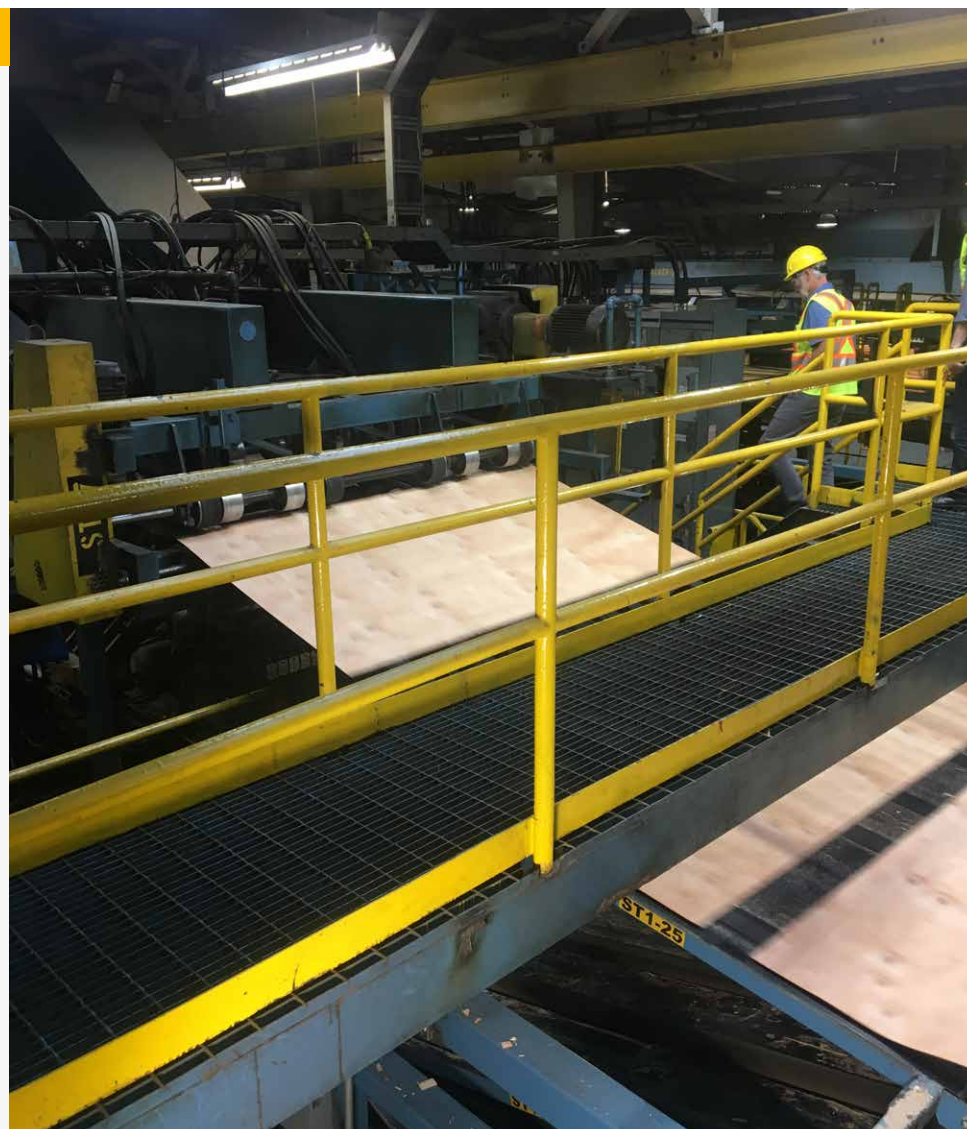
Half of the profits from the sale of that timber go to Qala:yit Community Forest, a joint venture between the Pacheedaht First Nation and Cowichan Lake Community Forest Co-operative, local groups that have been involved in timber harvesting for many years.

The new agreement will provide Pacheedaht First Nation and Cowichan Lake communities with financial and social benefits, as well as increased input into local resource management.

## What qualifies as a manufactured forest product?

Introduced in 2003, B.C.'s Manufactured Forest Products Regulation defines the criteria that products must meet to qualify as manufactured under Section 127 (b) of the Forest Act. [www.bclaws.ca/civix/document/id/complete/statreg/240\\_2003](http://www.bclaws.ca/civix/document/id/complete/statreg/240_2003)

As part of the Coast Forest Sector Revitalization Initiative, the Province is reviewing this regulation to increase the opportunities for further processing of processed lumber in B.C. and creating more value-added manufacturing.



## Working with First Nations

First Nations in B.C. are increasingly active participants in forestry activities that provide both economic opportunity and community sustainability.

