



October 11, 2019

The Honourable Gordon Wilson
Minister of the Environment
Nova Scotia Environment
PO Box 442
Halifax, NS B3J 2P8

By email: minister.environment@novascotia.ca

CIAC submission to the Nova Scotia Ministry of the Environment on the *Plastics Bag Reduction Act*

Dear Minister Wilson:

The Chemistry Industry Association of Canada (CIAC) is writing today regarding the *Plastic Bag Reduction Act*. While we fully support the Minister's intent to address the issue of plastic waste in our environment, we believe there are alternative approaches to bans on single-use plastics that will be more effective in tackling this issue.

More than 95 per cent of all manufactured products rely on chemistry and many of these include plastic resins. From wind turbines and solar panels, to vehicles and building materials, to the packaging that allows us to feed the world, plastics chemistry is vital to our economy and to our efforts to mitigate the impacts of climate change.

Today, managing plastic waste in our oceans and environment has become a global issue and the chemistry industry has a critical role to play in solving it. Nova Scotia, in its work with the Canadian Council of Ministers of the Environment (CCME), has committed to take action toward a resource-efficient lifecycle approach to plastics waste management. The chemistry sector, which includes plastic, has a long, well-established history of innovation to solve society's most pressing needs including climate change mitigation by developing new processes and solutions. Canada's chemistry industry and its highly skilled workers are uniquely positioned to provide innovative solutions to avoid and extract value from plastic waste. But these ambitions will not be easy to achieve and will require significant investment and cultural shifts towards a more circular economy. Our industry is stepping up to provide workable solutions

CIAC is pleased to submit the following comments in support of a circular economy for plastics in response to the ***Plastics Bag Reduction Act***.

General comments

The Canadian Plastics Industry Association (CPIA) and the Chemistry Industry Association of Canada (CIAC) announced in June 2018 ambitious targets that underscore our members' commitment to a future without plastic pollution. Representing the broad plastics value chain in Canada, CPIA and CIAC and their members announced the following waste reduction targets:

- A new aspirational goal of 100 per cent of plastics packaging being reused, recycled, or recovered by 2040.
- An aggressive interim goal of 100 per cent of plastics packaging being recyclable or recoverable by 2030.

We are already seeing leadership and engagement across the plastics value chain in Canada and in our sector, including new projects to establish additional recycling infrastructure. An immediate opportunity exists now for Nova Scotia to establish its leadership in plastics recycling and recovery by building on existing collections approaches and infrastructure to the benefit of our manufacturing sector's feedstock requirements.

In particular, we believe that implementing a circular economy for plastics (See [The Role of Chemistry in a Circular Economy for Plastics](#)) will enable society to sustain economic growth and mitigate the impacts of climate change while improving the environment for future generations, as we strive to use products and resources in the best way possible without loss in performance or increase in environmental impacts through the full lifecycle of the product.

We recognize Nova Scotia's unique environmental concerns as a coastal province that managing marine plastic waste. As multinational companies, our members are making strides here in Canada and abroad to tackle the problem of plastics in the marine environment. For instance, BASF, Dow, NOVA Chemicals, P&G, and Shell are founding members of the [Alliance to End Plastic Waste](#). This global, plastics value chain alliance of nearly 40 companies has committed US\$1.5 billion over the next five years to help end plastic waste in the environment – marine debris in particular – by working with international agencies.

CIAC is committed to the proper handling, management and disposal of waste. Our Responsible Care® ethic, principles and commitment to continuous improvement and sustainability drive our members to reduce waste throughout their value chain.

Bans on single use packaging

We believe Nova Scotians and Canadians are frustrated by the lack of management of single use plastic at the end of its life. We believe banning some single use plastic items might make consumers and governments feel good in the short term but does not address the longer-term problem. Reducing use is important but the real issue is keeping plastic products in the economy to deliver safety, health and economic benefits, and out of landfills and waterways. As a result, we believe there is real potential in chemical recycling, particularly for difficult to recycle plastics.

Plastic supply and demand are increasing at significant rates across the entire global economy, largely in response to the imperative to improve life-cycle energy efficiency and reduce greenhouse gas emissions. In most instances, light weight and highly adaptive plastics are the preferred choice of product designers who in addition to energy efficiency and greenhouse gas reduction, are also concerned about water and resource consumption.

Indiscriminate product bans will lead to several undesirable outcomes:

- They will do little to address the material flows and improve recovery rates;
- They will lead to materials choices that might have more detrimental environmental outcomes;
- They will lead to materials choices that might have more detrimental economic outcomes due to higher cost.

In October 2018, Canada's Ecofiscal Commission published [Cutting the Waste – How to save money while improving our solid waste systems](#). The report, which provides advice and guidance around how communities can better manage their waste, notes that:

*“(B)ans are a relatively blunt policy that can impose costs on consumers and producers if substitutes are not readily available. ... Some alternatives to single-use plastics may also have other, potentially larger environmental impacts. The extent to which banning single-use plastics generate a net benefit in a particular community (i.e., whether it increases system efficiency) ultimately depends on these details.”
(p 31)*

Rather than product bans, materials should be judged on a life-cycle basis with their societal and economic value also assessed. A material that can be recycled but which has a much larger overall environmental footprint does not improve sustainability. Nova Scotia may wish to look at systems in jurisdictions which vastly outperform our recovery rates (e.g. Japan, Scandinavia) and whose successes are not the result of bans, but of better sorting, collection and recovery systems, and leveraging market forces.

