

Ministry of the Environment, Conservation and Parks

Making Polluters Accountable: Industrial Emissions Performance Standards

Ontario Pulp and Paper Coalition Submission
March 29, 2019

Introduction

The Ontario Pulp and Paper Coalition (the Coalition) thanks you for the opportunity to comment on the Proposal ERO number: 013-4551 – *Making polluters accountable: Industrial Emission Performance Standards* (the Proposal).

The members of the Coalition include the following pulp and paper companies: Atlantic Packaging, AV Terrace Bay, Cascades, Domtar, Rayonier Advanced Materials, Resolute Forest Products, and the Ontario Forest Industries Association. The Coalition operates mills in all regions of Ontario. These mills are part of a broader highly integrated forest products sector that includes:

- Sustainable forestry operations
- Sawmills and wood product mills
- Paper recycling
- Bioenergy, biochemical and biofuel sectors
- Green energy for the electricity grid

Currently, the Ontario forest products sector represents \$15.5 billion of economic activity and provides over 170,000 direct and indirect jobs in every region of the province. The sector is heavily trade exposed and subject to international commodity pricing which they have no control over for the products they manufacture.

The Coalition feels that in order for our sector to take full advantage of the opportunities in GHG reductions and low carbon contributions that are available, it is critical that the government of Ontario develops a regulatory policy and framework that is effective and aligned with the business realities of our sector and the jurisdictions in which we must compete with and potentially trade with in the future. It should also recognize and reward companies that have made the necessary investments to improve energy efficiency reducing their carbon footprint and providing jobs in the province.

The Coalition has developed the following Climate Change Policy Principles that we believe must be met in order to have an effective and successful greenhouse gas emissions reduction policy:

1. Recognition of Early Actions in GHG Reductions
2. Recognition of Biomass's Contribution to Lowering Emissions
3. Recognition of Cogeneration's Contribution to Energy Efficiency and Greening the Grid
4. Recognition that Each Facility is Unique
5. Mitigation of Economic and Compliance Impacts

The Coalition looks forward to continuing to work with the Ontario government and the Ministry of the Environment, Conservation and Parks on the development of a Climate Change Policy that meets the above principles.

Recognition of Early Actions in GHG Reductions

The forest products sector has been investing in continued improvements in energy efficiency, bioenergy and cogeneration for the past 30 years. The sector has invested heavily in projects that have led to reductions or to produce green electricity for the grid.

Members of the Coalition are proud of their performance as it relates to reducing the carbon footprint of their products. The nine mills that the Coalition members are currently operating collectively reduced their emissions by 41% reduction of GHG emissions since 1990. This includes the additional emissions emitted from two mills opening in 2006 and 2013 and a new cogeneration added to one facility to supply green electricity to the grid in 2013.

These reductions were made by fuel switching from fossil fuels to biomass and increasing energy efficiency.

The low hanging fruit is gone. Given already low carbon footprint of primary mills and lack of alternative low carbon technology for recycle/convert mills the sector will have extremely hard time making significant reductions.

For example, the next step for Kraft mills would be to fuel switch in the lime kilns. This is not technically achievable as the lime needs to be pure for the Kraft process. Switching fuels to biomass introduces impurities and other contaminants. A trial was made at a mill in Kamloops, BC, and it did not go well. Although a fuel switching solution may be found in the future, there are currently no possible alternatives to consider.

The coalition supports the Proposal's offer to recognize the actions made by the electricity sector by not applying a stringency factor. The pulp and paper sector has also made significant reductions and unlike the electricity sector, is unable to pass its costs on to its consumers. The pulp and paper sector respectfully requests to receive the same fair treatment.

<u>Recommendation 1:</u> Remove stringency factors for the pulp and paper sector.
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Recognition of Biomass's Contribution to Lowering Emissions

The forest products sector produces a large quantity of biomass-based residuals including woody biomass (bark, sawdust), pulping black liquor and wastewater treatment residuals. Instead of landfilling, these materials are typically used as fuel for energy production directly replacing fossil fuels. Research has shown that use of residuals for energy production produce up to 98% less GHG emissions than the alternative of landfilling these materials where methane is produced.

