



Canadian Institute of Forestry Institut forestier du Canada

March 27, 2015

Honourable Glen Murray
Minister of the Environment and Climate Change
77 Wellesley Street West
Toronto, Ontario
M7A2T5

Re: Ontario's Climate Change Discussion Paper 2015

Dear Mr. Murray,

The Canadian Institute of Forestry/Institut Forestier du Canada (CIF/IFC) would like to respond to the recent report released by the Ministry of the Environment and Climate Change (MOECC) entitled *Ontario's Climate Change Discussion Paper 2015*.

The CIF/IFC has been the voice of forest practitioners in Canada since 1908 and we represent forest practitioners across Canada who work in government, industry, academia and non-profit organizations. We have approximately 2000 members and they come from a variety of professions such as foresters, technicians, biologists, ecologists, educators, economists, scientists, and many other individuals with an interest and passion for our forests and the environmental, economic and social opportunities that they provide. One of the core mandates of the CIF/IFC is to advocate on behalf of sustainable forest management, and to raise awareness regarding forestry issues both nationally and internationally.

The Institute applauds the MOECC for releasing the climate change discussion paper in an effort to develop a long term climate change strategy, and five year action plan for Ontario. We welcome the opportunity to provide comments on this document.

We will provide our comments in two ways, first we will provide general comments on the document and the role we feel forests can play in a climate change action plan. Secondly, we will answer the questions posed in the summary and discussions section.

One of the primary concerns we have with MOECC's discussion paper is that the role Ontario forests can play in mitigating climate change by storing carbon, providing green building materials and innovative bioproducts, and producing biomass for green energy is severely understated. It is well understood that tree harvest with subsequent regeneration of harvested areas, along with long-term carbon storage in harvested wood products, provides substantial climate change mitigation benefits, if it is done within the framework of sustainable forest management. To quote the Fourth Assessment Report by the Intergovernmental Panel on Climate Change "*In the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit.*" (p. 543).

Ontario has 70 million hectares of forest. Well managed, healthy forests at a landscape level can play a huge role in sequestering carbon and acting as carbon sinks. We have the ability to increase forest carbon sinks within a framework of sustainable forest management. Forests that have been sustainably harvested or disturbed by natural processes can in many cases be regenerated and sequester carbon

more rapidly through planned natural regeneration or planting. When you apply this concept to a landscape of 70 million hectares this becomes a very powerful mitigation strategy. A well balanced, landscape approach that incorporates sound forestry practices, and a long term sustainable approach, can be a key to making Ontario's forests a significant climate change mitigation tool. In addition, Ontario's harvested wood products, such as lumber, furniture, flooring, OSB, paper, etc., can play a role in carbon storage, and green energy from forest biomass can reduce fossil fuel use. The CIF/IFC would like to see these concepts explored further.

MOECC is in a unique position to promote the conversion from fossil fuels to energy provided by renewable, sustainable forest biomass. Energy from forest biomass reduces the use of fossil fuels and thereby avoids the long-term, millennial scale addition of carbon to the Earth's atmosphere. However, different sources of biomass from forests have different atmospheric payback times – harvest residues and mill residues reach a break-even point relatively quickly, while trees harvested for energy production may take decades to a century or more to reach break-even, depending on the forest type and the fossil fuel replaced. While in general, using biomass from sustainably managed forests for energy generation is preferable in the long-term to using fossil fuels, it is essential that the life cycle emissions and forest carbon stock changes of forest bioenergy be understood and accounted for.

The forestry sector in Ontario has experienced a structural change since 2004, and traditional markets for wood products have not rebounded. Ontario's forests can provide an additional 10 to 14 million cubic metres of sustainable harvest every year that is not being utilized. Ontario is uniquely positioned to not only provide sawmill and pulp and paper products, but to also fuel economic growth by increased utilization of forest biomass from its sustainably managed Crown forest for innovative new products not currently produced in Ontario.

The CIF/IFC will now address the questions posed in the discussion questions section of the climate change discussion paper.

1. Traditional Knowledge:

The CIF/IFC strongly supports engagement with First Nations. Communities in remote areas in northern Ontario will experience climate change sooner and with greater change. These communities tend to be more closely connected to the land, while their isolation will tend to make them more vulnerable to the effects of climate change. Northern and remote communities offer a great opportunity to implement green energy (both heat and power) from forest biomass. Converting from non-renewable fossil fuels to green energy, such as bioenergy, can contribute positively to their social, economic and environmental needs.

2. Actions in Key Sectors:

As stated earlier, the CIF/IFC suggests that forests can play a significant role in achieving Ontario's greenhouse gas reduction targets. Government can encourage climate change mitigation through the forest sector by considering the contribution of forests and harvested wood products in carbon accounting.