It is also important to note that not all single-use plastics are the same. Plastics for medical uses are single-use and are considered by a majority of Canadians to be essential to ensure human health and safety. Specifically, proposals to ban any articles should be reviewed and considered on an individual basis. Articles currently accepted within the Recycle BC system, at a minimum, need not be subject to bans. This would include polystyrene containers and plastic bags, to name but two.

Expanded Recycling and Recovery Opportunities

We are delighted that Nova Scotia is a signatory to the CCME's [Canada-wide Action Plan on Zero Plastic Waste](#) which includes a commitment to implement Extended Producer Responsibility (EPR) in Canada, an important element of a circular economy for plastic which can be much more effective than bans. By placing the financial and operational responsibility for recovery on the businesses that sell products to consumers, this creates a natural incentive to design products and packaging with a lighter environmental impact, while also helping create economies of scale. Businesses should be encouraged to set their own corporate packaging and recycled-content goals which can help drive demand for recycled content and create new markets. British Columbia and Ontario are already moving in this direction.

CIAC supports any efforts to expand the inclusion of packaging-like products and single use items as part of Extended Producer Responsibility, and recommends that Nova Scotia keep the following principles in mind as it transitions to EPR:

- Gradual and orderly inclusion of new items over a reasonable timeline that ensures cost increases can be passed on to producers evenly and incrementally;
- Ensure transparency in communication and decision-making, as well as meaningful engagement and consultation with all producers through the process;
- Ensure producers have sufficient flexibility in making business decisions and establishing new commercial arrangements with service providers for the new products in order to meet waste diversion targets and collection standards;

- Ensure producers have maximum regulatory flexibility to develop and implement stewardship initiatives to complement the Blue Box and increase recycling and recovery.

Additionally, given that innovative Canadian chemical recycling technologies such as Pyrowave's patented microwave catalytic depolymerization technology are now available to recycle and recover polystyrene in order to make new, virgin-like plastics, the Nova Scotia should consider maintaining and expanding the collection of plastics, including polystyrene throughout the province. Companies like Green Mantra and INEOS Styrolution are also partnering to convert waste polystyrene into chemical building blocks which can then be used in the polymerization process. These innovations will allow all plastics to be recovered, advancing a circular economy for plastics and creating new opportunities for Nova Scotians.

As we grow chemistry production in Canada, we should work to ensure that systems are in place to recover the value of post-consumer plastics as potential feedstocks. Innovative technologies currently exist in niche areas to facilitate the collection, recycling and recovery of plastics – all of which are needed to reduce the risk of marine litter, divert more valuable plastics from landfill and extend their life cycle.

Nova Scotia could be a leader when it comes to employing innovative approaches to managing difficult to recycle plastics. Nova Scotia should consider support for innovative transformation facilities such as gasification and pyrolysis facilities that convert post-use plastics into synthetic diesels used as transportation fuels, particularly for heavy vehicles used in the natural resources sector.

Reducing Plastics Overall

Reducing waste and impact on the environment should be the goal of any policy change. Reducing plastics use overall, however, has been demonstrated in studies to significantly increase environmental impacts. A [Trucost](#) study conducted for the United Nations Environmental Programme in 2014, and updated in 2016, found that replacing plastics in consumer products and packaging with a mix of alternative materials that provide the same function would actually increase environmental costs to society up to four times from \$139 billion to \$533 billion annually. The finding is not surprising, given the original drivers for using plastics: lightweight, energy efficient, mouldable, durable and cost effective. The government should keep this in mind as it works to balance recycling and recovery policies with its climate change policies.

CIAC is aligned with the Canadian Beverage Association in its support in principle for the concept of disposal bans for designated materials that have sustainable end-markets. A disposal ban for beverage containers, for example, would serve as an effective tool to increase waste diversion outside of the residential waste collection channel. A disposal ban could be, for example, be enforced at transfer stations to ensure that waste collected for landfill has a low level of recycled material in it.

We are also supportive of procurement policies that favour products and packaging that have post-consumer recycled content. Setting a range of targets will help create a market for recycled content.

Conclusion

Any action by CIAC members to address the environmental, economic and community impacts of our operations are governed by Responsible Care®. Responsible Care is the flagship program of our industry that ensures our

members innovate for safer and greener products and processes, working to continuously improve their environmental, health and safety performance. Launched in Canada in 1985 and now adopted globally and recognized by the United Nations, Responsible Care compels CIAC member-companies to “do the right thing and be seen to do the right thing.” This is our commitment to sustainability, namely delivering results for the betterment of society, the environment, and the economy. This includes continued improvement of our air, water and land emissions, and waste management as well as successful past commitments to reduce our emissions of Canadian Environmental Protection Act (CEPA) toxics.

As part of our members’ commitment to Responsible Care, companies are required to be transparent about their activities, and allow independent experts and members of the public to verify that they are living up to the standards set by Responsible Care. Every three years, a team of industry experts, public advocates and representatives chosen by local communities, audit each CIAC member to evaluate their commitment to Responsible Care.

This includes efforts aimed at improving our emissions and reducing the impacts of our facilities on the community, and environment.

The chemistry industry supports Nova Scotia’s efforts to reduce the amount of plastic waste in the environment. We believe this is achievable through the use of sound policy and regulation, education and investment in infrastructure and innovation.

As we have noted, we believe Nova Scotians are frustrated by the lack of management of single use plastic at the end of its life. While they may make consumers feel good in the short term, we would urge the province to resist product bans as they do not address the issue of keeping plastic products in the economy and out of landfills and waterways.

Please do not hesitate to reach out if you would like any further information or have any questions.

Sincerely,



Isabelle Des Chênes
Executive Vice President

c.c. Gordon Hebb, Legislative Counsel