More than 140 First Nations in B.C. have forestry agreements in place that provide harvesting rights or a proportion of forestry revenue in recognition of Aboriginal rights to land and resources in their traditional territories.

Through collaboration and partnership with FPIInnovations, B.C.'s Indigenous forestry program has also supported over 100 Indigenous communities and/or organizations in forest sector economic development.

Provincewide, First Nations are responsible for about 5% of the allowable annual cut.

In the coast area, there are 11 First Nations community forests, 40 First Nations-controlled woodlots and five First Nations woodland licences.

## Increased support for First Nations Forestry

In 2018, BC Timber Sales (BCTS) adopted a new overarching principle to guide its operations: Reconciliation with Indigenous Peoples. This reflects the B.C. government's commitment to fully implement the United Nations Declaration on the Rights of Indigenous Peoples.

BCTS manages about 20% of the province's allowable annual cut for Crown timber, generating economic prosperity for British Columbians through the safe, sustainable development and auction of Crown timber.

Each year, BCTS auctions off 10–13 million cubic metres of Crown timber to loggers, wood processors and other forestry businesses. The public auction of timber determines the market value of timber harvested from Crown land, which is then used to set stumpage rates.



# Indigenous Bio-economy

Supporting the development of a forest bio-economy can create new opportunities for using residual fibre to manufacture cutting-edge products that help drive forest sector revitalization.

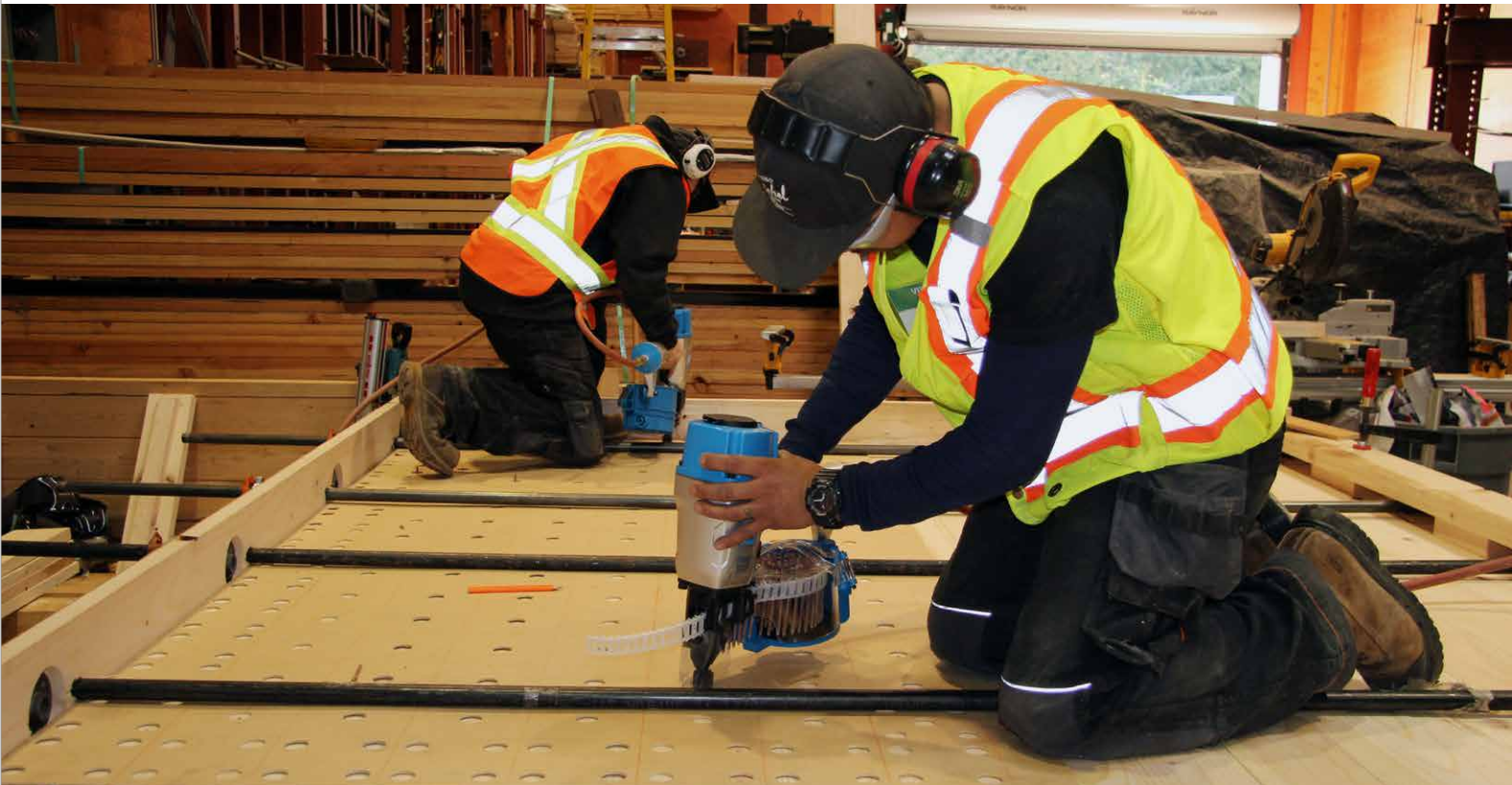
The term forest bio-products refers to consumer/industrial products made from forest-based biomass. Using fibre from sustainably managed forests, these bio-products have the added benefit of reducing carbon emissions (for example from slash burning or natural decay) and increasing long-term carbon storage.

