



**PAN-CANADIAN FRAMEWORK
ON CLEAN GROWTH AND CLIMATE CHANGE**

Forest Ministerial Progress Report



2017

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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
4. Clean technology and innovation

Through the PCF, federal, provincial, and territorial governments committed to report on progress within a year, and annually thereafter to First Ministers. To achieve this, the Canadian Council of Forest Ministers (CCFM) along with eight other Ministerial tables have committed to reporting on progress on the status of implementation of PCF actions within their portfolio. These reports will feed into a Synthesis Report on overall PCF progress, which will be delivered to First Ministers in late Fall 2017.

PCF actions within the forest sector fall under the PCF pillar on mitigation: complementary actions to reduce greenhouse gas emissions. More specifically, forest-related climate change actions will entail:

1. Increasing stored carbon: protecting and enhancing carbon sinks
2. Increasing the use of wood for construction
3. Generating bioenergy and bioproducts
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 FPT 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.

Given that the PCF is still in early stages of implementation, this report focuses on progress made initiating programs, mobilizing financing, and establishing governance structures. Future years' reports will shift focus more toward concrete results and outcomes, using metrics such as greenhouse gas emissions reductions and increases in stored carbon. They could also include recommendations for adjustments of existing policies or programs or for the implementation of new policies or programs.



OVERALL ANALYSIS OF PROGRESS

Federal, provincial, and territorial governments are taking action and making early progress on all forest-related climate change commitments. This report captures a wide variety of measures that in many cases contribute to multiple PCF climate change mitigation commitments while advancing economic objectives. Some actions are included in provincial climate change action plans, some are collaborations between multiple levels of government, and others are projects that are being implemented at the community-level through partnerships with industry and government funding support. A subset of actions is described below, with more actions and greater detail provided in the Annex.

Action is informed by integrating climate change science and GHG considerations into forest management planning and policy. Governments are strengthening research partnerships and investing in better data collection and modelling systems to improve forest carbon storage measurement and better assess the cumulative effects of climate change on forests. In this way, forest climate action is driven by science, partnerships, collaboration, and a culture of innovation to transform the forest sector to thrive in a low-carbon economy.

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 CO₂ 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.

- The \$2 billion Federal Low Carbon Economy Fund (LCEF) announced in the federal Budget 2016 and Budget 2017 supports new and expanded provincial and territorial actions to reduce emissions as well as actions by others. One of the targeted sectors for the LCEF is enhancing carbon sinks and reducing GHG emissions in the forest sector. Provinces and territories are working on forestry proposals and, after project approval, bilateral funding agreements between the federal and provincial/territorial governments will be put in place.
- 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 February 2017, an investment of \$150 million was announced to enhance the carbon storage potential of BC's public forests by increasing the rate of replanting and fiber recovery and by improving forest management practices to capture the carbon benefits of reforestation, while avoiding emissions from burning slash. By 2050, the province has estimated that the ten-year program could lead to a reduction of annual greenhouse gas emissions of up to 11.7 million tonnes.
- New Brunswick and Quebec have been combatting the spruce budworm epidemic in Eastern Canada, and British Columbia and Alberta have been combatting 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.

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.

- 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 not only help Canada's forest sector but also increase carbon storage and the resiliency of forest-based communities.
- Governments across Canada have long supported increased wood use for construction. Recent investments include the federal \$39.8 million program to increase the use of wood in building construction to be launched in Fall 2017, the Quebec Wood Building Demonstration Program with a budget of \$11 million and Ontario's Mass Timber Building Project that will also launch in Fall 2017 with \$4.8 million in funding for 2017-18. Quebec's Wood Charter also allocates financial assistance for government-led research, innovation and training on the use of wood in construction. 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.
- Provinces, including Alberta, British Columbia, Quebec and New Brunswick, have shown public leadership by recently recommitting to increasing the use of wood and other low-carbon renewable materials in the design and construction of municipal and government-funded buildings.

