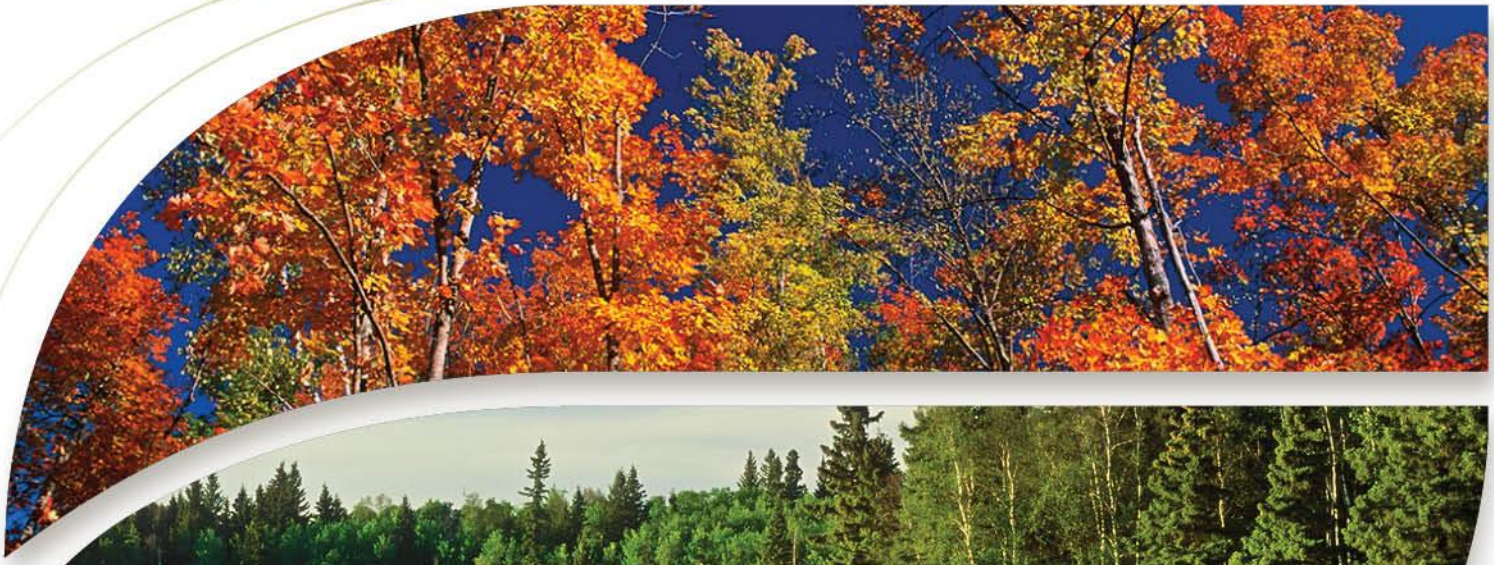
Canadian Council of Forest Ministers

Conseil canadien des ministres des forêts

PAN-CANADIAN FRAMEWORK ON CLEAN GROWTH AND CLIMATE CHANGE

Forest Ministerial Progress Report



2018

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INTRODUCTION

On December 9, 2016, federal and most provincial and territorial governments adopted the Pan-Canadian Framework on Clean Growth and Climate Change (PCF). The PCF is an ambitious plan to reduce greenhouse gas (GHG) emissions, create clean jobs and growth, and increase Canada's resiliency to the impacts of climate change.

The PCF outlines how Canada will meet or exceed its target under the Paris Agreement of reducing GHG emissions by 30 percent from 2005 levels by 2030. The PCF was developed through a collaborative process by federal, provincial and territorial working groups in consultation with the public and Indigenous Peoples who will continue to be meaningfully engaged as the plan is implemented.

The PCF puts Canada on a path to meet its 2030 emission reduction target through four pillars:

1. Carbon pricing;
2. Complementary actions to reduce greenhouse gas emissions;
3. Adaptation and climate resilience; and,
4. Clean technology and innovation.

Through the PCF, federal, provincial, and territorial governments committed to report annually on progress to First Ministers. To meet this commitment, the Canadian Council of Forest Ministers (CCFM) along with nine other Ministerial tables have committed to producing annual progress reports on PCF actions within their portfolios. These reports feed into annual Synthesis Reports on overall PCF progress, which are delivered to First Ministers in late autumn each year.

The forest sector falls under the PCF's third pillar, *Complementary actions to reduce greenhouse gas emissions*, and supports the following actions:

1. Increasing stored carbon: protecting and enhancing carbon sinks;
2. Increasing the use of wood for construction;
3. Generating bioenergy and bioproducts; and,
4. Advancing innovation in GHG-efficient forest management practices.

Three of the forest-related PCF actions (1, 3, and 4) also fall within the agriculture portfolio. Progress on actions that relate directly to agriculture will be included in the PCF report from the Ministers of Agriculture. There is no significant overlap between the measures discussed in this report and those reported by the Ministers of Agriculture.

This is the second annual Forest Ministers' report on the PCF, and it builds on last year's inaugural report. Programs included in last year's report have been updated to reflect tangible progress, and many new programs have been added. Future reports will continue to shift focus more toward concrete results and outcomes, using metrics such as greenhouse gas emissions reductions and increases in stored carbon. As programs mature and more results become available, future reports could also include policy and program recommendations that build on the evidence collected to date.

OVERALL ANALYSIS OF PROGRESS

Over the past year, federal, provincial, and territorial governments have made tangible progress on forest-related initiatives in support of the Pan-Canadian Framework on Clean Growth and Climate Change. This year's report covers 65 separate initiatives, nearly double the number reported last year, which support both environmental and economic objectives. When reviewing these initiatives, three themes emerge clearly: the importance of partnerships and collaboration; the need for forest science to support policy and action; and a drive towards innovation to support clean growth and a low-carbon future.

In addition to the below concrete measures taken, there are a number of policy changes and strategies that further support these objectives. Some of these policies and strategies include: Alberta's Carbon Offset Activities opportunity review and Climate Change Innovation and Technology Framework (CCITF); British Columbia's Clean-Tech Innovation Strategy for the BC Forest Sector; the CCFM's Bioeconomy Framework for Canada; New Brunswick's Wood in the Construction of Public Buildings and Infrastructure Policy (i.e., Wood First Policy) and Forest Biomass Policy for sustainable biomass harvesting; Newfoundland and Labrador's forthcoming Forest Sector Strategy; Northwest Territories' Forest Industry Development Strategy; Nova Scotia's Forest Industry Development Strategy and plans to increase capacity for model forest carbon sequestration; Quebec's Wood Charter to increase the use of wood in construction and the Development Strategy for Québec's Forest Products Industry; and Saskatchewan's Prairie Resilience climate change strategy. All of this work demonstrates a strong commitment across the country to promoting new strategies and policies to further the aims of the Pan-Canadian Framework.

