



September 30, 2019

Honourable George Heyman
B.C. Minister of the Environment and Climate Change Strategy

By email: plastics@gov.bc.ca

Re: British Columbia Ministry of Environment & Climate Change Strategy on the Plastics Action Plan – Policy Consultation Paper

Dear Minister Heyman:

The Canadian Plastics Industry Association (CPIA) is pleased to submit its comments on the Plastics Action Plan to examine opportunities to reduce plastic waste in our environment. CPIA and the plastics value chain are key contributors on science and fact-based solutions that truly protect the environment and economy to ensure plastics are managed responsibly by society.

CPIA (www.plastics.ca) is the national voice for and leader in plastics sustainability in Canada since 1943. With more than 3,170 companies employing 95,400 workers, Canada's \$29.2-billion plastics industry encompasses plastic products manufacturing, machinery, molds and resins and plastics recycling. We are proud to count as CPIA members B.C. headquartered companies like the Layfield Group, Applied Plastics Technology, Merlin Plastics, and others.

The CleanBC Plastics Action Plan paper begins with: *“Too often plastic packaging and single use items end up as litter in our communities, waste in landfills or debris in lakes, rivers and oceans... The Ministry of Environment and Climate Change Strategy recognizes that new steps are needed and is proposing action in four connected areas.”*

The action areas identify four streams, all targeting plastics usage and plastics waste. We would argue that this approach misses a critical step. That is, plastics are used in a wide variety of products, from short-lived to durable, and they are chosen for their physical properties over other materials. Plastic debris is the result of the treatment of plastic products by consumers or by improper waste treatment. If plastics are removed, they will either be substituted with other materials – which may or may not have desirable impacts – or they will require changes to consumer behavior. The effects of this substitution are not immediately obvious. Convenience and cost are only two reasons why plastics are currently used in projects. The environmental impact of plastics substitution by other materials alone involves a complex set of considerations, which could lead to an inadvertent increase in greenhouse gases and food waste for example.

We strongly believe that the environmental impact of plastics can be minimized through the recommendations found in the Deloitte/Cheminfo report commissioned by Environment and Climate Change Canada for an informed discussion amongst Canadian Council of Ministers of the Environment (CCME). In particular, we note that there have been great strides in technology that allow for sorting, recycling and recovery, but that government policies could do much more to enhance the value of post-consumer plastics and even create economic opportunities in the treatment of post-consumer plastics.

5955 Airport Road, Suite 125, Mississauga, ON L4V 1R9

t. 905.678.7748 • f. 905.678.0774 • www.plastics.ca

Policies to create a stable market for recycled or reclaimed plastics would both minimize the need for virgin resins and affect consumers' treatment of plastics.

Plastics Benefits to Society Need to Be Maintained

Plastics manufacturing and use of plastics in a range of sectors make significant positive economic, social and environmental contributions to B.C. and Canada. Benefits of using plastics include product light weighting, increased hygiene and cleanliness, decreased spoilage and food waste, durability, convenience and safety, among others. These benefits are realized in the many sectors where plastics products are commonly used, such as packaging, construction/building development, automotive, aerospace, electronic equipment, and healthcare.

CPIA and the plastics industry value chain has committed to support ambitious goals to manage plastics effectively and reduce plastic waste - (1) An interim goal of 100 per cent of plastics packaging recyclable or recoverable by 2030 and (2) A societal goal of 100 per cent of plastics packaging reused, recycled, or recovered by 2040.

CPIA is committed to working with governments, industry and other key sectors to establish policies, regulations and infrastructure to achieve the goals.

Overall Comment to The Consultation Process: The consultation is focused purely on plastics, an approach that will fail to get B.C. to its zero waste goals. The focus should be on all materials, not just plastics which are actually a smaller part of the solid waste stream (15% - 20%). It is recommended a broad systems approach be taken if the province is to achieve its zero waste goals.

The Canadian Plastics Industry Association has the following comments to the discussion paper.

Section 1: Bans on Single Use Packaging – “Examining the Science”

CPIA shares the province's commitment to its carbon reduction agenda. The consultation document, clearly states that *“the Ministry of Environment and Climate Change Strategy recognizes that waste prevention is the highest priority”*. CPIA believes that actions taken on plastic bans must carefully examine the province's stated goals to become carbon neutral, achieve zero waste and not have the unintended consequence of generating more carbon and waste. We caution the government that arbitrary bans on plastics will make the B. C.'s carbon neutral goals more difficult to achieve as the alternatives will have worse environmental outcomes as the science will reveal.

