

TOWARDS ZERO PLASTIC WASTE IN CANADA

Environment and Climate Change Canada

Plastic Packaging Reduction Summit, Dartmouth, Nova Scotia

March 5, 2020



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

OVERVIEW

- The plastics challenge: globally and in Canada
- Canada's international commitments
- Government of Canada leadership
- Moving forward and working together

PLASTICS: GLOBAL PROBLEM, ECONOMIC OPPORTUNITY

- **Integral to the global economy**
 - >380 million tonnes produced/year
- **Plastic pollution impacts ecosystems, tourism, fisheries, livelihoods and potentially human health**
 - >150 million tonnes of plastics in the oceans and >8 million tonnes added each year
- **Poorly managed globally, wasting valuable resources and energy**
 - 6% of current global oil consumption
 - **9% recycled and 91% landfilled, littered or incinerated**
 - USD 80 - 120 billion/year global opportunity to recover value from plastic packaging alone



Urgent need for global action to reduce plastic pollution and recover lost value

CANADA'S INTERNATIONAL COMMITMENTS

- **Canada is a leading voice on this issue through the Ocean Plastics Charter**
 - **The Ocean Plastics Charter commits** to take action across 5 pillars along the lifecycle of plastics: (1) design; (2) production and markets; (3) collection and management; (4) education, research; (5) technology & shoreline clean-up.
 - 25 governments, 65 businesses and organizations (Coke, Unilever, IKEA, Volvo, Walmart) are endorsees
 - Canada is investing \$100 million to help developing countries address plastic pollution
- **Mobilizing international action**
 - G7, G20, United Nations, OECD, Basel Convention and others

Key Ocean Plastics Charter targets

- *100% reusable, recyclable, or recoverable plastics by 2030*
- *Increasing recycled content in products by at least 50% by 2030*
- *Recycle and reuse at least 55% of plastic packaging by 2030 and recover 100% of all plastics by 2040*
- *Reduce the use of plastic microbeads by 2020, and address other sources of microplastics*

PLASTIC WASTE A CANADIAN ISSUE

- **High-profile, sustained environmental issue for all Canadians:**
 - 33% rank among the most important environmental issues today (Abacus, 2018)
 - >75% support or somewhat support a total ban on single-use plastics (Nanos, July 2019)
- **Plastic litter and microplastics found on all three coasts and in freshwater systems**
 - 29,000 tonnes leaked to the environment each year
- **86% of Canada's plastic waste was landfilled in 2016, a lost value of up to \$7.8 billion**
 - 9% recycled, 4% incinerated, 1% leaked to the environment

THE PLASTICS STORY IN CANADA



RESIN PRODUCTION

Domestic virgin resin production, valued at \$10 billion, is primarily dependent on oil or natural gas as its feed stock

MANUFACTURING PRODUCTS

A growing sector in Canada, with \$25 billion in sales and sustaining 89,000 jobs in 2017



DISTRIBUTION

Plastics make our food last longer and lightens the load, decreasing emissions from food waste and transport



USE

Packaging, construction and automotive sectors account for almost 70% of plastic use



RECYCLING

Only 9% of Canada's plastic waste is recycled and kept in the economy



ENERGY RECOVERY

4% of Canada's plastic waste is incinerated for heat and energy



PLASTIC WASTE

Canadians throw away over 3 million tonnes of plastic waste annually

Almost half (47%) of that is from packaging



PLASTIC ALTERNATIVES

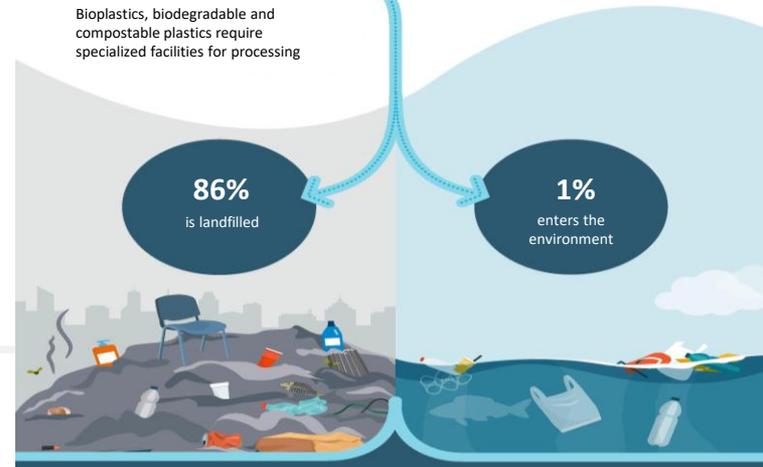
Bioplastics, biodegradable and compostable plastics require specialized facilities for processing