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 the reliance on more 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 federal Budget 2017 included \$55 million in support of bioheating as part of the Clean Energy to Reduce Reliance on Diesel in Remote Communities program to be launched in Fall 2017. The Government of Ontario is launching a Wood Stove Exchange Program in Fall 2017 that will offer financial incentives to homeowners in northern, rural, and Indigenous communities to replace existing wood heating or fossil fuel (propane or fuel oil) appliances with new, high-efficiency, modern wood heating systems.
- 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 launched a territorial Biomass Energy Strategy in 2016, with \$187,000 invested in 2017 to support biomass development in Yukon. The government of New Brunswick has also launched a Forest Biomass Policy for companies to harvest forest biomass either to use as a direct input to energy production or to produce fuel.
- Quebec's Wood Innovation Work Plan unveiled in 2016 supports the transformation and modernization of the forest products industry, with over \$86 million in government investments by 2022. Quebec also began a Wood Innovation Program in 2015 to encourage applied research, demonstration and implementation of innovative products, processes and systems in the forest products industry. By July 2017, the Program has already funded 24 forest innovation projects totalling \$11.3 million, particularly in the bioenergy and bioproducts sectors.
- At the community level, the Whitesand First Nation Community Sustainability Initiative (CSI) in Ontario will replace diesel power generation by constructing a combined heat and power cogeneration plant and a wood pellet plant, with operation to begin by Winter 2019-20. The initiative also includes enhanced forest management of the Armstrong Forest to maintain healthy forests as a carbon sink,

which will allow Whitesand First Nation's CSI to contribute to Ontario's GHG reduction targets. Since 2009, \$5 million has been invested into the CSI by Whitesand First Nation, Ontario and Canada for project development costs, demonstrating collaboration and partnerships between multiple levels of government and Indigenous communities.

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 will release a Forest Bioeconomy Framework for Canada in September 2017, with a vision to position Canada to become a global leader in the use of forest biomass for advanced bio-products and innovative solutions. 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	
Multiple	Afforestation, intensive forestry and improved forest management practices on public and private lands
Multiple	Reforestation and treatment of public and private forest lands that have been disturbed or degraded by natural disturbances such as wildfire and insect infestations
Federal	Low Carbon Economy Fund (LCEF)
British Columbia	Forest Carbon Initiative
British Columbia	Clean-Tech Innovation Strategy for the BC Forest Sector
New Brunswick	Spruce Budworm Early Intervention Strategy (SBW EIS)
North West Territories	Forest Industry Development Strategy
Ontario	50 Million Tree Program
Quebec	Wood Production Intensification Program (AIPL)
Quebec	Spruce budworm treatments on private and Crown lands
PCF ACTION: INCREASING THE USE OF WOOD FOR CONSTRUCTION	
Multiple	Investments in FPInnovations collaborative research programs on wood buildings and bridges and the development of innovative products and technologies for the forest sector
Federal	Program to Increase the Use of Wood in Building Construction
Alberta	Alberta Wood Charter
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
New Brunswick	Wood First Policy
Ontario	Mass Timber Building Project (MTBP)
Quebec	Quebec Wood Charter
Quebec	Wood Buildings Demonstration Program
PCF ACTION: GENERATING BIOENERGY AND BIOPRODUCTS	
Federal	Clean Energy to Reduce Reliance on Diesel in Remote Communities
Alberta	Industry bioenergy and bioproduct projects
New Brunswick	Forest Biomass Policy
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
Ontario	Development of the Wawasum Group Ltd. 60,000 metric tonne wood pellet plant using forest biomass
Ontario	Wood Stove Exchange Program (WSEP)

Quebec	Support for innovative initiatives in pulp and paper plants
Quebec	Wood Innovation Forum
Quebec	Wood Innovation Work Plan
Quebec	Innovation platform to accelerate the development of a new generation of panels and engineered wood composite products
Quebec	Wood Innovation Program
Yukon	Yukon Biomass Energy Strategy

PCF ACTION: <i>ADVANCING INNOVATION IN GHG-EFFICIENT FOREST MANAGEMENT PRACTICES</i>	
CCFM	A Forest Bioeconomy Framework for Canada