The initiatives covered in this report reflect the importance of partnerships and collaboration in delivering on PCF commitments. These initiatives involve collaborations between multiple levels of government, universities and academics, industry partners, Indigenous representatives, not-for-profit organizations, and communities. Engaging with such a diverse group of stakeholders will help ensure that Canada's PCF actions support Canadians' diverse economic, cultural, and spiritual forest values.

Federal, provincial, and territorial PCF initiatives also reflect the need for evidence-informed forest policy based on sound research. Governments continue to support forest science, including better data collection and modelling, both to monitor the effects of climate change and to predict its effects in different scenarios. Together, this research will help Canadians to mitigate and adapt to the challenges posed by climate change.

Finally, these initiatives reflect continued investment in forest innovation and the transition to a low-carbon economy. For example, the number of initiatives related to bioenergy and bioproducts nearly doubled since the 2017 report, from 13 to 24, and the initiatives included in last year's report have matured and met new milestones. Innovative uses of wood in

construction, including tall-wood buildings, also continue to mature and accelerate. Together, these initiatives will foster a culture of innovation and help the forest sector to thrive in a low-carbon economy.

The sections below provide a discussion of concrete results from selected initiatives organized by PCF action. See the Annex for a complete list of initiatives.

INCREASING STORED CARBON: PROTECT AND ENHANCE CARBON SINKS

Federal, provincial, and territorial governments will work together to protect and enhance carbon sinks, including in forests, wetlands, and agricultural lands (e.g., through land-use and conservation measures).

- Trees grow by absorbing and storing CO_2 from the atmosphere, and carbon is also stored in dead biomass and soil. Sustainably managing forests is an important part of protecting and enhancing carbon sinks. In the last year, federal, provincial, and territorial governments have increasingly focussed on how management could be adjusted to increase carbon sinks and reduce GHG emissions by, for example improving regeneration of forests after natural disturbances insect infestations and fire.
- Alberta's Caribou Habitat Recovery Program made progress on caribou habitat restoration, which will contribute to ecosystem resilience and carbon sequestration. In 2017 the program restored 70km of legacy seismic lines, which are linear disturbances created when mapping oil reserves. 400km are expected to be treated in 2018, and the Program proposes to treat 800km in 2019.
- The $1.4 billion Low Carbon Economy Leadership Fund, as part of the $2 billion Federal Low Carbon Economy Fund (LCEF) announced in the federal Budget 2016 and Budget 2017, was launched in June 2017, supporting new and expanded provincial and territorial actions to reduce GHG emissions. One of the targeted sectors for the LCEF is enhancing carbon sinks and reducing GHG emissions in the forest sector. At the end of 2017, the LCEF announced Leadership Fund support for forest restoration efforts in British Columbia, Alberta and Quebec, as well as for use of forest harvesting residues for energy in Quebec. The LCEF launched the $450 million Low Carbon Economy Challenge (Champions stream) in March 2018 to seek proposals for emission reductions or carbon sequestration from a broad range of potential applicants. The forest sector continues to be a targeted sector, and funding decisions are expected in fall 2018 to winter 2019.
- British Columbia's Forest Carbon Initiative will restore up to 300,000 hectares of forests impacted by the mountain pine beetle infestation and wildfires. In March 2018, the province and the federal government finalized a funding agreement under which the Low Carbon Economy Fund provided $140M for eligible forest carbon investments between 2017/18 and 20201/22, on top of the $150 million investment announced by the British Columbia government in February 2017.
- Ontario continues to advance its silviculture Program. In 2017, over 250,000 trees were planted in urban municipalities across Ontario. Overall, about 24 million trees have been planted since 2007, assisting more than 4,000 landowners and creating over 12,000 hectares of new forests across the province.
- New Brunswick and Quebec continue to combat the spruce budworm epidemic in Eastern Canada. New Brunswick treated approximately 200,000 hectares of hot-spot populations in 2018. Quebec treated over 350,000 hectares out of a total of nearly 8.2 million hectares that were infested in 2018.
- British Columbia and Alberta continue to address mountain pine beetle outbreaks in Western Canada through early intervention and monitoring, reforestation, and ongoing treatment of affected areas in order to limit the damage to forest health and productivity.
- The Northwest Territories have begun working on a Forest Industry Development Strategy, laying the foundation for a successful forest industry.

INCREASING THE USE OF WOOD FOR CONSTRUCTION:

Federal, provincial, and territorial governments will collaborate to encourage the increased use of wood products in construction, including through updated building codes.

- Governments across Canada have long supported increased wood use for construction. Use of

renewable solid wood products in building construction can store carbon long-term and, when they replace more emissions-intensive non-renewable building products, they help to reduce GHG emissions. An urban landscape dotted with tall wood buildings and wood bridges would benefit Canada's forest sector and increase carbon storage and the resiliency of forest-based communities.

- The federal Green Construction through Wood (GCWood) program, a four-year $39.8 million initiative, was launched in October of 2017 to support wood-based research, development, education, and demonstration projects that increase the use of wood in infrastructure projects as a green building material. A call for Expressions of Interest for tall wood building demonstration projects occurred in late 2017 with multiple projects to commence in the next two years. Calls for Expressions of Interest for low-rise commercial building and bridge demonstration projects will be launched in autumn 2018.
- Provinces including British Columbia, Quebec, Ontario, and New Brunswick have shown public leadership by recently recommitting to increase the use of wood and other low-carbon renewable materials in the design and construction of municipal and government-funded buildings.
- New Brunswick's Wood First Policy is increasing the use of structural and appearance wood products in publicly funded building construction and renovation.
- In addition to government programs, many jurisdictions also invest in research collaborations on wood building construction and wood product innovation through FPInnovations, a public-private national forest research institute.

GENERATING BIOENERGY AND BIOPRODUCTS:

Federal, provincial, and territorial governments will work together to identify opportunities to produce renewable fuels and bioproducts – for example, generating renewable fuel from waste.

- Increasing the production of bioenergy and bioproducts contributes to GHG emissions reductions by decreasing reliance on fossil-fuel intensive alternatives. For example, harvest residues and other waste wood can be used for energy in place of fossil fuels such as diesel, while forest bioproducts can be substituted for fossil fuel-intensive products such as steel and plastics.
- Federal, provincial, and territorial governments are targeting support for cleaner bioenergy to communities that rely on fossil fuels. For example, the 2017 federal Budget included $55 million for the BioHeat stream of the Clean Energy for Rural and Remote Communities (CERRC) program, to support transitions from fossil fuel heating to bioheating. The CERRC program solicited proposals from rural and remote communities in the spring of 2018. The BioHeat stream anticipates approving and funding about 25 communities to undertake projects under this round of funding. Most of these projects will roll out over multiple years while some aim to be completed this year. CERRC will offer further rounds of funding over the course of its six-year duration.
- Jurisdictions are investing in research, development, and commercialization of innovations in using wood to help position Canada as a competitive market for advanced bioproducts, including biofuels. For instance, Yukon's Biomass Energy Strategy, approved in 2016, provided funding in 2017/18 for a number of First Nations to explore biomass opportunities. New Brunswick's Forest Biomass Policy continues to progress, with three large-scale projects under consideration for bioenergy and/or bioproduct generation. Newfoundland and Labrador investigating the feasibility of converting publicly owned buildings to biomass heating, which will reduce their reliance on fossil fuels.
- The Government of Quebec announced its 2018-2023 Development Strategy for Quebec's Forest Products Industry, in line with the commitment it made at the Wood Innovation Forum. The initiative provides for a series of measures representing investments of over $827 million. Several key measures focus on the production of bioenergy and bioproducts.
- Ontario is examining some projects to replace diesel power generation with bio-product plants.