Ontario's pulp and paper sector has already achieved significant reductions in greenhouse gas emissions through the production of heat and power using forest harvest residues and residual by-products of mill operations.

Forestry can play a role in reducing greenhouse gas emissions over the long-term through the production of green energy and by providing carbon offsets to other sectors from increased forest growth. To maintain forest sustainability and to achieve climate change mitigation through its forests, Ontario requires strategies that incorporate active forest management on the forest landscape to adapt forests to changing climate.

Land use planning in Ontario's forests has already played a critical role in achieving forest sustainability (e.g., Forest Accord, Lands for Life, Crown Forest Sustainability Act, etc.). It is important that Crown forest in Ontario is managed for economic, social and ecological benefits in a sustainable manner to ensure they also contribute where appropriate to climate change mitigation. Continuing forest sustainability will require improved understanding of how forests will respond to changing climate and the development of innovative approaches to forest management.

3. Communities & Built Form

The CIF/IFC strongly supports initiatives that incorporate wood products in building structures, and we feel this approach should be facilitated by the province, with leadership from municipalities. It is well understood that forest products provide carbon capture benefits, while the forests they were taken from sequester additional carbon.

It is also well-supported by science that building materials derived from forest products have a much lower carbon footprint than products like concrete, steel and plastics, whose manufacture requires large amounts of energy. For this reason, we commend the Ontario government for amending the Building Code on January 1, 2015, to allow for wood-frame residential and office buildings up to six storeys. With this recent changes and with the introduction of new building materials made from wood, such as cross-laminated timber (CLT) and other engineered wood products, Ontario's forest sector can contribute to the construction of low-carbon buildings by using wood products with lower embodied energy. In addition, there are emerging products derived from forest biomass that have great promise for the future and could potentially replace many products traditionally made from petroleum products (e.g., interior car parts, tires, cosmetics, pharmaceuticals, packaging materials, etc.). These emerging technologies need to be supported by government policies, and there will need to be incentives from government promoting the use of these green products from sustainably managed forests in Ontario.

The use of green energy (heat and power) is a climate change mitigation strategy in a number of jurisdictions (e.g., Finland, Sweden, Denmark, British Columbia, Quebec, etc.). Ontario has an opportunity to learn from them and promote innovative forest bioenergy technologies when planning large infrastructure projects. While recognizing that different forest biomass sources provide an atmospheric benefit over different timespans, public buildings such as hospitals, schools, libraries, etc., offer great opportunities to implement green energy initiatives using combined heat and power from forest biomass that will help mitigate climate change. British Columbia, Quebec and the Northwest Territories are already realizing the benefits of such approaches. As mentioned previously, remote First Nations communities that currently rely on energy from fossil fuels provide an excellent opportunity for conversion to combined heat and power from forest biomass, providing local employment and reducing reliance on fossil fuels to provide carbon emission reductions.

4. Price on Carbon

CIF/IFC supports putting a price on carbon as a mechanism to encourage changes in behaviour that reduce greenhouse gas emissions. By returning these benefits to consumers and by supporting research

and development of additional areas contributing to greenhouse gas emission reductions, the mitigation benefits can multiply.

It is the CIF/IFC's position that if the producers of items such as building materials, had to pay to emit carbon from their products' manufacturing to the atmosphere, that the cost competitiveness of forest products would increase substantially.

5. Science & Technology

The CIF/IFC believes that Ontario has a huge natural advantage due to its large, sustainably managed and publically owned forests. Biomass is the only renewable energy source that can replace fossil fuels in all energy markets – heat, electricity, and fuels for transport. Additionally, innovative biocomposite and biochemical products are seeing exponentially growing global demand. Ontario has an opportunity to be a major player in the development and production of such products from its forest biomass. Ontario has the technical and human capital to implement forest and harvested wood products carbon accounting and life-cycle assessment, to support research in the development of new forest-based technologies and innovative products, and in the production of green energy from sustainably managed forests.


In summary, the CIF/IFC feels that the potential role of Ontario's forests in a climate change strategy is vastly understated in the current climate change discussion paper, and we strongly encourage the government of Ontario to take a stronger look at the above mentioned opportunities. Supportive government policies will be key to enabling these opportunities, and we should learn from other jurisdictions that are currently recognizing the role that well-managed forests play in their climate change action plans.

We welcome the opportunity to further discuss the role that Ontario forests can play in mitigating climate change and providing green energy.

Sincerely,



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President
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A/Executive Director
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Voice of Forest Practitioners / La voix des professionnels de la forêt

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