ANNEX: MEASURE-BY-MEASURE DETAILED UPDATE

PCF ACTION	JURISDICTION	ACTIVITY	STATUS / ACCOMPLISHMENTS ACHIEVED	NEXT STEPS / TARGETS FOR 2018	FINAL COMPLETION DATE / TARGET
<p>Increasing stored carbon: protect and enhance carbon sinks</p> <p>This initiative is also relevant to <i>Advancing innovation in GHG-efficient forest management practices</i> and <i>Generating bioenergy and bioproducts</i></p>	Federal	<p>\$2 billion Federal Low Carbon Economy Fund (LCEF)</p> <p>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.</p> <p>One of the targeted sectors is enhancing carbon sinks and reducing greenhouse gas emissions in the forestry sector.</p>	<p>Launch of the LCEF by Environment and Climate Change Canada on June 15 with a call for initial submissions from provincial and territorial governments to the Leadership Fund (\$1.4B).</p> <p>Final proposals in September to the Leadership Fund and, after project approval, bilateral funding agreements between the federal and provincial/territorial governments will be put in place.</p> <p>Launch of the Low Carbon Economy Challenge in Fall 2017.</p>	<p>All bilateral funding agreements under the Leadership Challenge between the federal and provincial/territorial governments put into place and project activities underway.</p> <p>Low Carbon Economy Challenge proposal evaluation and decisions, with funding agreements put into place and project activities underway.</p>	Budget 2017 specified the LCEF would operate 5 years to 2021-22.
<p>Increasing stored carbon: protect and enhance carbon sinks</p> <p>This initiative is also relevant to <i>Advancing innovation in GHG-efficient forest management practices</i></p>	British Columbia	<p>Forest Carbon Initiative (FCI)</p> <p>This strategy outlines current and planned initiatives by the Ministry to manage forest carbon and improve the sustainability of BC forests, communities and industry while mitigating the effects of climate change.</p> <p>The FCI aims to capture the carbon benefits of reforestation through rehabilitation of up to 300,000</p>	<p>In 2017, BC committed approximately \$150M to fund the FCI.</p> <p>FCI projects are funded directly by the BC Ministry of Forests, Lands and Natural Resource Operations as well as through the Forest Enhancement Society of BC (FESBC).</p> <p>Key 2017 accomplishments on the FCI includes the following: \$4.55M for reconnaissance, surveys, prescriptions and seed purchase for reforestation; \$2.7M for fertilization; \$262K for rehabilitation of mountain and boreal caribou habitat; \$90K for development of site level planning guidelines to reduce the amount of residue left on site after harvest</p> <p>BC Ministry of Forests, Lands</p>	<p>Next stage of implementation of approved Forest Carbon Initiative projects.</p> <p>Further development of programmatic approach to FCI activities (rehabilitation, fertilization, utilization, enhanced silviculture).</p> <p>Development of additional FESBC funding proposals for programmatic activities.</p> <p>Continued implementation of</p>	2021-22

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		<p>hectares of forest impacted by the pine beetle and wildfires.</p> <p>This initiative also focuses on increasing utilization of forest waste and reducing slash pile burning to reduce emissions.</p>	<p>and Natural Resource Operations is developing integrated investment plans to ensure that appropriate structures exist for on the ground delivery.</p> <p>Greenhouse Gas Calculation Principles and Policies for the Forest Carbon Initiative developed.</p> <p>Planning for the implementation of a performance management framework, which will include requisite database structures, has begun.</p>	<p>integrated investment planning process.</p> <p>Next stage of development/implementation of the integrated investment planning performance management framework, including tracking databases.</p>	
<p><i>Increasing stored carbon: protect and enhance carbon sinks</i></p> <p>This initiative is also relevant to <i>Increasing the use of wood for construction</i> and <i>Advancing innovation in GHG-efficient forest management practices</i></p>	British Columbia	<p>Clean-Tech Innovation Strategy for the BC Forest Sector (“Innovation Strategy”)</p> <p>The Innovation Strategy informs and guides the BC-focused research and development and pre-commercial outcomes developed by FPInnovations and its partners to stay focused on enhancing BC forest sector competitiveness and sustainability and support stable communities and First Nations.</p>	<p>The Innovation Strategy was developed in 2016. There are 13 research projects selected for 2017/18 aiming to demonstrate the viability of new products and clean technologies to enhance the value chain and position BC as a clean technology leader in developing processes, tools, and technologies to identify and support forest carbon value, sustainable resource development, and environmental monitoring.</p> <p>A performance metrics is included as a key component in the Innovation Strategy.</p>	The Ministry of Forests, Lands and Natural Resource Operations and Rural Development and FPInnovations will improve the project selection process under the Innovation Strategy by enhancing the communication and collaboration.	FPInnovations’ research would expect to achieve the cumulative outcomes over next 4 years by 2022 in new wood product and clean-technology used in building environment, GHG emission reduction and increase of carbon stocks.
<p><i>Increasing stored carbon: protect and enhance carbon sinks</i></p>	New Brunswick	<p>Spruce Budworm Early Intervention Strategy (SBW EIS)</p> <p>The SBW EIS is an innovative approach aimed at maintaining</p>	<p>Actions include intensive monitoring efforts, applied research, and treatment of hot-spot populations as they spread to New Brunswick through Quebec.</p> <p>The SBW EIS is mid-way</p>	Continue with efforts to secure long-term funding support. From 2018 to 2025, the lead scientists in the project anticipate a need for ~\$200M in	2025