ADVANCING INNOVATION IN GHG-EFFICIENT FOREST MANAGEMENT PRACTICES

Federal, provincial, and territorial governments will work together to enhance innovation to advance GHG-efficient management practices in forestry and agriculture.

- Finding new ways to harvest and use wood fibre to reduce emissions from forest and forestry operations and maximize the value derived from wood has become crucial to help mitigate climate change and transform the Canadian forest industry to a low-carbon economy. In a complimentary fashion, investing in innovative solutions to identify more GHG-efficient forest management practices enhances forests as carbon sinks while advancing economic transformation and competitiveness of the forestry industry.
- The CCFM released its Forest Bioeconomy Framework for Canada in 2017. The Framework presents an integrated approach to meeting climate change mitigation commitments and advancing innovation in the forest sector for the long term, which affirms federal, provincial and territorial government commitment to work in partnership with forest communities and industry stakeholders, including continually engaging Indigenous peoples, to build lasting solutions together.
- Overall, federal, provincial and territorial actions to support sustainable forest management practices, innovation and transformation have compounding climate change mitigation benefits, improving how Canada meets the challenges and opportunities that climate change presents to the forest sector.

MEASURE-BY-MEASURE SUMMARY TABLE

JURISDICTION	ACTIVITY
PCF ACTION: ***Increasing stored carbon: protect and enhance carbon sinks***	
Federal	$2 billion Federal Low Carbon Economy Fund (LCEF)
Alberta	Enhanced forest growth and reforestation of legacy natural disturbance on forested public land
Alberta	Alberta Mountain Pine Beetle Strategy
Alberta	Alberta Land-use Framework Planning
Alberta	Caribou Habitat Recovery Program
British Columbia	Forest Carbon Initiative (FCI)
New Brunswick	Spruce Budworm Early Intervention Strategy
Quebec	Low Carbon Economy Leadership Fund
Quebec	Québec's Wood Production Strategy
Quebec	Spruce budworm treatments on private and Crown land
PCF ACTION: ***Increasing the use of wood for construction***	
Multiple	Investments in FPInnovations research
Federal	Green Construction through Wood (GCWood) program
British Columbia	Increase the use of low carbon and renewable materials in all public sector infrastructure projects
British Columbia	Forestry Innovation Investment (FII) Wood First Program
Newfoundland and Labrador	Wood Use Initiative within Atlantic WOODWORKS!
Nova Scotia	Renewed support for Atlantic Woodworks Initiative
Quebec	Wood Building Demonstration Program
Quebec	Wood Charter
PCF ACTION: ***Generating bioenergy and bioproducts***	
Federal	Clean Energy to Reduce Reliance on Diesel in Remote Communities (CERRC) Program
Alberta	Forest Industry Bioenergy and Bioproduct Projects
Alberta	Bioenergy Producer Program
Alberta	Alberta Carbon Offset System – Offset Generation
New Brunswick	Atlantic BIOCON 2018 Conference
Newfoundland and Labrador	Biomass Conversion Feasibility Initiative for Publicly owned Buildings
Nova Scotia	Development of Wood Energy heating solutions for public buildings.
Ontario	Whitesand First Nation Community Sustainability Initiative (CSI).
Ontario	Development of the Wikwemikong First Nation 150,000 metric tonne wood pellet plant using forest biomass in Nairn Centre
Ontario	Development of the Wawasum Group Ltd. 60,000 metric tonne wood pellet plant using forest biomass on the Sand Point Indian Reserve
Ontario	Haliburton BioChar commercialization of organic carbon production from wood fibre product
Ontario	Development of a wood-fueled district heating system for downtown Haliburton

JURISDICTION	ACTIVITY
Ontario	Addition of biomass dryers and electric generation and expansion of KD Quality Pellets wood pellet facility to 200,000 tonnes annually
Quebec	Wood Innovation Forum
Quebec	2018-2023 Development Strategy for Quebec's Forest Products Industry
Quebec	Innovation Platform
Quebec	Forest Innovation Program (FIP)
Quebec	Support for innovative initiatives in pulp and paper plants
Quebec	Residual Forest Biomass Program
Quebec	Tax credit for the production of pyrolysis oil from residual forest biomass
Quebec	Tax measures to promote biofuel production in Quebec
Yukon	Yukon Biomass Energy Strategy
PCF ACTION: *Advancing innovation in GHG-efficient forest management practices*	
Alberta	Emissions Reduction Alberta (ERA)
Alberta	Alberta Innovates - Alberta Bio Future(ABF)
Alberta	Alberta Innovates Bio Energy Program
Alberta	Capital Investment Tax Credit (CITC)
Alberta	Alberta - Emerging Clean Technology Partnerships
Saskatchewan	Forest Management Planning
Saskatchewan	Climate Change Vulnerability Assessment in SFM– CCFM Framework
Manitoba	Assessing Carbon Stocks in Forested Wetlands

ANNEX: MEASURE-BY-MEASURE DETAILED UPDATE

PCF ACTION: *Increasing stored carbon: protect and enhance carbon sinks*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
Federal	**$2 billion Federal Low Carbon Economy Fund (LCEF)** Announced in federal Budget 2016 and Budget 2017 to support new provincial and territorial actions to reduce emissions, with a focus on new, incremental reductions while considering cost-effectiveness. One of the targeted sectors is enhancing carbon sinks and reducing greenhouse gas emissions in the forestry sector.	Launch of the LCEF by Environment and Climate Change Canada in June 2017 with a call for initial submissions from provincial and territorial governments to the Leadership Fund ($1.4B). At the end of 2017, the LCEF announced Leadership Fund support for forest restoration efforts in British Columbia, Alberta and Quebec, as well as for use of forest harvesting residues for energy in Quebec. The federal government has put in place bilateral funding agreements with many provincial/ territorial governments for approved projects. The LCEF launched the $450 million Low Carbon Economy Challenge (Champions stream) in March 2018 to seek proposals from a broad range of potential applicants. The forest sector continues to be a targeted sector.	Complete bilateral funding agreements under the Leadership Challenge with project activities underway. Low Carbon Economy Challenge proposal evaluation, with funding decisions expected in fall 2018 to winter 2019. Funding agreements put into place and project activities underway.	Budget 2017 specified the LCEF would operate 5 years to 2021-22.
Alberta	**Enhanced forest growth and reforestation of legacy natural disturbance on forested public land**. $20 million is to be allocated to the project with 50% funded through Low Carbon Economy Fund (Leadership Fund). Program promotes management interventions in areas of natural disturbances and increased coniferous planting supports the recovery of the coniferous components of forests, which then supports greater carbon sequestration.	Implementation activities are aimed at initial planting treatments in 2019/2020. Program aims to treat approximately 8,600 ha through planting 12.1 million seedlings by 2022.	Proposed 2019/2020 Treatment ha – 3,450 ha (subject to change depending on operational factors).	Completion expected in 2021-2022

