



Global Update: Moving Canada toward zero plastic waste

Great Lakes Plastics Forum
Toronto, Ontario
October 11, 2018

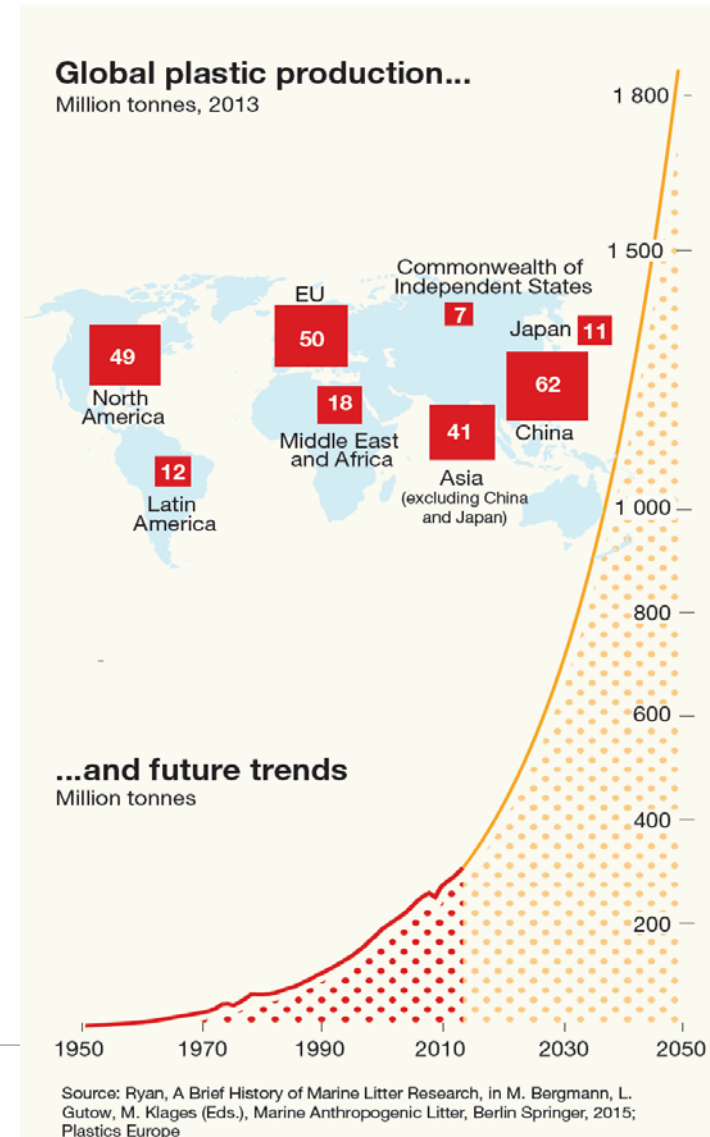
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Overview

- 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



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

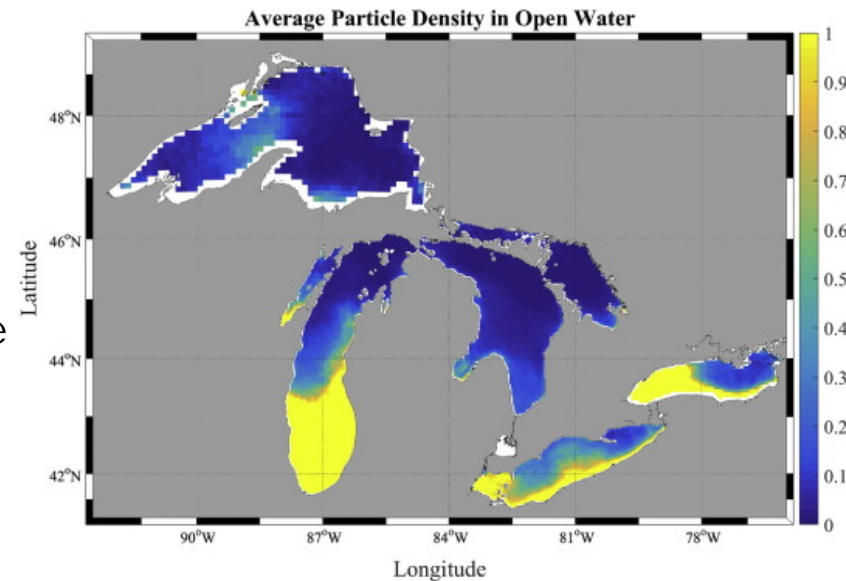


Fig. 2. Modeled average particle density in the open water over the years 2009–2014. (Hoffman & Hittinger, 2017)

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, Precore 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

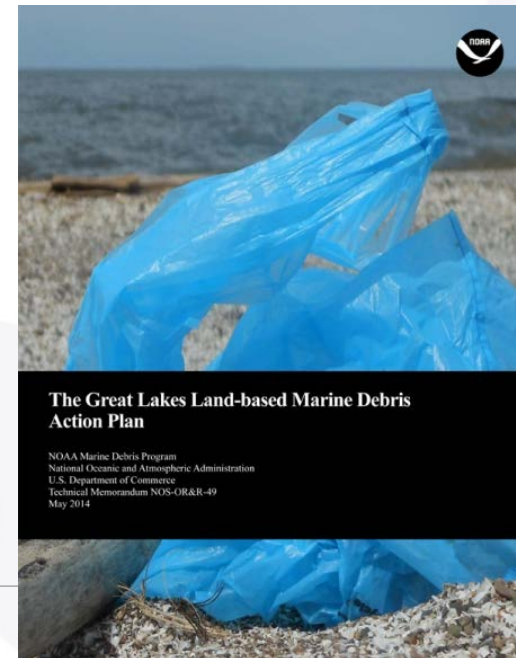
What we've heard from Canadians

- 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



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!

For more information, please contact:

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