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		forest health, productivity, and carbon sinks.	<p>through its 4th and final year under an existing Atlantic Canada Opportunities Agency Atlantic Innovation Fund project with many signs of initial success. There has been a substantial reduction (70-90%) in budworm population density in the areas that have been detected and treated as part of this strategy.</p> <p>A proposal is being prepared in the effort to secure funding to continue this critical work.</p>	<p>budworm control activities in New Brunswick. Specific actions being continued:</p> <ul style="list-style-type: none"> - Early detection and monitoring of building spruce budworm populations - Research into population dynamics, control practices, remotely detecting population movement, environmental effects of damage, etc. - Insecticide treatment of population hot-spots using safe and carefully regulated products suitable for this use - Citizen science initiative 'budworm tracker' where concerned citizens can help collaborate in the effort by supplying valuable data - Communication and engagement with First Nations, landowners, communities, and other interest groups 	

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<p>Increasing stored carbon: protect and enhance carbon sinks</p> <p>This initiative is also relevant to <i>Generating bioenergy and bioproducts</i> and <i>Advancing innovation in GHG-efficient forest management practices</i></p>	Northwest Territories	<p>Forest Industry Development Strategy</p> <p>The objective of the Forest Industry Development Strategy is to provide a clear pathway to developing and building a successful and profitable forest industry in the Northwest Territories.</p>	A contractor has been hired and work will commence shortly	Once completed, the Strategy will support the Government of the Northwest Territories objectives to building a profitable forest industry and increase the use of biomass for space heating and potentially power generation	To be determined
<p>Increasing stored carbon: protect and enhance carbon sinks</p>	Ontario	<p>50 Million Tree Program</p> <p>This program was implemented in 2007 with an aim of planting 50 million trees (3 million annually) to sequester an estimated 6.6 million tons of CO₂ by 2050.</p>	More than 22 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.	Meet annual planting target of 3 million trees including planting trees within the boundaries of urban municipalities under Ontario's Climate Change Action Plan.	Planting 50 million trees by 2025
<p>Increasing stored carbon: protect and enhance carbon sinks</p>	Quebec	<p>Wood Production Intensification Program (AIPL)</p> <p>The objectives of this program, established in 2013, are to:</p> <ul style="list-style-type: none"> - Increase wood production quality and quantity with low-level management constraints - Intensify forestry on public forest land (areas of intensified wood production) 	Continued implementation of the program, with accomplishments achieved including: site treatment, artificial regeneration, regeneration method, education.	Continued program maintenance.	Ongoing

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		- Improve forest management on Crown land			
<i>Increasing stored carbon: protect and enhance carbon sinks</i>	Quebec	<p>Spruce budworm treatments on private and Crown land</p> <p>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.</p>	<p>Spray treatment with <i>Bacillus thuringiensis</i> (Bt) approved in 2017 by the Quebec Ministry of Forests, Wildlife and Parks.</p> <p>Pre-treatment inventories of private land, and organization of intervention. Crown land areas have been treated since 2016.</p>	<p>Estimate extent of damage caused by epidemic.</p> <p>First round of spraying will be carried out. Spraying of areas planned for the end of 2017.</p> <p>Quantify early emissions of CO₂ avoided.</p>	Treatments will be ongoing until the end of epidemic
<i>Increasing the use of wood for construction</i>	Multiple	<p>Investments in FPInnovations research</p> <p>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.</p>	<p>Examples of government support for FPInnovations research include:</p> <p>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).</p> <p>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.</p>	<p>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.</p> <p>Quebec will continue implementation of projects by FPInnovations in collaboration with partners in 2018/19.</p>	<p>The BC target is to reclaim a share of the certain number of replacement bridges per year after 2018-19 and the ultimate goal is to implement the novel components and concepts in demonstration projects of wood bridges for resource roads and municipalities by 2021</p> <p>Quebec implementation of projects by FPInnovations will be completed by March 31, 2021</p>
<i>Increasing the use of</i>	Federal	Program to Increase the Use	The program will launch in Fall 2017	Program funding beginning in 2018-19.	Budget 2017 specified the