Alberta	**Alberta Mountain Pine Beetle Strategy** Alberta Strategy targeted at reducing the spread and impact of the mountain pine beetle (MPB). MPB-infested stands show significant reductions in their ability to store carbon. This preventive program is aimed at reducing and slowing the MPB's impacts and potential eastern progression.	Level 1 Control Treatments* (single tree) August 2017-August 2018: 92,275 stems treated by the Province *All stems treated are felled and burned.	Ongoing August 2018- August 2019: it is anticipated that an equivalent number of stems will be treated as in 2017	Ongoing
Alberta	**Alberta Land-use Framework Planning** The Land-use Framework (LUF) sets out a new approach to managing our province's land and natural resources to achieve Alberta's long-term economic, environmental and social goals. The LUF establishes seven new land-use regions and calls for the development of a regional plan for each. Currently 2/7 plans are approved. The regional plans dictate Land-use strategies that will influence carbon sinks in the province, establish new protected/conservation areas, and emphasize the need to sustain a vibrant forest sector.	Alberta saw the addition of 1,360,390 hectares of new protected land in the boreal region in 2018: • Kazan Wildland Provincial Park (WPP) Establishment (570,822 hectares of new protected land for a total of 659,397 hectares) • Richardson WPP Establishment (264,727 hectares of new protected land for total of 312,068 hectares) • Dillon River WPP Establishment (191,545 hectares) • Birch River WPP Establishment (331,832 hectares) • Birch Mountains WPP Expansion (by an additional 1,563 hectares) Combining conservation/protected areas with sustainably managed forest lands should yield more carbon mitigation than either measure employed alone.	Continued development of uncompleted Regional Plans.	Ongoing
Alberta	**Caribou Habitat Recovery Program** The purpose of the Program is to support the Recovery Strategy for the Woodland Caribou Boreal Population and the Recovery Strategy for the Woodland Caribou, Southern Mountain Population by providing funds for Eligible Activities. The Program is structured around projects that are made up of Eligible Activities aimed at the Program's purpose which may include: planning, monitoring, evaluation, reporting access management planning, Traditional Knowledge collection, etc., Monitoring, evaluation and	Restoration of legacy seismic lines (linear disturbance) • 70 km treated in 2017 • 400 km treated in 2018	Continued Implementation of the program. Current Proposed Treatment 800 km in 2019	Ongoing

	reporting, Monitoring, evaluation and reporting—This includes activities that measure, track and report on project activities and caribou habitat conditions for project management and outcomes measurement purposes. Program is administered by the Forest Resource Improvement Association of Alberta (FRIAA).			
British Columbia	**Forest Carbon Initiative (FCI)** Launched in early 2017, this strategy outlines current and planned initiatives by the Ministry of Forests, Lands, Natural Resource Operations, and Rural Development (FLNRO) to manage forest carbon and improve the sustainability of BC forests, communities and industry while mitigating the effects of climate change. This initiative also focuses on increasing utilization of forest waste and reducing slash pile burning to reduce emissions.	For 2017/18, FCI activities were delivered through two key partners, Forests for Tomorrow (FFT) and the Forest Enhancement Society of BC (FESBC). FESBC's eligible FCI activities include several planting projects, rehabilitation, fertilization, and utilization projects. FFT's eligible activities include incremental increases in provincial fertilization and rehabilitation. In early 2017, BC committed approximately $150 million to support the implementation of the FCI, demonstrating its support for the Pan Canadian Framework on Climate Change and Clean Energy (PCF). In late 2017, the federal Low Carbon Economy Fund (LCEF) announced support of $140 million under the Leadership Fund. In March 2018, the agreement between the province of British Columbia and the government of Canada was finalized, which means a total of $290M in funding for eligible forest carbon investments from 2017/18 to 2021/22.	In 2018/19 and beyond, the province will continue to implement FCI activities aligned with the support provided by the LCEF Leadership Fund (rehabilitation, fertilization, utilization, reforestation, investments in alternatives to burning of wood waste and increased sequestration of carbon)	2021-22
New Brunswick	**Spruce Budworm Early Intervention Strategy** The federal and provincial governments, industry and academia renewed a 5-year funding partnership (2018-2022) to continue early targeted intervention against an outbreak of spruce budworm within Atlantic Canada. The goal of the strategy is to protect forest habitats, forest carbon sequestration, and forest-	Approximately 200,000 hectares of hot-spot populations in New Brunswick were treated in 2018.	Continue early targeted intervention work, with actions including intensive monitoring efforts across the Atlantic region, applied research, communications, citizen science, and treatment of hot-spot populations in New Brunswick.	2025

	dependent economy from the impacts of an outbreak.			
Quebec	**Low Carbon Economy Leadership Fund** This fund from the federal government enables the provinces and territories to meet their commitments to reduce greenhouse gas emissions (GHGs). The Government of Quebec (in cooperation with the MDELCC) has obtained $50 million in funding over five years to increase the number of carbon sinks through afforestation and reforestation of areas in addition to its regular program. The funding is split evenly between private forests and Crown lands.	Three types of areas were identified: 1) Restoring the production of forests affected by the spruce budworm epidemic in the Gaspésie and Lower St. Lawrence regions. Planning for the sectors to be back in production by 2020 was completed and the seedlings ordered. 2) Increased productivity of spruce-moss and Ericaceae forests. Planning for the sectors to be back in production by 2020 is in progress. 3) Afforestation of wild land in private forests. Planning for the sectors to be back in production by 2020 was completed and the seedlings ordered.	1) Restore production in the sectors identified in the 2020 planning. Plan and restore production in the sectors for 2021. 2) Order the seedlings needed to restore production in 2020 by the end of 2018; plan and restore production in sectors for 2021. 3) increased productivity of spruce-moss and Ericaceae forests Restore production in the sectors identified in the 2020 planning. Plan and restore production in the sectors for 2021.	The project will end in March 2022.
Quebec	**Québec's Wood Production Strategy** The fundamental aim of this Strategy is to produce more wood with the desired characteristics, at a competitive price, and based on profitable investments. One of the objectives is to "Help to achieve Québec's climate change mitigation targets by increasing carbon sequestration in the forest and in forest products." One of the specific actions related to this objective is to "Consider different options to strengthen the forest sector's contribution to the achievement of climate change mitigation targets."	Québec's Wood Production Strategy is to be released in December 2018. It is currently in public consultation.	Once released, implement the specifics actions. Begin to assess the forest sector's potential additional contribution to the achievement of Québec's greenhouse gas reduction target (2019)	2019
Quebec	**Spruce budworm treatments on private and Crown land** The objective of these treatments is to reduce loss in productivity and decrease mortality of lands affected by the epidemic compared to an untreated reference area.	Extent of damage caused by outbreak was estimated. Planning for spraying private wood lots was carried out. Spraying on Crown land was continued (began in 2009). Quantify early emissions of CO_2 avoided.	Continued mapping of SBW defoliation. First round of spraying on private wood lots will be carried out in 2018. Spraying on Crown land will be continued.	Treatments will be ongoing until the end of outbreak.

