

Plastic Pollution in Canada

There's No Time to Waste

POLICY BRIEF

September 2020



environmental
defence

The world is facing a plastic pollution crisis and Canada is a significant contributor to the problem.

It is estimated that over 4.5 million tonnes of plastic are introduced to the Canadian market on an annual basis: more than 125 kilograms per person¹. Across all waste streams, Canadians are the biggest per capita waste generators among developed countries². The federal government's draft Science Assessment on Plastic Pollution found that macroplastics—mainly packaging and single-use plastics—cause considerable physical harm to biota, and recommended reductions in both micro- and macroplastics³.

Since the release of the draft Science Assessment, more research has indicated the omnipresence of microplastics in our lives, environment and even us. A paper published in the journal *Science* in June 2020, found that huge amounts of microplastics—the majority being microfibrils from textiles—are transported by wind and rain in the United States⁴. The situation is likely very similar in Canada, and other countries around the world.

Then in July of 2020, new research published in the *Globe and Mail* suggested that microplastics are inside our bodies, and that they increase in number with increased exposure⁵. While science has not yet demonstrated definitively that plastic (especially micro- and nanoplastic) consumption and exposure has negative impacts on human health, it hasn't proven it safe either. Canada must stay true to the guiding principles of the Canadian Environmental Protection Act, 1999, particularly the Precautionary Principle which states that:

Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation⁶.

While it is important to deepen our understanding of the impacts of plastic pollution on human health and the environment, essential conclusions can be drawn from the draft Science Assessment:

1. It's important to reduce the overall amount of plastic that enters the environment; and,
2. Canada should qualitatively target plastics that are more dangerous to human health and the environment due to their chemical composition and the hazardous chemical additives they contain.

Canada's commitments

In June 2019, the federal government announced plans to ban harmful single-use plastic products and take steps toward eliminating plastic pollution in Canada. In his letter to the Minister of Environment and Climate Change, Prime Minister Trudeau gave the following direction to Minister Wilkinson:

Implement our plan to ban harmful single-use plastic products and take steps toward eliminating plastic pollution in Canada. This includes working with provinces and territories to develop national targets, standards and regulations that will make companies that manufacture plastic products or sell items with plastic packaging responsible for collecting and recycling them⁷.

These announcements were celebrated by the public, industry and the environmental community. As we approach the end of this government's first year in office, it is critical to get specific about the actions the federal government will take to end plastic waste. The plastics pollution crisis isn't *just* a result of improper waste management. It is an issue of overuse and overproduction of unnecessary single-use plastics resulting from inexpensive, and easily available petrochemical supply, and a lack of consequences for the businesses whose products pollute the environment. It is essential that any steps taken by the federal government consider the waste diversion hierarchy, and prioritize avoidance, reduction and reuse over recycling and other forms of materials recovery.

As Canada moves forward with addressing plastics by adding them to the Toxic Substance List under Schedule 1 of the *Canadian Environmental Protection Act, 1999*, and proposing an integrated management approach for plastic products and materials, Environmental Defence makes the following recommendations.

Policy Recommendations

- 1. Add plastics to the Toxic Substance List under Schedule 1 of the *Canadian Environmental Protection Act, 1999* (CEPA)**
 1. The listing must be broad enough to allow government to regulate plastic throughout its lifecycle, including: design, manufacturing, import, export, and end of life
 2. Based on lessons learned in the EU with regard to unintended consequences of material substitution, Canada must (adapted from *Material Substitution within the SUP Directive*)⁸:
 1. Take a restrictive and precautionary approach when exempting materials or products, applying a high burden of proof
 2. Ensure that the *only* natural polymers exempted by legislation are those that are proven substantially less persistent in the environment in comparison to plastics.
 3. Define natural polymers as polymers in which polymerisation has taken place in nature, and define materials where polymerisation takes place in an artificial or industrial setting not to be natural polymers, even if polymerisation relies on naturally occurring microorganisms or enzymes.
 4. Define chemical modification as a binary process that either has or has not occurred. Therefore, there is no de minimis threshold or degree of modification that is considered too insignificant to consider.
 5. Declare that modification of chemical structure at any point in the production process is to be considered a chemical modification, even if such a modification has been reversed by the end of the production process.

- 2. Collect data on the amounts and types of plastic packaging and products introduced into the Canadian market**
 - a. Introduce consistent reporting requirements for producers of consumer goods in order to get a picture of what types and amounts of plastics are made, used, imported, and become waste.
 - b. Introduce standardized definitions of reuse, recycling, recovery that are consistent with a circular economy as well as definitions for various types of plastics and their use.

 - 3. As agreed to by Environmental Defence, Canadian Environmental Law Association, David Suzuki Foundation, Ecojustice, Ecology Action Centre, HEJ! Support and Toronto Environmental Alliance, and submitted to Minister Wilkinson for consideration in March 2020⁹, ban the following plastic items by 2021:**
 - a. Items banned by the EU Single Use Plastic Directive EU/2019/904: stirrers; straws; plates (including paper plates with plastic lining); cutlery (forks, knives, spoons, chopsticks, etc.); cotton swabs; balloon sticks; oxo-degradable plastics and beverage containers that do not have tethered caps and lids;
 - b. Bags;
 - c. All forms of polystyrene and polyvinyl chloride (PVC) food and beverage containers; and
 - d. Plastic packaging made of mixed materials (i.e., multi-layered plastics).