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<i>wood for construction</i>		<p>of Wood in Building Construction Budget 2017 announced \$39.8M to support projects and activities that increase the use of wood as a greener substitute material in construction.</p>		Development of advanced training/education curriculum, design tools, and information products expected in 2018-20.	funding to support projects and activities to increase the use of wood in construction would operate over 4 years from 2018-19 to 2021-22
<i>Increasing the use of wood for construction</i>	Alberta	<p>Alberta Wood Charter</p> <p>The intent of the Alberta Wood Charter is to reduce CO₂ emissions and encourage investment in the forest sector by encouraging the use of wood in the design and construction of municipal and government-funded buildings. It also aims to influence a revision to the Alberta Building Code.</p>	The Wood Charter is expected to be approved in Fall 2017.	Implementation will continue and new municipal and government-funded building projects will be required to comply with the new direction. Continue work to revise Alberta Building Code to permit the development of tall wood structures (over 6 stories).	<p>Fall 2017 approval of the Charter and implementation.</p> <p>Work to revise the Alberta Building Code will extend into 2018.</p>
<i>Increasing the use of wood for construction</i>	British Columbia	<p>Increase the use of low carbon and renewable materials in all public sector infrastructure projects</p> <p>New projects align with existing government policy including:</p> <ul style="list-style-type: none"> - Requiring LEED Gold certification of new public 	<p>Use of Low Carbon/Renewable Materials in Public Sector Infrastructure projects initiated.</p> <p>Currently identifying and evaluating policy options and developing recommendations. Draft guidance materials developed.</p>	<p>Seek input from industry partners on draft guidance materials.</p> <p>Identify and assess policy options to support increased use of BC wood.</p>	One or more policies will be selected for development to support increased use of BC wood in new public sector infrastructure projects by 2018.

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		<p>sector facilities</p> <ul style="list-style-type: none"> - The Greenhouse Gas Reduction Targets Act/Carbon Neutral Government Regulation - The Wood First Initiative (which includes the <i>Wood First Act</i> and Wood First Program) 			
<i>Increasing the use of wood for construction</i>	British Columbia	<p>Forestry Innovation Investment (FII) Wood First Program</p> <p>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.</p>	<p>Accomplishments over the last five years of the program include:</p> <ul style="list-style-type: none"> - A 3-year strategic plan for 2017-20 developed focusing on maximizing use of wood in public and private projects - The wood used in Library Square, Kamloops, BC, a six-storey wood frame mixed use complex - The University of British Columbia's iconic Earth Sciences Building using more than 1,300 m³ of cross-laminated timber, all sourced and engineered in BC as well as the Brock Commons Tall wood House comprised of 17 stories of mass timber construction - Cloverdale Recreation Centre designed using exposed wood beams and columns throughout the building's interior and exterior - Three building projects, in Elkford, Squamish and North Vancouver, funded under Wood First featuring an innovative structural or architectural application of wood - The Wood Innovation and Design Centre (WIDC) in 	\$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

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			downtown Prince George \$56M of total sales of wood in BC's non-residential and multi-storey/multi-family residential construction markets attributed to program interventions.		
<i>Increasing the use of wood for construction</i>	New Brunswick	Wood First Policy New Brunswick's Climate Change Action Plan commits to reduce provincial buildings GHG emissions and encourage the use of wood products in construction, including through building codes, standards and procurement policies.	Continued commitment to increasing the use of structural and appearance wood products in construction, based on a favourable lifecycle evaluation, for all publicly funded new building construction and major renovations.	The Wood First Policy will continue to be followed.	Ongoing
<i>Increasing the use of wood for construction</i>	Ontario	Mass Timber Building Project (MTBP) A three-part tall wood research and construction program consisting of a demonstration program, research partnership and skills training program. The MTBP also includes a Tall Wood Reference Guide with background and references to assist applicants, reviewers and designers as they pursue alternative solution compliance under Ontario's	The 4-year program will launch in Fall 2017, with \$4.83M in funding for 2017-18. Tall Wood Reference Guide will be published in Fall 2017. The Calculator will be available for public use by Spring 2018.	Reach out to post-secondary and other research institutions to begin developing plans for establishing the centre for wood science innovation, as well as for developing the first MTBP demonstration projects.	Ongoing until Spring 2021