The science on material substitution shows clearly that bans on plastic materials do not further a carbon reduction agenda because all bans do is trigger substitution with other packaging materials with much larger carbon footprints. We refer you to two substitution studies that make the case that bans on plastic packaging materials will have greater environmental impacts. They are the 2016 Trucost Study and a 2014 study by Franklin Associates. Both studies show that plastic packaging is the most efficient materials and packaging choice.

[“Plastics and Sustainability: A Valuation of Environmental Benefits, Costs, and Opportunities for Continuous Improvement Trucost Study 2016](#)

Impact of Plastic Packaging on Life Cycle Energy Consumption & Greenhouse Gas Emissions in the United States and Canada Substitution Analysis, Franklin Associates

<https://plastics.americanchemistry.com/Education-Resources/Publications/Impact-of-Plastics-Packaging.pdf>

Replacement of plastics with other materials has higher environmental costs because more material and energy are required to do the same job as plastics per the Trucost study (4.6 times more substitute material is required).

The Franklin study (Table ES-6) is specific to Canada and reveals that substitution of alternative materials has a much higher global warming potential and will not advance B.C.'s carbon reduction plan. Use of substitutes for plastic packaging will generate 16.3 (million) **more** metric tonnes of **carbon dioxide (CO₂)** and consume more than twice the energy (36.5 million barrels of oil a year). (Substitutes generate 27.5 million metric tonnes of CO₂ versus plastic packaging at 11.8 (million) metric tonnes.)

B.C. municipalities such as Vancouver and Victoria (plastic bag & polystyrene foam bans) are examples of where provincial leadership is required on policy to avoid bans that will have negative environmental consequences. It was reported the bag ban in Victoria resulted in more plastics being used by residents as they substituted heavier plastic kitchen catchers after thinner plastic shopping bags were banned. This is consistent with other bag ban experiences and is not a win for the environment and waste reduction.

In Vancouver, the ban on PS foam foodservice packaging which is proven 100% recyclable and already collected in the Recycle BC stewardship program, is going to substituted with un-recyclable & un-compostable paper packaging going to landfill. This will result in as much as 3-4 times more material in landfill; the complete opposite of the purpose of the ban to reduce waste. *The Vancouver PS Foam ban will accelerate climate change as paper substitution leads to higher greenhouse gas emissions and energy use. This is the wrong direction and requires the province to insist on a life cycle and scientifically based approach to managing materials.*

Table ES-6. Savings for Canadian Plastic Packaging Compared to Substitutes

	Comparison of Plastic Packaging and Substitute Packaging, Canada					
	Global Warming Potential (million metric tonnes CO₂ eq)		Cumulative Energy Demand (billion MJ)		Expended Energy (billion MJ)	
	No Decomp	Max Decomp	No Decomp	Max Decomp	No Decomp	Max Decomp
Total for Plastic Packaging	11.8		225		155	
Total for Substitutes	27.5	29.6	446	439	401	394
Savings for Plastics	15.8	17.9	221	214	246	240
Substitutes % Higher than Plastics	134%	152%	98%	95%	159%	155%
Savings Equivalencies						
Million passenger vehicles per year	3.3	3.7	3.1	3.0	3.5	3.4
Million barrels of oil	36.5	41.3	36.1	35.0	40.3	39.1
Thousand tanker trucks of gasoline	208	236	197	191	220	214
Thousand railcars of coal	68	77	84	81	93	91
Coal-fired power plants (annual emissions)	4.5	5.1				
Oil supertankers	18	21	18	18	20	20

More serious, is the impact bans have on Extended Producer Responsibility (EPR) programs, zero waste goals, economy, jobs and the threat it poses to investment in new advanced recycling technologies and additional mechanical recycling capacity to achieve zero waste goals. Bans have the overall impact of stifling innovation by creating uncertainty in the feedstocks available to recycling technologies and recycled content. Bans run counter to EPR principles where industry manages the program – industry will lose the freedom to make materials choices based on life cycle approaches to protect the environment, meet climate change directives and control costs that are certain to rise with other material substitutions.