While using biomass has higher handling costs and is more complicated than using fossil fuels, its use helps the local economy. Sawmills rely on selling their biomass by-products to the pulp mills to remain competitive on their other marketable products, which effectively transmits the indirect impacts of carbon policies to large emitters under the Proposal.

Further, there are opportunities to increase sources of biomass. However, these sources of material, such as branches and old storage sites, are currently uneconomical due to elements such as logistics and contamination and significant incentives would be required to extract those resources.

Ontario's broader pulp and paper sector already sources 57% of its non-electricity energy use from wood waste and pulping liquor. In some cases, its use is as high as 90%. Note that some fossil fuels are required to operate biomass boilers to ensure the operating temperatures are maintained to reduce air contaminants and for operating efficiencies. Additional fossil fuel is

required during start-up and shutdown situations and during adverse (cold and wet) weather conditions.

There are economic and technology barriers to increasing use of biomass. New biomass power boilers cost over \$100 million. And as mentioned before, the technology to convert the Kraft mill lime kilns to biomass is not available.

In order for biomass to play a significant role in further reducing carbon emissions in Ontario, its use needs to be recognised for its current contribution and incentivized to promote its expansion.

Recommendation 2:

Include all fuels (including biomass) in the calculation of energy input

- **Easy to implement – little to no change to the policy document**
- **Creates market incentive – currently 100% fossil cogens will obtain benefit from converting part or all of their fuel supply to biomass, but the current contribution from biomass use in our industry will not be recognised.**

Recognition of Cogeneration’s Contribution to Energy Efficiency and Greening the Grid

Cogeneration (or combined heat and power) is when there are two major products produced from the combustion of fuel; thermal (heat) energy and electricity. The forest products sector has invested in significant amounts of cogeneration, with most pulp and paper facilities running cogeneration facilities or being supplied with heat and power from third party plants.

The advantage of cogeneration is that the source of energy is used twice instead of just once. In addition, there are additional efficiencies with the electricity generated, such as an absence of transmission line losses, as the power is typically physically used on site.

The Proposal mentions that the electricity sector is now essentially renewable. Part of this result is due to facilities like those in the forest products industry who produce renewable electricity. In 2016, the P&P sector generated 1,381 GWh of electricity from 6 facilities.

The addition of these biomass co-generation units has increased fossil fuel consumption and emissions from these facilities because some fossil fuels are necessary to operate these units efficiently. This translates into an immediate increase in carbon intensity for the facility. However this smaller increase results in a much larger decrease of emissions from the grid. The resulting effect is an increase in the risk for carbon intensity increases if market demand for its primary products decrease as it continues to produce electricity.

It is important to recognize that all electricity produced is supplementing the power system, whether it is used internally or sold to the grid. The electricity that is used internally offsets power that would otherwise be purchased. It is also generally dispatchable and able to offset natural gas sourced electricity.

Recommendation 3:

- **The cogeneration, steam and electricity EPS’s should include biomass in their energy calculations**
- **Allow the P&P mills with cogeneration to recognize electricity as a product.**

Recognition that Each Facility is Unique

Each pulp and paper mill is unique. They have different inputs, processes and outputs. They are located in different parts of the province which subjects them to different weather conditions and different availability of types of fuel sources. They are in various states of transformation to meet new market demands. When a facility needs to implement a new process, such as installing a boiler to make steam instead of purchasing the steam, there will be no site history of the related emissions of that new process.

The Coalition supports the proposed facility-specific guidelines. Each site must be able to choose the method that works for them. The ability to select an appropriate baseline period and calculation methodology is required.

Furthermore, the program need to provide enough flexibility for facilities to develop new products. If a facility produces a new low carbon product or installs a biomass cogeneration unit to produce low carbon electricity, its overall site emissions or emissions intensity may increase, and the facility would be penalized for taking actions and making investments that further the Ontario government's policy objective of promoting a green economy. If production of a traditional product decreases or ceases due to market conditions, the energy footprint might not correspondingly change, and the facility is facing a double jeopardy. For these reasons, the program should allow sites to renegotiate limits as product lines change.

The program should also recognize that when new processes are installed, they are likely to be installed using BATEA. Therefore, the opportunities for reductions from these installations may be years out for when further new technologies are developed, or the economic situations change.

Recommendation 4: Recognize the uniqueness of each facility and that the industry is transforming by allowing flexibility in how the site-specific baselines are developed and flexibility during the compliance period to cover situations where products or processes change.