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		<p>Building Code using performance-based criteria for wood-based building projects.</p> <p>MTBP also includes a Life Cycle Analysis Carbon Calculator tool for project managers to conduct a comparative analysis of GHG emissions for different materials when considering building with wood.</p>			
<p><i>Increasing the use of wood for construction</i></p>	<p>Quebec</p>	<p>Quebec Wood Charter</p> <p>The purpose of the Wood Charter is to increase the use of wood in construction in Quebec.</p>	<p>A new draft of the Wood Charter published in May 2017. Implementation of the measures of the Wood Charter is ongoing, including the following achievements in 2017:</p> <p>Measure 1: Government Sets an Example</p> <ul style="list-style-type: none"> - Creation of an interdepartmental technical committee - Allocation of financial assistance to Cecobois to develop and publish the GHG emissions quantification tool <p>Measure 2: Innovative Wood Construction</p> <ul style="list-style-type: none"> - Implementation of an 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 using wood <p>Measure 3: Training and Promotion</p> <ul style="list-style-type: none"> - Funding provided to post-secondary institutions to 	<p>Continue to implement the measures of the Wood Charter.</p>	<p>Ongoing</p>

PCF ACTION	JURISDICTION	ACTIVITY	STATUS / ACCOMPLISHMENTS ACHIEVED	NEXT STEPS / TARGETS FOR 2018	FINAL COMPLETION DATE / TARGET
			<p>organize training activities on use of wood in construction and hiring instructors specializing in wood construction</p> <ul style="list-style-type: none"> - Development of an ongoing training program on the use of wood in construction <p>Measure 4: Research and Innovation</p> <ul style="list-style-type: none"> - Funding of FPInnovations for various research initiatives 		
<i>Increasing the use of wood for construction</i>	Quebec	<p>Wood Building Demonstration Program</p> <p>Implementation of the Technological Showcase for Wood Buildings</p> <p>Objectives of the program:</p> <ul style="list-style-type: none"> - Reduce the carbon footprint of buildings through increased use of wood material in non-residential and multi-family construction in Quebec - Increase the use of wood by demonstrating its potential in the non-residential and multifamily construction market in Quebec while ensuring that the right material is used in the right place - Disseminate technical solutions in the construction industry that are advantageous in terms of wood 	<p>Program launched in December 2016 with a budget of \$11M by 2018.</p> <p>Program for applicants with an innovative wood construction project or an innovative wooden solution in the non-residential or multifamily sector in Quebec.</p> <p>As of July 2017, 2 projects are in the process of approval for a total amount of \$1.2M and 6 projects have been submitted and are under analysis for a total amount of \$3.6M in financial assistance.</p>	<p>Continuation of the program</p> <p>Renewal process in progress</p>	March 31, 2018

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		<p>material and systems developed from reference models, in order to promote wider use</p> <p>- Develop the technical and professional know-how bringing the evolution of the practices and allowing then the emergence of other projects in wood</p>			
<i>Generating bioenergy and bioproducts</i>	Federal	<p>Clean Energy to Reduce Reliance on Diesel in Remote Communities</p> <p>Budget 2017 included \$55M in support of bioheating to reduce the reliance of rural and remote communities on diesel fuel (a component of the \$220M announced to reduce reliance on diesel.</p>	Intake and review of bioheating projects submitted for funding.	Announcements of initial project selection in Spring 2018.	Budget 2017 specified the funding to support clean energy to reduce reliance on diesel in remote communities would operate over 6 years from 2018-19 to 2023-24
<i>Generating bioenergy and bioenergy products</i>	Alberta	<p>Industry Bioenergy and Bioproduct Projects</p> <p>Lafarge Cement will be testing the use of wood waste to replace natural gas in the production of cement.</p> <p>Capital Power is testing the use of woody biomass to replace the use of coal at their power plants.</p>	Supported dialogue between forest company residual fibre producers and industries able to utilize material in bioenergy production.	Continue to work with biomass proponents to utilize forest biomass to help reduce GHG emission from use of hydrocarbons.	<p>Lafarge Cement has set a date of 2020 for full implementation</p> <p>Capital Power will replace up to 15% of coal with woody biomass from mills by 2019-20.</p> <p>Pinnacle plant set to be operational</p>

