



Global Update: Moving Canada toward zero plastic waste

Great Lakes Plastics Forum
Toronto, Ontario
October 11, 2018

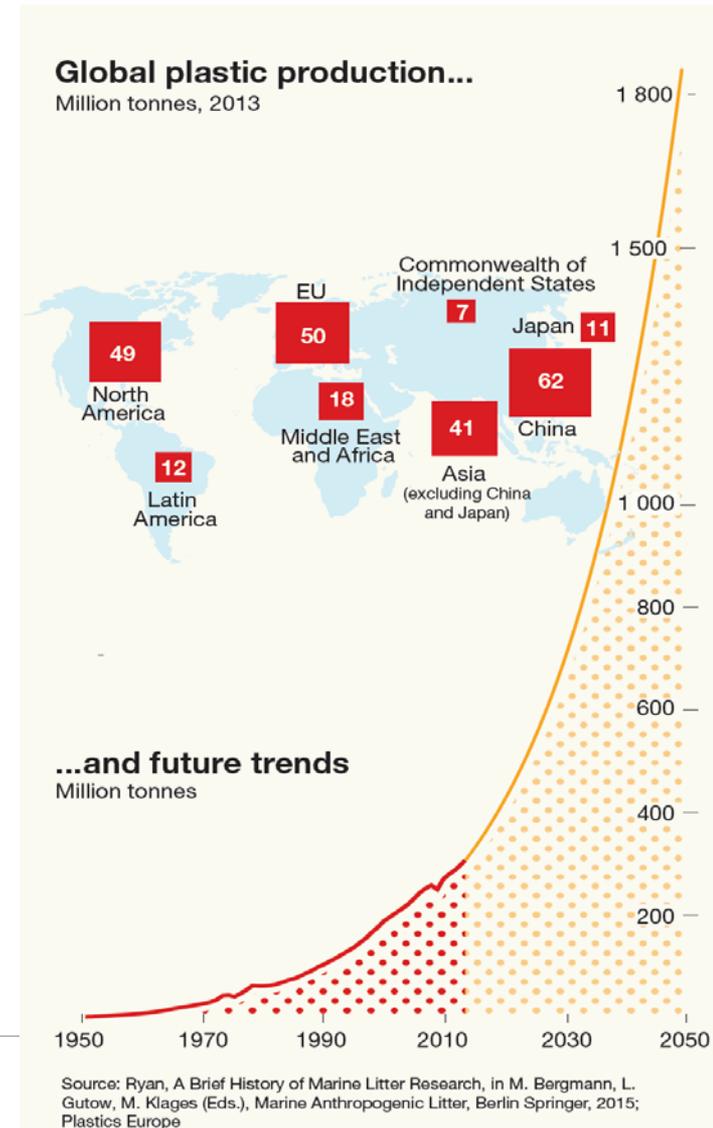
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Overview

- Global perspective and momentum
- Canada's G7 Presidency
- Towards a Canada-wide approach

Plastics: a global perspective

- Integral to the economy: low cost, unrivalled functionality & durability
- Used in all sectors: majority in packaging (40%), construction (20%), automotive (9%)
- Increase from 1.5 to >380 million tonnes produced/year since 1950s
- Poorly managed globally:
~9% recycled, ~12% incinerated, and remaining 79% landfilled or littered



Plastic waste and pollution

- Significant wasted material value and embedded energy
 - USD 80-120 B/year in plastic packaging material value lost to the economy
 - 6% of global oil consumption (20% by 2050)
- > 150 million tonnes of plastics are in the oceans
 - 8 million tonnes of plastic waste enters the oceans from land every year
 - Without action plastics input could double by 2025
- > \$13 billion/year damage to marine ecosystems
 - >600 marine species affected; 15% are endangered
 - Impacts tourism, fisheries, shipping, livelihoods and potentially human health



Macrodebris UN Environment



Microbeads pixabay.com



Pellets © Dave Crawford



Fragments 5 Gyres

Not only an oceans issue

- Plastic pollution is found on all three coasts and in freshwater systems, including the Great Lakes
- Examples of accumulation in the Great Lakes:
 - Hoffman and Hittinger (2017), estimate that 9,887 tonnes of plastic waste enters the Great Lakes every year
 - Eriksen et al. (2013), estimate that there are more than 43,000 microplastic particles/km² in the Great Lakes
 - Corcoran et al. (2015), microplastics were found to be accumulating in sediment cores of Lake Ontario (10.5 pieces/m²) for the past 38 years