86%

is landfilled

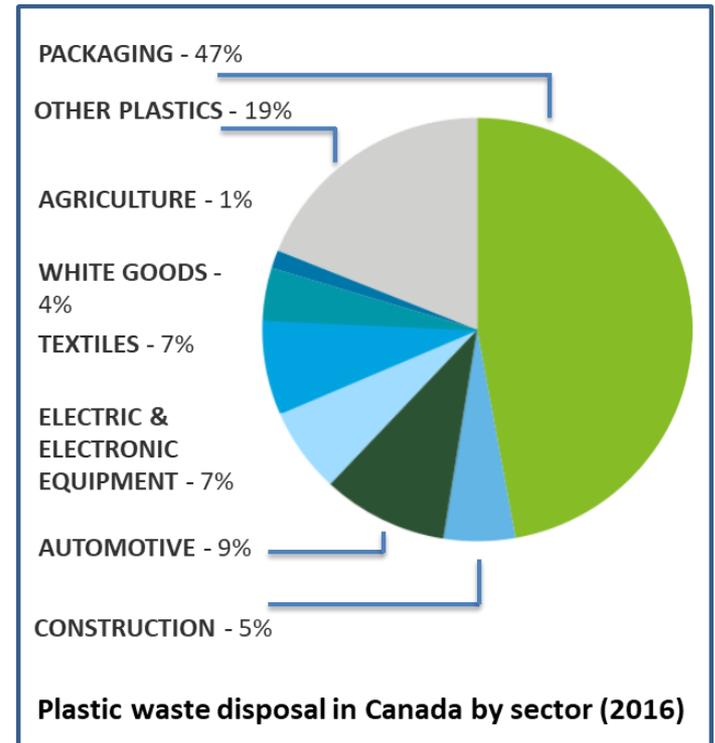
1%

enters the environment



PLASTIC WASTE: A CANADIAN ISSUE

- **A circular plastics economy will help reduce plastic pollution and deliver environmental benefits**
- **Plastics are integral to our economy and all sectors contribute to the waste stream**
- **Plastics important to the economy but pollution and waste are costly:**
 - \$10B virgin resin industry (72% for export); \$25B plastic manufacturing sector; \$350M recycling industry
 - Waste management and recycling is a major municipal budget item.



Source: Economic study of the Canadian plastic industry, markets and waste, 2019

Zero plastic waste means keeping all plastics in the economy and out of the environment

GOVERNMENT OF CANADA LEADERSHIP

- Working across many federal departments on the foundational elements
- Collaborating with provinces and territories in implementing the CCME Canada-wide Strategy on Zero Plastic Waste and Action Plan
- Mobilizing actions by industry, local communities and the public



Sustainable design, production and markets

Collection and system infrastructure



Sustainable lifestyles & education

Science, innovation and new technologies



Coastal and shoreline action

Circular economy



CANADA'S BROAD AGENDA

Canadian Council of Ministers of the Environment

- Working with provinces and territories to implement the Canada-wide Strategy on Zero Plastic Waste and associated action plans

Policies and regulations

- Measures, regulations and agreements to prevent plastic waste and marine litter

Greening our government

- Reducing plastic waste from federal operations and promoting sustainable procurement

Advancing science

- Supporting and conducting research through Canada's Plastics Science Agenda

Plastics innovation

- Supporting innovative social and technological solutions for the sustainable management of plastics throughout their lifecycle

Mobilizing Canadians

- Supporting education and awareness-raising initiatives as well as community solutions, such as demonstration and clean-up projects

Ocean Plastics Charter and International actions

- Advancing international actions on plastic waste and pollution

Visit our Zero Plastic Waste website for details: www.canada.ca/zero-plastic-waste

WORKING WITH PROVINCES AND TERRITORIES

- In 2018, the Canadian Council of Ministers of the Environment (CCME) launched a **Canada-wide Strategy on Zero Plastic Waste**
 - Comprehensive, circular-economy approach in priority result areas across the plastics lifecycle
- **CCME Action Plan** to implement the Strategy:
 - **Phase 1** was approved in June 2019 with concrete actions for the first five result areas
 - **Phase 2** will be developed in 2020 and focus on the remaining five result areas

1. PRODUCT DESIGN

6. CONSUMER AWARENESS

2. SINGLE-USE PLASTICS

7. AQUATIC ACTIVITIES

3. COLLECTION SYSTEMS

8. RESEARCH AND MONITORING

4. MARKETS

9. CLEAN-UP

5. RECYCLING CAPACITY

10. GLOBAL ACTION

Towards Zero Plastic Waste in Canada

CANADA-WIDE ACTION PLAN ON ZERO PLASTIC WASTE

Phase 1 of the CCME Canada-wide Action Plan on Zero Plastic Waste (June 2019)