Mitigation of Economic and Compliance Impacts

Most of the forest products are commodities where producers do not control prices and cannot transfer additional costs, such as carbon taxes, onto the customers. As Ontario's forest products sector operates in a global market place and must compete for investment dollars, pricing carbon pollution above the price levels in competing jurisdictions will not stimulate investments in low-carbon innovation, nor create a sustainable clean-growth economy. Furthermore, the integrated nature of the industry means that the financial health of all the forest industry sectors is important to the health of pulp and paper sector.

The risk of any increase in costs, whether from the direct compliance costs or the indirect costs from the carbon levies or higher cost of fuel from the clean fuel standard less money to invest, is that there will be less money for investing in the current infrastructure. This turns into the "spiral of death" as lower investment leads to less and less investment until closure.

The Coalition supports the "Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environment Plan" goal to improving the business climate for driving and

supporting climate innovations by providing a variety of financial tools to encourage investment and by working to reduce costly and time consuming regulatory and operational barriers.

Recommendations 5:

- **Any funds collected through the EPS need to be recycled back to the sector provide support for applied research and new technological development.**
- **The program needs to provide compliance flexibility in banking and trading emissions.**
- **The socio-economic analysis needs to consider the full impact of complementary carbon policies faced by Ontario businesses**

The Coalition will be submitting comments on the proposed formulas separately.

If you have any questions, please feel free to contact myself at 416-368-3827 or idunn@ofia.com or Barbara Mossop, the Environment and Energy Technical Advisor, at 647-231-1867 or bmossop@ofia.com.

Sincerely,



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Ontario Forest Industries Association

Signed on behalf of the Ontario Forest Products Industry GHG Emissions Reduction Coalition:

Atlantic Packaging
AV Terrace Bay
Cascades
Domtar
Rayonier Advanced Materials
Resolute Forest Products
Ontario Forest Industries Association

Appendix A: Answers to the Discussion Questions

Q1. How can the EPS be designed to optimize GHG emission reductions while minimizing carbon leakage?

The EPS must be designed to avoid creating winners and losers. The Coalition has developed the following Climate Change Policy Principles that we believe must be met in order to have an effective and successful greenhouse gas emissions reduction policy:

1. Recognize early actions in GHG reductions
2. Recognize biomass's contribution to lowering emissions
3. Recognize cogeneration's contribution to energy efficiency and greening the grid
4. Recognize that each facility is unique
5. Provide mechanisms to mitigate the economic and compliance impacts

Q2. What compliance options should industrial facilities have under the program (e.g. use of compliance units for payments for excess emissions that go into a fund that could be used to support greenhouse gas emissions projects in industry, voluntary emission reductions or removals or overachieving the EPS, other)?

The Coalition supports having the following compliance options:

- Any funds collected through the EPS need to be recycled back to the sector provide support for applied research and new technological development.
- The program to provide flexibility in banking and trading compliance units.

Q3. If facilities receive compliance units for GHG emission reductions beyond the standard for the facility, should they be eligible to trade or bank them indefinitely?

Yes, expiry dates would discourage large projects.

Q4. Which industrial facilities should be covered by the program (e.g. industrial facilities with GHG emissions greater than 10,000 or 25,000 or 50,000 tonnes CO₂e per year)?

The Coalition recommends that Ontario initially develop its program with the same thresholds for opting-in and mandatory participation the EPS program in order to avoid confusion. This is important for applying for the CRA fuel surcharge exemption. Subsequently, the policy will be more effective with a larger amount of obligated facilities. The Coalition recommends that highly trade exposed industries regardless of emissions should be allowed to opt-in