Conventional Bio-products		Advanced Bio-products
Paper Mills	→ Packaging, Newsprint, Publishing, Substrate, tissue	<div>Composites &amp; Textiles: Cellulose nanocrystals, Cellulose filaments, Micro-fibrillated cellulose, Composites using cellulose fibres, Bioplastics</div> <div>Advanced Bio-materials</div>
Chemical Pulp Mills	→ Market kraft pulp Tall oil, Turpentine, Dissolving pulp	<div>Chemicals &amp; Additives: Methanol, Ethanol, Acetate, Lignin, Lubricates, Surfactants and rheology, Pharmaceuticals</div> <div>Bio-chemicals</div>
Mechanical Pulp Mills	→ Market high-yield pulp	<div>Liquid Fuels: Pyrolysis oil, Bio crude, Gas, Bio diesel aviation fuel, Dimethyl ether, Natural Gas (Nexterra Syn-Gas, Gas Technology Institute)</div> <div>Biofuel</div>
Forests and Process Residues	→ Pellets, Boilers	<div>Solid Biomass: Bio-energy intermediates, Torrefied pellets, Bio-coal, Heat and Power</div> <div>Bioenergy</div>
Plywood Engineered Wood Products Oriented strand board Mills	→ Panels	<div>Next-gen Engineered Wood: Cross-laminated timber (CLT), Multi-attribute panels, Wood fibre insulation, Hybrid/ tall building solutions, etc.</div> <div>Conventional Bio-product System with Innovative Technology</div>
Sawmills	→ Lumber	
Harvesting	→ Log	

The Province is working with First Nations on an Indigenous bio-economy program aimed at using forest biomass to produce new consumer goods and products. These products will provide alternatives to certain petrochemicals and enhance the sustainability of our provincial economy.

Value-added bio-products we could see arise from this collaborative program with First Nations include, but are not limited to, bioenergy, biochemicals and biomaterials as well as more conventional but innovative value-added products like cross-laminated timber panels and other pre-fabricated building products.

These wide-ranging opportunities can be designed as small pilot projects to help build capacity and demonstrate success before scaling up to commercial manufacturing.



## First Nations Woodland Licence

The First Nations woodland licence, is an area-based, long-term forest tenure unique to First Nations’ interests in the land and resources.

These agreements allow First Nations to increase their role in forest stewardship, manage land use, protect traditional practices and harvest timber and non-timber forest products.





## Restoring public confidence

One of the keys to long-term sustainability in the forest sector is ensuring a strong social contract between government and the public, and First Nations. We all care deeply our forests.

To ensure that harvesting adheres to world-class environmental standards, with greater transparency and more opportunity for public input, the Province will be amending the Forest and Range Practices Act (FRPA) and conducting a review of the private managed forest land program in the province.

### Forest and Range Practices Act

When the Forest and Range Practices Act was introduced in 2004, the goal was to reduce government and industry costs through a streamlined approval process that encouraged innovative forest practices.

Fifteen years later, with the benefit of hindsight, it's clear that parts of this legislation can be strengthened and improved.

Changes to FRPA are being introduced incrementally. The first round of amendments were introduced in 2019 and more amendments are planned through to 2021.

Improvements to FRPA will ensure that forest management in B.C. includes greater collaboration between the Province and First Nations to provide more opportunities for First Nations to share information and have input into strategic planning.

New map-publishing requirements related to planned harvest areas and roads will increase opportunities for public and stakeholder review, and the duration of forest stewardship plans will be shortened to trigger more frequent public review and comment.

Planned FRPA amendments will also strengthen government's role as the land manager to help promote and protect the natural resources of B.C., and introduce regulatory changes aimed at transforming forest management planning.

Over 2019, government will be continuing a detailed engagement process to develop further improvements.