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		Pinnacle Renewable Energy Inc. is developing a pellet facility near Edmonton and will source biomass from regional mills.			early 2018
Generating bioenergy and bioproducts	New Brunswick	<p>Forest Biomass Policy</p> <p>This policy sets a framework within which companies are permitted to harvest forest biomass in a sustainable manner.</p> <p>Material harvested under this program is used either as a direct input to energy production or is used to produce fuel (e.g. pellets).</p>	<p>Investigated three large-scale projects for the production of bioenergy and/or biofuels. The raw input for these projects is intended to be a combination of forest biomass and low-grade pulp fibre, filling a gap in the market for these products.</p> <p>There are more than twenty New Brunswick facilities which already consume residual forest products (either forest biomass or sawmill residues) for the purpose of energy production and/or producing fuels. These facilities range from small-scale “biobrick” producers to the University of New Brunswick’s central heating plant, which generates steam using forest biomass and other residual wood products.</p>	One of the projects being investigated is expected to move forward with the construction phase. If market conditions are not favourable, the project will be put on hold until there is a viable opportunity.	Ongoing
<p>Generating bioenergy and bioproducts</p> <p>This initiative is also relevant to <i>Increasing stored carbon: protect and enhance carbon sinks</i></p>	Ontario	<p>Whitesand First Nation Community Sustainability Initiative (CSI)</p> <p>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,</p>	<p>Since 2009, over \$5M has been invested into the CSI by Whitesand First Nation, and the Ontario and federal governments for project development costs, which includes planning, environmental, engineering, and other professional services.</p> <p>Renewable Energy Approval (REA) issued by the Ministry of Environment and Climate Change in 2015, with terms renewable in 2039-40.</p> <p>Power Purchase Agreement (PPA), a renewable 20-year contract, was finalized 2017.</p> <p>Phase 1 Construction of the Industrial Park expected in</p>	Phase 2 Construction of the Cogen plant and Pellet Plant to start in Spring 2018.	Commissioning and operation by Winter 2019-20

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		which will allow Whitesand FN's initiative contribute to Ontario's GHG reduction targets.	Summer/Fall 2017.		
<i>Generating bioenergy and bioproducts</i>	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.	Complete Engineering and Environmental Planning. Complete Comprehensive Business Plan with Regional Marketing Assessment of Northern Ontario in partnership with the Wawasum Group Ltd.	Tentative construction in 2020-21
<i>Generating bioenergy and bioproducts</i>	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.	Complete Engineering and Environmental Planning. Complete Comprehensive Business Plan with Regional Marketing Assessment of Northern Ontario in partnership with the Wikwemikong First Nation.	Tentative construction in 2019-20

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<i>Generating bioenergy and bioproducts</i>	Ontario	<p>Wood Stove Exchange Program (WSEP)</p> <p>The WSEP an initiative under Ontario's Climate Change Action Plan (CCAP) and will operate through the GreenON Fund. The program will offer financial incentives to homeowners in northern, rural, and Indigenous communities to replace existing wood heating or fossil fuel (propane or fuel oil) appliances with new, high-efficiency, modern wood heating systems.</p>	<p>WSEP criteria and design developed including \$3M allocated for replacement of inefficient household wood heating systems with efficient, modern appliances through rebates.</p> <p>Engaged with municipalities, technical groups, Indigenous communities, and stakeholder organizations which expressed interest in the program.</p> <p>Program tentatively slated to launch in Fall 2017 and is mandated to operate for four years.</p>	<p>WSEP will operate through the GreenON Fund framework which is currently under development with delivery partners. GreenON has been established to increase deployment of low-carbon technologies that will help households, business and industry reduce their carbon footprints.</p> <p>MNRF and partner ministries are working with the GreenON Fund to consolidate WSEP design elements into the larger low carbon technology incentive program.</p> <p>An education and advertising plan will be developed to promote the program to households.</p>	2020
<i>Generating bioenergy and bioproducts</i>	Quebec	<p>Wood Innovation Forum</p> <p>Forum held on October 31, 2016, brought together governments, the forest products industry and its main partners.</p>	<p>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 sectors: sawmill, panels, wood construction, pulp, paper and bioproducts as well as bioenergy.</p> <p>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</p>	<p>Review of the Wood Innovation Forum held on September 25, 2017.</p>	Ongoing