PCF ACTION: *Increasing the use of wood for construction*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
Multiple	**Investments in FPInnovations research** Federal and provincial governments invest annually through Shared Cost Arrangements in FPInnovations' research in forest management and sustainability, with a focus on the design, engineering and supply of large wood structures and components in construction.	Examples of government support for FPInnovations research include: The BC Ministry of Forests, Lands and Natural Resource Operations and Rural Development supported FPInnovations' research in adopting wood in buildings and bridges. The current funded projects through the Shared Cost Arrangement include Novel Building Materials Using Bio-materials (completed in 2016) and Next Generation Timber Forest Resource Bridges (on the 2nd year). In March 2017, the Quebec Ministry of Forests, Wildlife and Parks also announced the allocation of funding for FPInnovations totalling $4 M over four years for the continuation of its national collaborative research program.	BC will implement bridge components and concepts in demonstration projects of actual bridge constructions by March 2018 and support the implementation of these concepts in one or more demonstration bridges in 2018/2019. Quebec will continue implementation of projects by FPInnovations in collaboration with partners.	2021
Federal	**Green Construction through Wood (GCWood) program** Budget 2017 announced $39.8M to support projects and activities that increase the use of wood as a greener substitute material in construction. The GCWood program supports Canada's transition to a more wood-inclusive construction industry by funding projects that encourage: • greater adoption and commercialization of wood-based products in the construction of innovative tall wood buildings, timber bridges, and low-rise wood commercial buildings • replication of demonstrated innovative non-traditional wood-based buildings and timber bridges • research that addresses the gap in technical information needed to facilitate revisions to the 2020 and 2025 National Building Code of Canada (NBCC) to allow tall wood buildings beyond the current 6 storey limit	The federal government announced the program in October 2017, and a call for Tall Wood Demonstration Building Call for Expressions of Interest closed in December 2017. Negotiation of tall wood demonstration project agreements is expected in 2018, Calls for Expressions of Interest for low-rise commercial building and bridge demonstration projects will be launched in Fall 2018.	Multiple tall wood projects to commence in the next two years. Process for selection of low-rise commercial building and bridge demonstration projects. Development of advanced training/education curriculum, design tools, and information products expected in 2018-20.	Funding supports activities for 4 years to 2021-22

PCF ACTION: *Increasing the use of wood for construction*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
British Columbia	**Increase the use of low carbon and renewable materials in all public sector infrastructure projects** New projects align with existing government policy including: - Requiring LEED Gold certification of new public sector facilities - The Greenhouse Gas Reduction Targets Act/Carbon Neutral Government Regulation - The Wood First Initiative (which includes the Wood First Act and Wood First Program) BC Procurement Strategy, June 2018 – commits government to creating a life cycle assessment framework to measure and report on embedded carbon in (some) building materials used in capital infrastructure projects.	Use of Low Carbon/Renewable Materials in Public Sector Infrastructure projects initiated. Currently identifying and evaluating policy options and developing recommendations. Draft guidance materials developed. Strategy released June 25, 2018. Details to be determined.	Seek input from industry partners on draft guidance materials. Identify and assess policy options to support increased use of BC wood. Work with stakeholders across government, including the Ministry of Forests, Lands, Natural Resource Operations and Rural Development to design framework.	One or more policies will be selected for development to support increased use of BC wood in new public sector infrastructure projects by 2018. Target launch fiscal 2019/20.
British Columbia	**Forestry Innovation Investment (FII) Wood First Program** FII's Wood First Program focuses on advancing wood use in the province by positioning wood as a preferred building material through diversifying uses of wood in building design and construction, and supporting innovation in manufacturing.	Ongoing	$68M of total sales of wood in BC's non-residential and multi-storey/multi-family residential construction markets attributed to program interventions by 2018-19.	Program completion by 2020
Newfoundland and Labrador	**Wood Use Initiative within Atlantic WOODWORKS!** Newfoundland and Labrador has renewed its partnership with the Atlantic WoodWORKS! Program and is committed to exploring new wood use applications to increase the amount of wood that is used in non-residential construction. This will be accomplished through participation in the WoodWORKS! Program, and influence in various policies supporting increased wood use.	Committed funding to the Atlantic WoodWORKS! Program	Support Atlantic WoodWORKS! Initiatives such as training, design workshops, forums etc. Provide influence for the adoption of the 2015 Building Code. Explore opportunities where wood product construction can be utilized in public/institutional applications.	Ongoing
Nova Scotia	**Renewed support for Atlantic Woodworks Initiative.** Atlantic Woodworks is a cooperative program led by the maritime Lumber Bureau with Support from Canada the 4 Atlantic Provinces. It promotes wood as a preferred building material in Atlantic Canada.	Wood-based architectural design is celebrated, highlighted and promoted through workshops, special programs and building and development industry events.	Expansion of the program to include PEI in promotional efforts in 2018-19.	

PCF ACTION: *Increasing the use of wood for construction*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
Quebec	**Wood Building Demonstration Program** Implementation of the Technological Showcase for Wood Buildings Program for applicants with an innovative wood construction project or an innovative wooden solution in the non-residential or multifamily sector in Quebec.	Program launched in December 2016 with a budget of $11 million by 2018. In 2018, the Program was approved in order to increase the number of mobilizing projects being carried out. As such, the program is now in effect until 2020. In addition, the list of eligible expenses has been enhanced and the admission rules have been adapted to projects submitted by municipalities and school boards. In 2018, eight projects were approved for a total of $5.52 million in funding	Continuation of the program and monitoring of supported projects	March 31, 2020
Quebec	**Wood Charter** The purpose of the Quebec Wood Charter is to increase the use of wood in non-residential and multi-family construction in Quebec.	New preliminary version of the Wood Charter published in May 2017. Drafting in 2017 of a communications plan for promoting and increasing the visibility of the Wood Charter. The implementation of the Wood Charter measures is ongoing, including the following achievements in recent years: Measure 1: Government Leadership: - creation of a high-level interdepartmental committee on wood construction to ensure that departments and agencies set an example for the use of wood in construction projects funded in whole or in part by public funds; - allocation of financial assistance to Cecobois to develop and publish the tool for calculating GHG emissions; - annual reporting of the use of wood in Quebec public buildings. First annual report covering the period from 1 April 2016 to 31 March 2017 was completed. Measure 2: Innovative Wood Construction: - implementation of the Innovative Wood Solutions program; - creation of an advisory committee with the Régie du Bâtiment du Québec; - allocation of financial assistance for a feasibility study on the construction of a primary school in wood.	Continue to implement Wood Charter measures. - Implementation of the communications plan aimed at reaching cities and municipalities, the general public, construction professionals, project donors and government departments and agencies. In addition, the members of the high-level Interdepartmental Committee on exemplary use of wood construction are called upon to carry out promotional activities such as the enhancement of their infrastructure programs. - Updating and drafting of guidelines and explanatory guides on wood construction by the Régie du bâtiment du Québec. - Support for modeling and optimization in the prefabrication sector. - Support for the release of environmental statements for forest products; Target: Increase in the rate of wood use in non-residential and multi-family construction, which could reach 32% in 2020.	Permanent