 - 4. Address bottles, cups, and lids which contribute significantly to Canada's plastic pollution problem**
 - a. Introduce legally binding quotas for refillables so that 25 per cent of beverages are sold in refillable bottles by 2023, increasing to 40 per cent in 2025, and 55 per cent in 2030, as per Austria's¹⁰ example.
 - b. Establish a 90 per cent enforceable collection target for beverage bottles, and require reductions in the use of cups and lids, as the EU has done.

 - 5. Require producers and retailers to meet enforceable collection/recycling targets for plastic waste streams not subject to the ban**
 - a. Establish recycling targets to ensure that 70 per cent of plastics are recycled by 2025.
 - b. Define recycling only as closed-loop recycling to make a clear distinction from down-cycling.

 - 6. Set reduction targets for single-use plastics not subject to the ban**
 - a. Set targets across sectors for reusable packaging.

 - 7. Set reuse/reusables targets across sectors with timelines, and invest in reuse and refill models**
 - a. Support research and development for durable reusable materials (including plastics) and design that can further improve the reusability of packaging.
 - b. Create incentives for the adoption of reusable containers such as taxes for non-refillable containers, and eco-labels and product standards that improve the environmental performance of products and packaging.
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8. Set medium- and longer-term goals to reduce virgin plastic production, including minimum recycled content standards

- a. Establish a minimum requirement of at least 30 per cent recycled content for all plastics. This requirement should be achieved by 2025, with an aim of achieving closed-loop recycling.
- b. Introduce fiscal incentives to ensure that single-use plastics sold in Canada contain high quantities of recycled content.

Further information on some of the above described policy recommendations can be found in our report, *No Time to Waste: Six Ways Canada Can Progress to Zero Plastic Waste by 2025*¹¹.

References

1. Deloitte and Cheminfo services Inc., "Economic Study of the Canadian Plastic Industry, Markets and Waste, Summary Report" Environment and Climate Change Canada, 2019, page i. Available at: http://publications.gc.ca/collections/collection_2019/eccc/En4-366-1-2019-eng.pdf.
2. The Conference Board of Canada, "Municipal Waste Generation", 2013, Available at: <https://www.conferenceboard.ca/hcp/Details/Environment/municipal-waste-generation.aspx>
3. Environment and Climate Change Canada, Health Canada, "Draft Science Assessment of Plastic Pollution", 2020, Available at: <https://www.canada.ca/content/dam/eccc/documents/pdf/pded/plastic-pollution/Science%20Assessment%20Plastic%20Pollution.pdf>.
4. Brahney, Janice, et al, "Plastic Rain in Protected Areas of the United States", *Science*, vol. 368, no. 6496, 2020, 1257–1260. Available at: <https://science.sciencemag.org/content/368/6496/1257>
5. Smith, Rick, "Opinion: We Are All Plastic People Now, in Ways We Can't See – and Can No Longer Ignore", *The Globe and Mail*, 17 July 2020. Available at: www.theglobeandmail.com/opinion/article-we-are-all-plastic-people-now-in-ways-we-cant-see-and-can-no/.
6. Environment and Climate Change Canada, "Canadian Environmental Protection Act, 1999", Available at: www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/canadian-environmental-protection-act-1999.html.
7. Office of the Prime Minister, "Minister of Environment and Climate Change Mandate Letter", 2019. Available at: <https://pm.gc.ca/en/mandate-letters/2019/12/13/minister-environment-and-climate-change-mandate-letter>
8. ReLoop, and Zero Waste Europe, "Material Substitution within the SUP Directive", 2020, 2–3. Available at: https://www.reloopplatform.org/wp-content/uploads/2020/01/zwe_reloop_joint_policy_briefing.pdf
9. Environmental Defence, Canadian Environmental Law Association, David Suzuki Foundation, Ecojustice, Ecology Action Centre, HEJ! Support, Toronto Environmental Alliance, "Banning non-essential, single-use plastics and moving toward zero plastic waste and plastic pollution prevention", 2020. Available at: <https://environmentaldefence.ca/report/banning-non-essential-single-use-plastics-and-moving-toward-zero-plastic-waste-and-plastic-pollution-prevention/>.
10. EUWID Recycling and Waste Management, "Austria plans deposit for single-use beverage containers, quota for refillable bottles", 2020. Available at: <https://www.euwid-recycling.com/news/policy/single/Artikel/austria-plans-deposit-for-single-use-beverage-containers-brquota-for-refillable-bottles.html>
11. Environmental Defence. "No Time to Waste: Six Ways Canada Can Progress to Zero Plastic Waste by 2025", 2020. Available at: <https://environmentaldefence.ca/report/no-time-to-waste/>.



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