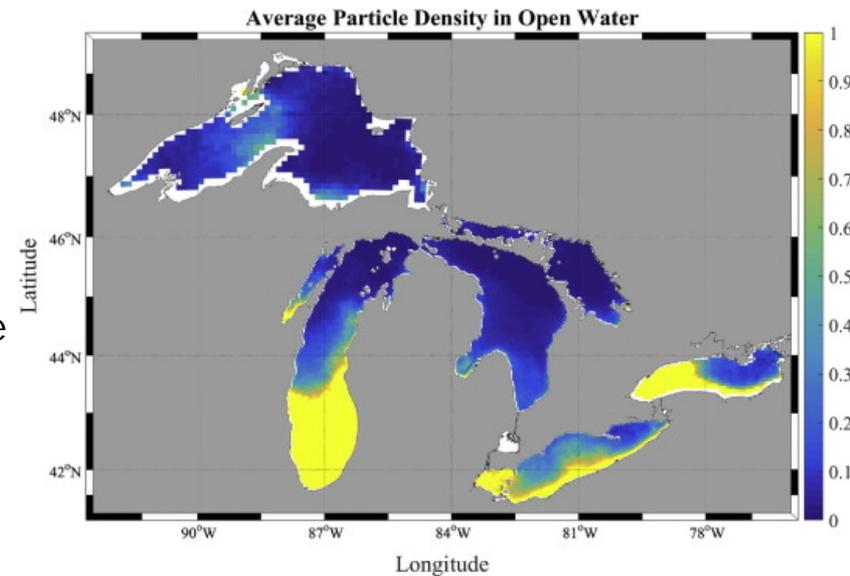


Fig. 2. Modeled average particle density in the open water over the years 2009–2014. (Hoffman & Hittinger, 2017)

Global momentum

- Initiatives and commitment to address marine litter and microplastics have been advanced by many international bodies



Global industry momentum

Global plastics industry commitments

- Declaration of the Global Plastics Associations for Solutions on Marine Litter
- Canadian and American industry association goals of 100% recyclable or recoverable plastic packaging by 2030 and 100% of packaging reused, recycled or recovered by 2040

New plastics economy

- Led by Ellen MacArthur Foundation with goal to rethink and redesign the future of plastics, starting with packaging
- January 2018: 11 leading companies commit to **100% reusable, recyclable or compostable packaging by 2025** or earlier (*including Unilever and Walmart*)
- June 2018: Launch of **UK Plastics Pact** with industry, governments and NGOs along the value chain committing to ambitious 2025 targets for reuse, recycling, composting and recycled content



<https://newplasticseconomy.org/>

G7 context



- Since 2015, the G7 has been advancing marine litter and resource efficiency efforts, through:
 - G7 Action Plan to Combat Marine Litter (2015)
 - G7 Alliance on Resource Efficiency (est. 2015)
 - Toyama Framework on Material Cycles (2016)
 - 5-Year Bologna Roadmap (2017)
 - Canada's presidency: Ocean Plastics Charter (2018)

G7 Charlevoix Leaders' Summit

- G7 Leaders met from 8-9 June in Charlevoix Quebec. One of the priority areas under Canada's G7 Presidency was ***Working Together on Climate Change, Oceans, and Clean Energy***
- Key outcomes:
 - ***Charlevoix Blueprint for Healthy Oceans, Seas, and Resilient Coastal Communities*** to promote sustainable oceans and fisheries, support resilient coasts and coastal communities, and take action on ocean plastic waste and marine litter.
 - ***Ocean Plastics Charter*** endorsed by Canada, France, Germany, Italy, UK, and the EU
- Supporting Canadian announcements:
 - **\$100 million** to rid our oceans of global marine litter and plastic pollution

Ocean Plastics Charter

- A landmark achievement of the G7 Charlevoix Leaders' Summit
- It commits endorsees to move towards a resource efficiency and sustainable approach to plastics management through action on:
 - Sustainable design, production and after-use markets
 - Collection, management and other systems and infrastructure
 - Sustainable lifestyles and education
 - Research, innovation and new technologies
 - Coastal and shoreline action
- **Ocean Plastics Charter Supporters**
 - **G7:** Canada, France, Germany, Italy, United Kingdom and European Union
 - **Countries:** Norway, Kenya, Jamaica, Marshall Islands
 - **Businesses and organizations:** A&W Food Services of Canada Inc., Clean Foundation, Develop Nova Scotia, Enerkem, IKEA, Loop Industries Inc., Nestlé, Oceans North, One More Generation, OneLessStraw, Precoverly Labs, Sky PLC, The Coca-Cola Company, The Tare Shop, Unilever, Volvo Car Group, BASF Canada, Walmart





G7 ministers' meetings & plastics

- Building on the themes and outcomes from Charlevoix, Ministers met from September 18-21st in Halifax to discuss climate change, oceans, and clean energy priorities
- Key outcomes:
 - Ministers agreed on the urgent need to take a lifecycle approach to plastics stewardship, the priority of advancing research and innovation, and the importance of all sectors of society taking action
 - All G7 members agreed to a ***G7 Innovation Challenge to Address Marine Plastic Litter*** to stimulate innovations, raise awareness of how to address marine plastic litter or facilitate improvements to plastics management in developing countries
 - **Expanded support for the Ocean Plastics Charter**