Extended producer responsibility (EPR)	Facilitate consistent EPR programs for plastics through guidance on categories, definitions, standards, etc.
Single-use and disposable products	Develop a roadmap to address priority single-use and disposable plastics most commonly released into the environment
National performance requirements and standards	Develop targets and timelines for recycled content; new standards for bio-based plastics; a roadmap for specific sectors for repair, reuse and remanufacture; and guidelines for recyclability
Incentives for a circular economy	Develop best management practices; economic and fiscal incentives; and agreements and tools with willing industry sectors
Infrastructure and innovation investments	Assess infrastructure needs for improved plastics life-cycle management and facilitate access to capital funding or financing
Public procurement and green operations	Develop guidelines and tools for government procurement practices to green operations and reduce plastic

Federal, provincial and territorial governments will work together, in consultation with others, to implement all areas of the action plan

CANADA-WIDE ACTION PLAN ON ZERO PLASTIC WASTE

Phase 2 of the CCME Canada-wide Action Plan on Zero Plastic Waste

- Expands upon the engagement approach under the Phase 1 Action Plan
- Focuses on Strategy Result Areas 6 through 10
- Engagement: September 2019 – early 2020

6. CONSUMER, BUSINESS, AND INSTITUTIONAL AWARENESS

7. AQUATIC ACTIVITIES

8. RESEARCH AND MONITORING

9. CAPTURE AND CLEAN-UP

10. GLOBAL ACTION

Broad engagement is needed to address the breadth of result areas

PLATFORM FOR INNOVATION

Launched eight Canadian Plastics Innovation Challenges in 2018-19

- Funding for SMEs to reduce waste and pollution and turn wastes into resources
- Eight challenges have provided over \$11.8 million to 18 Canadian enterprises

2020 Canadian Plastics Innovation Challenges

- Challenges launched in six plastics and three clean tech areas: textiles, EOL vehicles, e-waste, packaging, marine microplastics monitoring, plastic ceiling tiles, waste conversion, air purification, and window coverings

2018-19 Canadian Plastics Innovation Challenges

1. Food packaging
2. Construction waste
3. Separation of mixed plastics
4. Recycling of glass fiber-reinforced plastic
5. Remove and manage ghost fishing gear and marine debris
6. Sustainable fishing and aquaculture gear
7. Improved compostability of bioplastics
8. Next generation bio-based foam insulation

Helping Canadian businesses and governments develop new solutions

ZERO PLASTIC WASTE FUNDING INITIATIVE

- On January 21, 2020 Environment and Climate Change launched its annual call for proposals for eight programs and funding initiatives.
- The new **Zero Plastic Waste Funding Initiative** will aim to support local projects that mobilize Canadians and communities to develop and test solutions to prevent plastics from entering the environment also opened.
- For more information visit:
<https://www.canada.ca/en/environment-climate-change/services/environmental-funding/programs.html>



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@EnvironmentCa

Calling all Canadians!

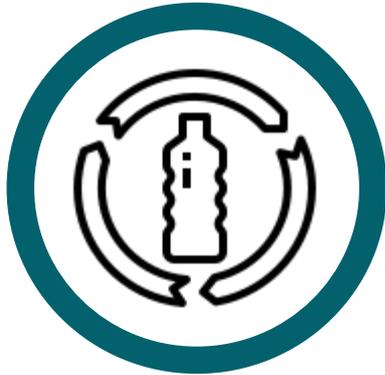
Apply for funding to support your local project that helps to protect water, take action on climate change, and **tackle plastic pollution**. Now accepting proposals!



MORE ON OUR BROAD AGENDA

- **Improving knowledge - building on the 2019 Economic Study**
 - Study on remanufacturing & value retention processes in Canada
 - Statistics Canada work to improve measurement of plastics
 - Infrastructure assessment and projects to examine barriers and solutions
 - **Developing standards and guidelines**
 - In collaboration with standards and other organizations, scoping needs for guidance on recycled content, biodegradability and other topics
 - **Addressing waste exports**
 - Working domestically and collaborating internationally (e.g. Basel Convention and bilateral agreements)
 - **Working with industry sectors to improve design and value recovery**
 - A wide range of voluntary mechanisms available (e.g. performance agreements, guidelines, codes of practice)
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THE SCIENCE ASSESSMENT



Summarize the current state of the science regarding potential impacts of plastic pollution on the environment and human health



Guide future research



Inform decision-making on plastic pollution in Canada



FINDINGS

- There are many sources that contribute to plastic pollution.
- Macroplastics have been shown to cause physical harm to environmental receptors.
- Information on the impacts of microplastics to human health and the environment is limited.
- Action is recommended to reduce macro and microplastics that end up in the environment.



NEXT STEPS

- The publication of the draft science assessment in the *Canada Gazette* for a 60-day comment period is the first step under the *Canadian Environmental Protection Act*.
- Comments will help inform federal actions to ban harmful single-use plastics, where warranted and based on science, as early as 2021.
- We will continue to consult stakeholders, including industry and the provinces and territories, on how to improve the management of single-use and other plastics through potential regulations and other measures.



THANK YOU

ECCC Plastics

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