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			government-industry vision to ensure the sustainability of the forest sector.		
<p>Generating bioenergy and bioproducts</p> <p>This initiative is also relevant to <i>Increasing the use of wood for construction</i></p>	Quebec	<p>Wood Innovation Work Plan</p> <p>Work plan consists of nearly 40 measures to support the transformation and modernization of the forest products industry.</p>	<p>Wood Innovation Work Plan unveiled in October 2016, at the Wood Innovation Forum.</p> <p>To date, government investments totaling over \$86 M by 2022 have been announced in order to implement the various measures of the Wood Innovation Work Plan.</p> <p>As of July 2017, over 70% of the measures in the Wood Innovation Work Plan were implemented.</p>	<p>Continue to implement the measures of the Wood Innovation Work Plan</p> <p>Publication in 2017-18 of a new strategy for the development of the Quebec forest products industry as discussed at the Wood Innovation Forum</p>	Ongoing
<p>Generating bioenergy and bioproducts</p> <p>This initiative is also relevant to <i>Increasing the use of wood for construction</i></p>	Quebec	<p>Innovation Platform</p> <p>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.</p>	<p>Announced in May 2017, the Government of Quebec is investing \$4M to promote innovation, diversification and competitiveness in the panel industry.</p>	<p>Implementation of the innovation platform and its associated projects.</p>	March 31, 2021
<p>Generating bioenergy and bioproducts</p> <p>This initiative is also relevant to <i>Increasing the use of wood for construction</i></p>	Quebec	<p>Wood Innovation Program (WPI)</p> <p>The objectives of the program are to:</p> <ul style="list-style-type: none"> - Develop market intelligence and a product technology watch for innovative products, processes and systems (and disseminate, if applicable) 	<p>Program launched in December 2015 with a budget of \$45M by 2022.</p> <p>As of July 2017, 24 projects approved for a total of \$11.3M in assistance under this program</p> <p>An example of WPI supported projects:</p> <p>June 2017 announcement that the Government of Quebec will deliver three funding packages totalling \$2.7M to DK-SPEC Inc.</p>	<p>Continuation of the Wood Innovation Program</p>	March 31, 2022

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		<p>- Encourage applied research and the development of innovative products, processes, technologies and systems for the forest products industry (such as, lumber, panels, bioenergy, wood construction and the pulp & paper and bioproducts sectors'</p> <p>- Support the demonstration and implementation of innovative technologies and products in plants</p>	to design a new generation of sharpening, debarking and rough trimming tools for the forest products industry.		
<i>Generating bioenergy and bioproducts</i>	Quebec	Support for innovative initiatives in pulp and paper plants	<p>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:</p> <p>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.</p> <p>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.</p>	Continuation of projects.	2019-20

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<i>Generating bioenergy and bioproducts</i>	Yukon	Yukon Biomass Energy Strategy Approved in 2016, the Biomass Energy Strategy outlines an approach for the expansion of biomass energy use in Yukon.	Obtained a second year of funding (\$187K) under the Natural Resources Canada Strategic Partnership Initiative (SPI) to support biomass development in Yukon. Some of the projects funded in 2016/17 include: - Coarse Woody Debris / Deadwood Standards and Guideline development - Assessment and Report on Wood Waste as Feedstock - Biomass Heating System Business Plan - Biomass Training Program for Yukon Community Campuses	2017-18 projects include strategic biomass business development plans for the communities of Dawson and Pelly Crossing as well as research in Old Crow for northern feedstock opportunities. 2018 will see the continued work towards installation of a biomass system at the Watson Lake school with a Request for Proposal process.	Ongoing
<i>Advancing innovation in GHG-efficient forest management practices</i> This initiative is also relevant to <i>Generating bioenergy and bioproducts</i>	Canadian Council of Forest Ministers (CCFM)	Forest Bioeconomy Framework for Canada The Framework presents a vision that Canada will be a global leader in the use of forest biomass for advanced bioproducts and innovative solutions.	Framework expected to be released by CCFM in September 2017.	Development of a short-term action plan.	2030