PCF ACTION: *Increasing the use of wood for construction*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
		Measure 3: Training and Promotion: - funding to universities to increase the availability of compulsory training on the use of wood in construction (e.g., hiring of teachers specializing in wood construction); - funding for Cecobois' activities; - funding for continued training in the use of wood in construction; - Support of an activity to facilitate labour market integration of foreign graduates specializing in timber construction. Measure 4: Research and Innovation: - funding received from FPInnovations for various research initiatives; - renewal of support to the Université Laval's Industrial Research Chair for environmentally responsible wood construction for five years, from 2018 to 2023.		

PCF ACTION: *Generating bioenergy and bioproducts*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
Federal	**Clean Energy to Reduce Reliance on Diesel in Remote Communities (CERRC) Program** Budget 2017 provided $220 million for this program, of which $55 million is to support transitions from fossil fuel heating to bioheating.	Intake and review of bioheating projects submitted for funding. The CERRC program solicited proposals from rural and remote communities in the spring of 2018. The BioHeat stream anticipates approving and funding about 25 communities to undertake projects under this round of funding.	Most approved Bioheat projects will roll out over multiple years while some aim to be completed this year. CERRC will offer further rounds of funding over the course of its six-year duration.	Program funding provided for 6 years to 2023-24
Alberta	**Forest Industry Bioenergy and Bioproduct Projects** Lafarge Cement will be testing the use of wood waste to replace natural gas in the production of cement. Capital Power is testing the use of woody biomass to replace the use of coal at their power plants. Pinnacle Renewable Energy Inc. is developing a pellet facility near Edmonton and will source biomass from regional mills. Tolko Industries in High level Alberta plans to install a thermal power plant to consume 80% of sawmill bark wood waste. Expected completion date is June 2019.	Supported dialogue between forest company residual fibre producers and industries able to utilize material in bioenergy production. In May 2018 Pinnacle Renewable Energy completed a new pellet production facility with an expected 400,000 tonnes of annual gross production	Continue to work with biomass proponents to utilize forest biomass to help reduce GHG emission from use of hydrocarbons.	Lafarge Cement: 2020 Capital Power: 2019-20. Tolko Industries High Level 2019
Alberta	**Bioenergy Producer Program** The Bioenergy Producer Program (BPP) is intended to support bioenergy production capacity in Alberta in order to reduce greenhouse gas emissions from the use of fossil fuel alternatives and create value-added opportunities with economic benefits.	Bioenergy Producer Credits Paid and energy produced (only facilities utilizing woody biomass for the majority of their feedstock) <u>April 2016 to September, 2017 (Previous BPP)</u> Total grant to electricity, heat and wood pellets = $9.08 million Electricity grant = $6.5 million Heat grant = 0.86 million Wood pellets = 1.7 million October 2017 to March 2020 (Refined BPP) Two existing stand-alone woody biomass power plants are to receive grants to a total $16.096 million.	Ongoing until 2020	March, 2020

PCF ACTION: *Generating bioenergy and bioproducts*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
Alberta	**Alberta Carbon Offset System – Offset Generation** The Alberta emission offset system is a regulatory program managed by the Alberta Climate Change Office that enables facilities regulated under the Carbon Competitiveness Incentive Regulation (CCIR) to purchase and retire emission offsets to meet compliance obligations.	Related Carbon offsets to forests and forestry Generated Protocol: Energy Generation from the Combustion of Biomass Waste 2017: 233,772 t CO2eq offset credits generated ** Protocol: Energy Efficiency Projects 2017: 84,723 t CO2eq offset credits generated	Ongoing	Ongoing
New Brunswick	**Atlantic BIOCON 2018 Conference** Co-hosted by BioNB on May 23-24, 2018, in Fredericton, New Brunswick.	Atlantic BIOCON 2018 showcased the best bioeconomy projects on-the-go from inside and outside the Atlantic Canada region. Highlights included value added resource based businesses, innovation and natural resource exports, and building regional collaboration bioeconomy models.	Intel gathered will be used to support the development of strategies related to forestry.	Ongoing
Newfoundl and and Labrador	**Biomass Conversion Feasibility Initiative for Publicly owned Buildings:** The objective of this initiative is to investigate the feasibility of converting public buildings to biomass heating to reduce/displace burning of fossil fuels.	A RFP was released to identify options for the conversion of publicly owned buildings. Work continues on identifying and evaluating potential options for implementation.	Continue to investigate the feasibility of conversions. Review conversion installations from other jurisdictions.	March, 2019
Nova Scotia	**Development of Wood Energy heating solutions for public buildings.**	Many government departments are supporting investigation of potential to heat government building with woodchip-based heating systems.	Assessment of potential installations in various regions of the province is underway. Procurement protocols and business case assessments are being developed and reviewed.	
Ontario	**Whitesand First Nation Community Sustainability Initiative (CSI)** The CSI will replace diesel power generation by constructing and operating a combined heat and power cogeneration plant and a wood pellet plant. The initiative also includes forest management of the Armstrong Forest to maintain healthy forests as a carbon sink.	Since 2009, Whitesand First Nation, Ontario, and Canada have invested $10.4 million into the CSI, for project development costs, which includes planning, environmental, engineering, and other professional services. Power Purchase Agreement (PPA) – a renewable 20-year PPA contract executed March 2018. Construction of the industrial park was completed in December 2017.	Start construction drawings and procurement in Fall 2018. Phase 2 Construction of the Cogen plant and Pellet Plant to start in Spring 2018.	Winter 2020/21: Bio-Economy Centre commission ing and operation.