Section 2 – More Recycling Options

BC is a leader in EPR programs to manage materials. By placing responsibility on industry and giving it financial and operational control, industry can plan, design and implement systems across the whole product life cycle to manage its products in an environmentally and economically efficient way. There needs to be recognition that mechanical recycling, the foundation for recycling is not enough, and the recycling process for plastics is moving into the 21st century with depolymerization technologies (pyrolysis, gasification, dissolution -<https://www.closedlooppartners.com/plastics/>) that can make the plastic molecule infinitely recyclable where mechanical wash and grind technologies have limitations. These new advanced technologies will compliment mechanical technologies and in the case of plastics move towards zero plastic waste societal goals by the plastics industry of 100% reused, recycled and recovered by 2040.

CPIA supports including single-use items, packaging-like products into the Recycling Regulation to ensure they are managed effectively – both economically and environmentally with achievable timelines to allow for infrastructure development (collection & processing), education, investment and markets development to meet the challenge. It is critical that ongoing collaboration and communication between government and industry to address these needs and work towards targets that also have the flexibility to ensure recycling options continuously improve and can adjust for new innovation.

Section 3 – Expanding Plastic Bottle & Beverage Container Returns:

The BC deposit return system has been very successful. CPIA supports continuous improvement that will get back and recycle more plastic containers in the current system. Investments to modernize and make more convenient the return and refund process along with improved access will improve recovery of containers.

CPIA is not opposed to increased deposits on containers to incentivize increased recovery.

Section 4 – Reducing Plastics Overall – Conserving Valuable Plastics Resources

CPIA supports the sustainable and responsible use of plastics in products and packaging. This is through reuse, recycling and recovery of plastics and its repurposing into new packaging and products. By supporting an approach to conserve essential plastic use via fees, disposal restrictions at curbside & landfill and education programs, plastics can be managed as a sustainable resource to maintain its benefits to society.

In addition to the above strategies, CPIA supports developing national procurement standards to support the use of post-consumer recycled (PCR) plastics content in products through governments immense buying power, which will influence markets immediately to favour manufactured products with appropriate levels of PCR plastics. This action is required not only by governments but also with private sector participation if the zero waste targets are to be achieved and collected materials have a sustainable home for their use in the circular economy.

CPIA recommends that standards need to be developed in collaboration with industry. Key principles required to develop a national procurement standard for PCR content are as follows:

- Plastic industry provides expert leadership on any government actions to implement PCR content procurement standards to assure the move to create greater circularity in the use of plastics is achieved in an economically and environmentally efficient way.
- All manufacturers have a level playing field that does not disadvantage any players in the marketplace which is North American wide if not global in some sectors.

- Plastic industry support targets that are the result of collaboration between governments and marketplace (resin suppliers, recyclers, converters, manufacturers).

Summary & Policy Options

We know that the province is deeply committed to a carbon neutral economy. Bans on plastics which would result in other material substitutions will generate significantly more carbon in both their manufacture and transport are not helpful. To meet B.C.'s carbon reduction goals and promote recycling innovation, we strongly encourage the province to implement policies that recognize molecular/chemical recycling that takes us closer to zero waste and reductions in carbon/GHG emissions.

It is critical that a life cycle approach be incorporated into decisions and policies made in the name of the environment. The Trucost and Franklin studies along with other global studies on plastic packaging help to inform decisions to reduce plastic waste with positive outcomes by avoiding negative unintended consequences.

The focus on plastics is not useful for the province to chart a path to zero waste – the province has to focus on the overall system and all materials. It is absolutely clear zero waste is not just physical tonnes but also includes energy efficiency, carbon, water and other emissions which is lacking in the current discussion and policy approach by the province and municipalities.

Consider imposing a fee on all take-out food containers regardless of material type (e.g. aluminum, foam, green/biodegradable/compostable paper, paper, plastic). Fees on take-out containers put a value on the container so that it is no longer “free”. They grab the consumers’ attention and build awareness of their role as a responsible user of the container. In essence, the customer is purchasing the container as part of their food transaction which becomes an incentive to recycle. Fees could be used to help fund anti-litter campaigns and education programs.

Landfill restrictions on packaging can drive up capture rates while at the same time providing a critical mass of materials for investment in new recycling capacity and new technologies.

The province provide leadership that would stop the patchwork of municipal ban actions that not only damages the environment, but also threatens EPR and the circular economy. The province should set the goals and objectives and then allow industry stewards to meet these obligations.

CPIA and the plastics industry is eager to work with the province on reducing plastic waste in the economy an environment. This can be achieved through active collaboration between government, industry, plastics value chain and key stakeholders developing sound policies and regulations based on good science and facts to support the goals and objectives of the province. We look forward to working with the province and sharing our solutions with you.

Sincerely



Carol Hochu
President & CEO