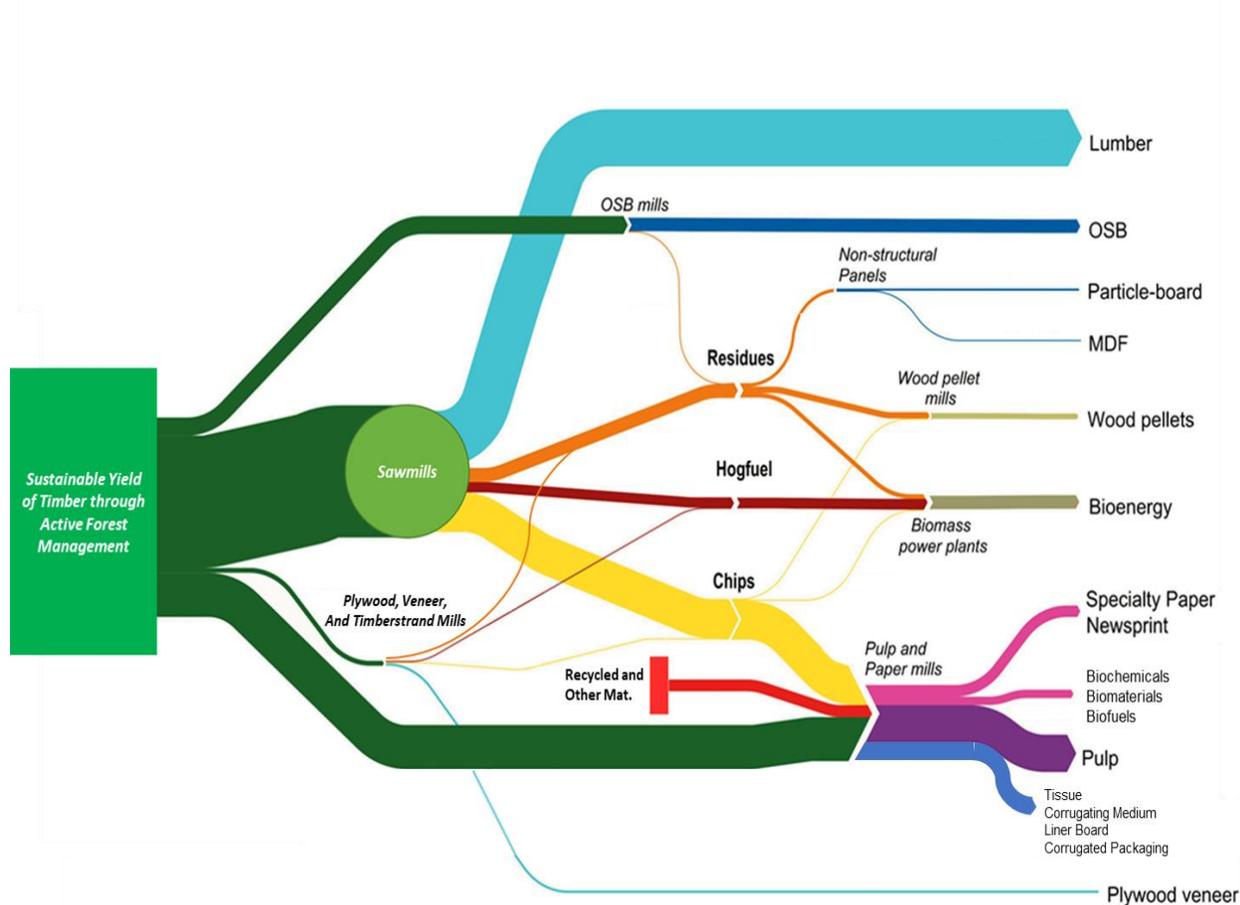
Q5. Should Ontario harmonize with the federal reporting under the federal Production Order (which sets out reporting and verification requirements) and the federal OBPS (output-based pricing system) (e.g., methods, threshold, verification)?

No, while streamlining measurement and reporting requirements is normally preferred, the Coalition does not support any other changes to Ontario's current calculation methodologies, sampling, analysis and measurement requirements that are in place now to harmonized with the federal program. The main issues of the federal proposal are related to evaluating landfill emissions which has huge uncertainties and the measurement of biofuels. The Coalition members prefer to report twice to ensure there is one correct data set.

Q6. Should different stringency factors apply to fixed process and non-fixed process emissions?

No comment as this does not really apply the pulp and paper sector given the very low level of fixed process emissions.

Appendix B: Integration of Ontario's Forest Sector



**For illustrative purposes only, not to scale. Unit is in tons. Diagram adopted from the Canadian Forest Service/GE³LS project: <http://spruce-up.ca/en/qe3ls/>*

Appendix C: Coalition Reductions

41% reduction in absolute emissions between 1990 and 2016