PCF ACTION: *Generating bioenergy and bioproducts*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
Ontario	**Development of the Wikwemikong First Nation 150,000 metric tonne wood pellet plant using forest biomass in Nairn Centre**	Global Marketing Plan, Forest Resource Assessment and Site Assessment completed. Class 30 business plan, engineering and environmental planning completed. Regional marketing assessment of Northern Ontario completed.	Complete site environmental assessment. Complete Class 10 comprehensive business plan, engineering and environmental planning. Initiate development of fibre supply agreements, contracts, and letters of intent as appropriate.	Tentative construction in 2020-21
Ontario	**Development of the Wawasum Group Ltd. 60,000 metric tonne wood pellet plant using forest biomass on the Sand Point Indian Reserve** Joint venture between the Animbiigoo Zaagi'igan Anishinaabek First Nation and the Bingwi Neyaashi Anishinaabek First Nation.	Completed Engineering, Environmental and Business Planning feasibility in 2016-17.	Class 10 engineering and forest resource facility license business plan with regional market study to be completed by September 2018.	Tentative construction in 2019-20
Ontario	**Haliburton BioChar commercialization of organic carbon production from wood fibre product**	Pilot plant effectively demonstrated the feasibility of the process to produce organic carbon from wood for use in filtration and purification applications or as an industrial additive substitute for petro-chemical produced carbon black.	Install commercial grade equipment and ramp up production	Tentative construction in 2018-19
Ontario	**Development of a wood-fueled district heating system for downtown Haliburton** by TorchLight Bioresources and Haliburton Forest, and electric power generation for the Haliburton Forest sawmill.	Haliburton Council support received. Awarded $2.8 million grant under Ontario Municipal GHG Challenge Fund.	Sign up interested business interests and complete engineering work.	Service launch Fall 2019
Ontario	**Addition of biomass dryers and electric generation and expansion of KD Quality Pellets wood pellet facility to 200,000 tonnes annually**	Plant with hammer mill and two pelletizing machines constructed in 2014.	Secure financing and order equipment	Tentative construction in 2018 through 2021
Quebec	**Wood Innovation Forum** The Wood Innovation Forum was the culmination of the work of five workshops whose mandate was to identify the issues facing the forest products industry and to find ways to improve it. These projects, made up of about fifteen representatives of governments, partners and industry, represent five major	Forum held on September 25, 2017. The Forum identified a common vision for the future based on the intention to modernize and transform Quebec's forest products industry. The Forum ended with the signing of an official declaration on a common government-industry vision to		Completed Several measures of the Wood Innovation Work Plan in progress or to come were in-corporated

PCF ACTION: *Generating bioenergy and bioproducts*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
	sectors: sawmill, panels, wood construction, pulp, paper and bioproducts as well as bioenergy.	ensure the sustainability of the forest sector. Report on the Wood Innovation Forum held on September 25, 2017, which brought together about 100 partners to take stock of the Wood Innovation Work Plan measures that have been put in place. The Report on the Wood Innovation Forum identified that over 80% of the work plan measures hade been implemented. In addition, additional measures totalling $7.65 million were announced in the Report of the Wood Innovation Forum		into the 2018-2023 industrial develop-ment strategy.
Quebec	**2018-2023 Development Strategy for Quebec's Forest Products Industry** The main objective of the development strategy is to enable this sector to remain competitive and to contribute more to the prosperity of Quebec and its regions by supporting businesses in the innovation, modernization and development of new products and markets that will ensure that plants continue to operate. It is therefore meant to increase wood manufacturing to create wealth and to contribute widely to the fight against climate change.	June 2018: Announcement of the Strategy with a budget envelope of 827 million. The Strategy includes 11 objectives and 43 measures to address the various challenges facing the forest products industry. These revolve around five areas of intervention that are designed to enable this sector to remain competitive and to contribute more to the prosperity of Quebec and its regions through the following: - innovation; - modernization and improvement of equipment and processes; - regulations and public policies; - the business environment; - the markets Overall vision encompassed in this strategy: To 2023, the forest products industry: - is a source of pride and a creator of wealth for Quebec's society; - is a world leader in wood fibre products that are the result of sustainably managed forests; - adapts, diversifies, modernizes and reinvents itself to keep up with global economic changes;	Dissemination of the Strategy to partners and the public. Setting up a framework for monitoring, evaluating and reporting on the Strategy (indicators and targets). Implementation of the measures provided in the Strategy.	2023

PCF ACTION: *Generating bioenergy and bioproducts*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
		contributes through its various sectors to the reduction of greenhouse gases (GHGs) and plays a key role in the fight against climate change.		
Yukon	**Yukon Biomass Energy Strategy** Approved in 2016, the Biomass Energy Strategy outlines an approach for the expansion of biomass energy use in Yukon.	Completed two years of work with funding from the Natural Resources Canada Strategic Partnership Initiative (SPI) to support biomass development in Yukon. Year Two (2017/18) projects include: - Strategic planning for Trondek Hwechin and Selkirk First Nation to develop a biomass economy. - Financial assessment of a district heating opportunity for Trondek Hwechin. - Evaluation of residential scale CHP feasibility for Kluane First Nation. - Year two of northern feedstock opportunity for Vuntut Gwitchin First Nation.	YG has negotiated a three year agreement with the Indigenous Forestry Initiative (NRCan), focusing on providing planning, engineering and deployment support to Yukon First Nations. 2018/19 will see the continued work towards installation of a biomass system at the Watson Lake school with a Request for Proposal process.	Ongoing
Quebec	**Innovation Platform** The objective of the platform is to support and accelerate the development of a new generation of panels and engineered wood composite products. The platform will support manufacturers from the product design phase through pre-marketing to the pilot manufacturing phase.	Announced in May 2017, the Government of Quebec is investing $4M to promote innovation, diversification and competitiveness in the panel industry.	Implementation of the innovation platform and its associated projects.	March, 2021
Quebec	Forest Innovation Program (FIP) The program is aimed at stimulating investments in innovative projects in the manufacture of forest products. This support is in the form of financial aid for studies or investment projects.	Program launched in December 2015 with a budget of $45M until 2022. 2017: Increase in the sums allocated to the program. Addition of a second component to financially support private developers who wish to carry out industrial projects using large volumes of lower grade wood from Quebec forests. 2018: Second increase of funds allocated to the program to reach a total budget of $70 million until 2023.	Continuation of the Wood Innovation program and monitoring of supported projects	March 2022

PCF ACTION: *Generating bioenergy and bioproducts*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
		In July 2018, nearly 80 projects were accepted for a total of almost $40 million in funding under this program. In addition, several projects are currently being analyzed.		
Quebec	**Support for innovative initiatives in pulp and paper plants**	In November, 2016, the Ministry of Forests, Wildlife and Parks announced the allocation of two financial assistance packages to companies in the pulp and paper sector of the Outaouais region, for implementation of innovative technologies: Allocation of financial assistance to Papier Masson WB Ltée. for the implementation of a new process in the production of wood fibre used in the manufacture of wood-plastic composite used in the manufacture of various products, including interior car doors panels. Allocation of financial assistance to Fortress Specialized Cellulose Inc. for the installation of a new system that will use birch wood to produce pulp for chemical processing, an ingredient used in the manufacture of many products used daily, including clothing, automobile parts and medical equipment.	Continuation of projects.	2019-20
Quebec	**Residual Forest Biomass Program** The Residual Forest Biomass Program is aimed at reducing GHG emissions and fossil fuel consumption by funding projects involving energy conversion to residual forest biomass. It is aimed at supporting the emerging energy-from-residual forest-biomass sector by encouraging the development of infrastructure and distribution networks in Quebec.	A new standards framework for the Residual Forest Biomass Program came into effect on January 31, 2018. In order to continue carrying out projects, additional funds were allocated to the Residual Forest Biomass Program by the Government of Quebec in 2018. Moreover, an additional $50 million from the federal government's Low Carbon Economy Leadership Fund was allocated to the program in 2017.	Continuation of the program and monitoring of associated projects.	Program in effect until March 31, 2021, or until the budget is fully committed.
Quebec	**Tax credit to support the production of pyrolytic oil from residual forest biomass**	The credit, set at $0.08/L, came into effect in April 2018. It will allow for a transition once a Quebec regulation on minimum biofuel content comes into effect.	Application of the tax credit.	The tax credit will end March 31, 2023.