### FRPA's role in responsible forestry

FRPA is the legislation that governs how we care for the forest and range environments, including how they are developed for logging, roadbuilding, ranching and recreation. It applies on all public forest lands and anyone who has a forest or range tenure has to abide by its rules.

FRPA and its associated regulations provide assurance that public forest and range lands are well-managed for the values that matter to British Columbians – environmental, economic, social and cultural. FRPA creates public oversight through the Forest Practices Board, and requires that forest tenure holders create plans that communicate their activities and can be used to hold them accountable.

For example, some of the rules under FRPA include limiting the size of cut-blocks to support biodiversity and designing cut-blocks so that harvesting mimics natural disturbance on hillsides.



# Private Managed Forest Land

The Province is undertaking a thorough review to identify government’s goals for the regulation of forestry activities on private managed forest land and to assess whether those goals are being met through the province’s managed forest land program.

This review will include a scan of government oversight of private forest land in other provinces and countries and a review of B.C.’s current legislation and regulations.

The review will identify whether any changes or improvements are required to ensure that harvesting activities on private managed forest land are meeting public values and addressing public concerns about reforestation, water quality and quantity, riparian management, to list a few.

The majority of the province’s privately managed forest land is on southern Vancouver Island. In the late 1800s, the government of the day gave railway companies large tracts of private land in exchange for them building railways.

Activities on private managed forest land are governed by the Private Managed Forest Land Act, as well as the Heritage Conservation Act, Drinking Water Protection Act, Wildfire Act and federal Species at Risk Act and federal Fisheries Act and various other regulations.

The current regime has been in place for 15 years and needs a thorough review to see what changes may or may not be needed. A public engagement process and First Nations consultation will inform our review.

Coastal B.C.’s Private Managed Forest Land (PMFL)



About 30% of the coastal region’s timber harvest comes from private managed forest land.



# Summary

Forest resources may be renewable, but to achieve long-term sustainability they must be managed wisely. This means putting requirements in place that help create jobs, develop investment opportunities and ensure the province is a global leader in sustainable forest management.

The Province’s Coast Forest Sector Revitalization Initiative will require ongoing collaboration between government, industry, forestry-dependent communities and First Nations.

It will require determination, innovation, co-operation, compromise and a recognition that all groups involved in taking up this challenge stand to benefit from new opportunities. Only by working together can we strike a balance between the various competing interests on B.C.’s public land.

Environmental protection is crucial, but so is protecting the forestry sector and its importance to the province’s economy. Timber harvesting has to co-exist with the multitude of values that are part of our forests, including business in eco-tourism, watersheds, and recreational values. First Nations’ rights to resources in their traditional territories must be respected, and all forest sector participants, including government, must work to support First Nations’ participation in the industry and ensure they benefit from forestry resources in their traditional territories.

The public deserves more transparency and input into timber harvesting, but excessive regulations and red tape can also undermine profitability. We need to process more of our precious timber resource here in B.C., without losing sight of the principle that business sustainability requires profitability.

It’s going to take a collective effort—the energy and enthusiasm of smaller players, the expertise of industry and the ongoing support of government—to achieve all these goals.

Faced with a constantly shifting global marketplace and ever-increasing technological change, there’s no way to magically bring back the forest industry of past decades.

But with strong leadership and a mutual recognition of our common goals, we can return the wealth generated by our forests to the communities it comes from and maximize the benefits to workers, contractors, First Nations and everyone that relies on forestry in B.C.





# Document links / Learn more:

## Post-Harvest Appraisal Reconciliation Model

[gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/timber-pricing/interior-timber-pricing/interior-appraisal-manual/2016\\_interior\\_amendment\\_3.pdf](https://gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/timber-pricing/interior-timber-pricing/interior-appraisal-manual/2016_interior_amendment_3.pdf)

## Manufactured Forest Products Regulation

[bclaws.ca/civix/document/id/complete/statreg/240\\_2003](https://bclaws.ca/civix/document/id/complete/statreg/240_2003)

## Forest and Range Practices Act

[gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/legislation-regulation/forest-range-practices-act](https://gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/legislation-regulation/forest-range-practices-act)

## Private Managed Forest Land Act

[bclaws.ca/Recon/document/ID/freeside/oo\\_o3o8o\\_o1](https://bclaws.ca/Recon/document/ID/freeside/oo_o3o8o_o1)

## Clean BC (B.C.'s Climate Action Plan)

[gov.bc.ca/gov/content/environment/climate-change/planning-and-action](https://gov.bc.ca/gov/content/environment/climate-change/planning-and-action)

## Coast Forest Sector Revitalization

[gov.bc.ca/coast-forest-sector-revitalization](https://gov.bc.ca/coast-forest-sector-revitalization)