G7 Innovation Challenge to address marine plastic litter

- Through the ***G7 Innovation Challenge to Address Marine Plastic Litter*** G7 members commit to take domestic and/or international actions to promote innovation in addressing marine litter, and aims to:
 - **Leverage existing initiatives** throughout the plastics lifecycle
 - **Support gender equality**, and women's empowerment and leadership
 - Encourage **sustainable, economically viable and scalable** solutions
 - Develop **effective relationships** for implementation.
- Key areas of action include:
 - **Product Design and Waste Prevention** - E.g. Developing new product designs and management processes to increase resource efficiency and the durability, reusability, and recyclability of plastic products
 - **Waste and Wastewater Management and Clean-up** - E.g. Supporting major source countries to manage waste in a manner that is cost-effective and transferable in order to prevent plastics from entering the environment
 - **Markets, Education and Awareness** - E.g. Developing business models and approaches to establishing new markets and value for used and recycled plastics to achieve environmental, social and economic benefits

Recent federal commitments

- In support of the G7 Innovation Challenge to Address Marine Plastic Litter
 - **\$20 million** to spark innovation to beat plastic pollution in developing countries
 - **\$12 million** to invest in made-in-Canada innovative approaches and technologies that help to stop the flow of plastics to the oceans
- **\$65 million** through the World Bank for an international fund to address plastic waste in developing countries
- **\$6 million** for innovative private-public partnerships through the World Economic Forum Global Plastics Action Partnership (GPAP)
- Actions on plastic waste in federal operations to achieve 75% diversion by 2030 target

Canada's domestic approach

- The Government of Canada, provinces and territories, in consultation with civil society, industry and others, are developing a Canada-wide approach to keep plastics within the economy and out the environment
- Pursuing solutions along the plastics lifecycle:
 1. Sustainable design and production
 2. Collection and management
 3. Sustainable lifestyle and education
 4. Research and innovation
 5. Action on the ground

What we've heard from Canadians

- Public consultation using PlaceSpeak platform (Apr. 22 - Sept. 21, 2018)
- Canadians recognize the need for prompt action, adopting a lifecycle approach, and that a variety of solutions are needed, such as:
 - recyclability and packaging standards
 - environmentally sound alternatives such as reusable items and compostable plastics
 - incentives for sound alternatives and fees for non-environmentally friendly plastics
 - limits on single use plastics and packaging (e.g. prohibit the sale of non-recyclable packaging)
 - improved recycling systems
 - increased awareness of solutions consumers can take

Environment and Climate Change Canada / Environnement et Changement climatique Canada

MOVING CANADA TOWARD ZERO PLASTIC WASTE

WHAT WE HEARD FROM YOU

Since April 22, 2018 we have received over 1,900 comments via PlaceSpeak and email in response to our consultation on moving Canada towards zero plastic waste. Here is what we heard from you!



- Canadians are aware that plastic pollution, waste and heavy consumption of single-use items is an issue that needs to be addressed promptly in Canada and around the world.
- We also recognize there is no "one-size-fits-all" solution to plastics pollution. The most common suggestions, not in any particular order, include:
 - improving recyclability and packaging standards
 - increasing access and incentives to use environmentally-sound alternatives, such as reusable items and compostable plastics
 - implementing limits or fees on single use plastics and packaging (e.g. prohibit the sale of non-recyclable packaging)
 - investing in improved recycling programs and infrastructure
 - increasing awareness of plastic waste and solutions through educational campaigns

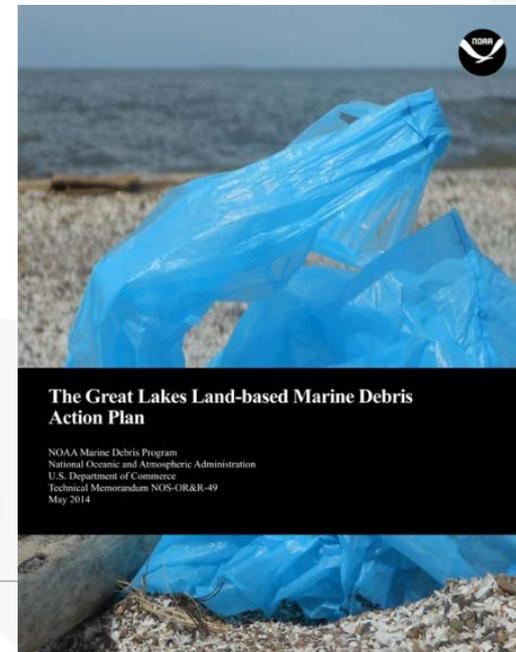
Are your views represented in the content? If not, you can still share your comments via email to: cc.en143842018E-PDF
Environment and Climate Change Canada thanks you for your input on Moving Canada toward zero plastic waste.

Can14-384/2018E-PDF ISBN: 978-0-660-27717-2



Federal actions in the Great Lakes

- National approach will address all types of plastics and in all medias including land and sea-based sources in marine and freshwater systems
- The federal government is advancing action in the Great Lakes by:
 - Conducting science on the sources and impacts of plastics pollution in the Great Lakes
 - Supporting community actions (e.g. EcoAction Community Funding Program) and external research (e.g. NSERC)
 - Collaborating with stakeholders (e.g. ECCC participates in the Great Lakes Land-based Marine Debris Action Plan)



Thank you!

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