PCF ACTION: *Generating bioenergy and bioproducts*				
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	This credit, set at $0.08/L, is in effect from April 1, 2018, to March 31, 2023, and will allow for a transition once a Quebec regulation on minimum biofuel content comes into effect. The Quebec Economic Plan released in March 2018 forecasts a financial impact of $6.9 million over five years for this tax measure.	The Quebec Economic Plan released in March 2018 forecasts a financial impact of $6.9 million over five years for this tax measure.		
Quebec	**Tax measures to promote the production of biofuel in Quebec**	As part of the Quebec Economic Plan released in March 2018, the Government announced that it would extend the tax measures ending March 31, 2018. The terms of these measures have also been amended to offer tax credits corresponding to the following fixed amounts: • $0.03/L for first-generation ethanol; • $0.16/L for cellulosic ethanol; • $0.14 /L for biodiesel. This new approach takes into account biofuel performance in reducing GHG emissions. For the forest industry, producers of cellulosic ethanol from forest biomass will be able to better predict their incomes thanks to the fixed amount provided by the tax credit. These new terms provide for a transition once a Quebec regulation on minimum biofuel content comes into effect. The government estimates that the extension of these tax credits will represent tax assistance of more than $34 million over five years for Quebec producers.	Application of tax measures.	Terms effective April 1, 2018 to March 31, 2023.

PCF ACTION: *Advancing innovation in GHG-efficient forest management practices*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
Alberta	**Emissions Reduction Alberta (ERA)** ERA is a not-for-profit corporation funded by the Government of Alberta works with the government, industry and innovators to accelerate development of innovative technologies that reduce GHG emissions. Biological Resource Optimization is one of the focus areas for ERA investment which focuses on projects that address biological GHG emissions, including areas such as agriculture, forestry, and waste management.	New forests and forestry related projects in 2018 are likely to be approved, however, these are yet to be determined. Current Active forests and forestry related projects include: Genesee Wood Waste Biomass Co-Firing Project: Capital Power Multi-site Cement Industry Low Carbon Fuel Implementation and Supply Chain Optimization Improved Construction of Roads and Pipelines to Minimize Impact on Peatland GHG Emissions Biological Plant Inoculants to Increase Carbon Sequestration in Alberta's Agriculture and Forestry Sectors Renewable Transportation Fuel Demonstration Project	Continued Calls for Proposals.	Ongoing
Alberta	**Alberta Innovates - Alberta Bio Future(ABF)** ABF is aimed at diversifying the provincial economy and accelerating growth of Alberta's bioindustrial sector by taking advantage of emerging opportunities. ABF is focused on increasing sustainability and reducing our carbon footprint by promoting use of Alberta's renewable resources. ABF provides funding in three strategic priority areas: research and innovation, product and technology commercialization, and equipment utilization.	Alberta Bio Futures is currently supporting over 37 active forest, forestry and woody biomass related projects with associated total project funding over $47 000 000. Total project funding refers to total value of the projects including ABF contributions, in-kind contributions, and other funding sources.	Ongoing	December, 2020.
Alberta	**Alberta Innovates Bio Energy Program** The Bioenergy Program invests in projects that adapt, develop and deploy innovative bioenergy technologies.		-July 1 2018-June 30 2020 - Material Recovery Project for Rural Alberta - budget $5.654 million - The project will establish a showcase-integrated facility with the objective of converting 95% of the received material (estimated between 24,000 to 40,000 tonnes annually) construction and demolition (C&D) waste into marketable products.	Ongoing
Alberta	**Capital Investment Tax Credit (CITC)**	This sector as of 2018 has been issued $14.2M of the $70.0M total available program tax credits.	Ongoing	2022

PCF ACTION: *Advancing innovation in GHG-efficient forest management practices*				
JURISDICTION	**ACTIVITY**	**STATUS / ACCOMPLISHMENTS**	**NEXT STEPS / TARGETS**	**END DATE / TARGET**
	The Capital Investment Tax Credit (CITC) is not sector specific and supports increased capital investment by businesses involved in manufacturing, processing and tourism infrastructure activities by providing a 10% tax credit for eligible expenditures over $1 million. Budget 2018 extended the tax credit to 2021-22, providing $30 million each year.	Recipient corporations have raised over $168.99M in associated investment.		
Alberta	**Alberta - Emerging Clean Technology Partnerships** Fosters strategic technology partnerships between advanced technology enterprises, targeted jurisdictions and Alberta's innovation system.	2017 – Funded projects - Bio battery – decentralized production of fuel from forest and agricultural waste – $750,000 funding contribution - $2,527,000 total project funding	Ongoing	Ongoing
Saskatchewan	**Forest Management Planning** Forest Management Agreement holders are legally required to address how climate change will impact their ability to achieve their management targets.	Three approved forest management plans which have a section which addresses the impact of climate change on their ability to achieve the targets set out in the plan.	Approve 3 forest management plans Upcoming FMP Targets:	2018
Saskatchewan	**Climate Change Vulnerability Assessment in SFM– CCFM Framework** Collaborative project between the Ministry of Environment, Forest Services Branch and Mistik Management Ltd. (Forest Industry) undertaking a case study utilizing the CCFM Climate Change Vulnerability Assessment with industry for adaptation.	Case study and research has been completed and is in the draft report stages. Mistik Management Ltd. is utilizing the results to mainstream climate change adaptations into their existing management and planning	Continue to collaborate with the provincial government and forest industry to expand adaptation tools and mainstreaming for SFM.	Fall 2018
Manitoba	**Assessing Carbon Stocks in Forested Wetlands** Development of a rapid assessment protocol for estimating carbon storage in wetlands in boreal forest landscapes. Partners are Saskatchewan Research Council, Ducks Unlimited Canada, Louisiana-Pacific Canada Ltd., Spruce Products Ltd., Brandon University. Funding provided by the Sustainable Forestry Initiative.	Development of sampling protocol and testing through field sampling completed in summer of 2016 and 2017; first draft of practitioner's guidebook completed in 2018.	Lab determination of peat carbon content to be completed by September 2018; final data analysis and report completed by March 2019.	2019