Environment and Climate Change Canada | Environnement et Changement climatique Canada

CANADIAN APPROACH TO PLASTICS AND PLASTIC POLLUTION

NIST Data and Harmonization to Improve the Circularity of Plastics Workshop

January 26, 2023

Canada

CONTEXT

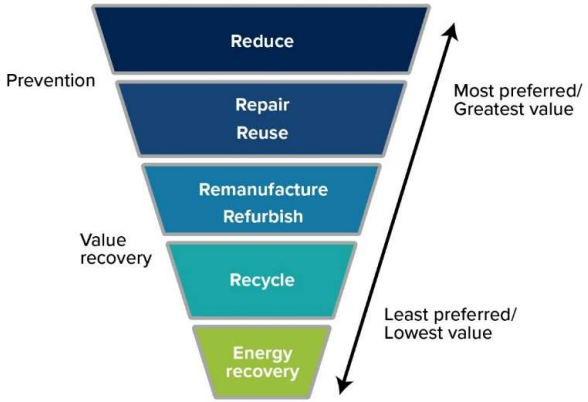
Canada's Plastics Value Chain

Data Sources:

- Deloitte, and Chem Info. 2019. *Review of Economic Study of the Canadian Plastic Industry, Markets, and Waste*. Environment and Climate Change Canada.
- Statistics Canada. 2022. *Pilot physical flow account for plastic material*

MOVING TO CIRCULARITY

- Through the Canadian Council of Ministers of the Environment (CCME), Canada is working with provinces and territories toward a zero plastic waste future where plastics stay in the economy and out of the environment
- No single solution – Canada is implementing a comprehensive and evidence-based agenda
  - Advances complementary actions across the plastics value chain and supports the waste hierarchy
  - Addresses market challenges, strengthens systems and infrastructure, spurs innovation, enables sustainable behaviours, and tackles plastic pollution
- Multi-stakeholder approach to achieve change
  - Everyone has a role to play to rethink how we make, use and manage plastics



Waste Management Hierarchy

FEDERAL ZERO PLASTIC WASTE AGENDA

Ocean Plastics Charter and international actions	• Working with governments and stakeholders to develop a legally-binding global agreement on plastic pollution and advancing international actions on plastic waste and pollution
Canadian Council of Ministers of the Environment	• Working with provinces and territories to implement the Canada-wide Strategy on Zero Plastic Waste and Action Plan
Policies and regulations	• Measures, regulations, agreements to prevent plastic pollution and support the transition to circularity
Greening our government	• Reducing plastic waste from federal operations and promoting sustainable procurement
Advancing science	• Implementing Canada's Plastics Science Agenda including conducting research and investing in science
Plastics innovation	• Enabling innovative social and technological solutions for the sustainable management of plastics throughout their lifecycle
Mobilizing Canadians	• Amplifying education and awareness-raising initiatives, community solutions (e.g. demonstration and clean-up projects), advancing citizen science, and tackling ghost gear

IMPORTANCE OF DATA FOR MOVING TOWARDS ZERO PLASTIC WASTE

- Data on plastic is crucial to building a circular economy
- Standardized, comparable data are needed to evaluating the effectiveness of measures to advance a circular plastics economy
- This data can be used to verify performance at the macro level such as tonnage collected, tonnage sorted and reprocessed
- Current sources of plastics data are inconsistent and difficult to compare as plastics is highly diffused across the economy

ZPW AGENDA: POLICIES AND REGULATIONS

SINGLE-USE PLASTICS PROHIBITION REGULATIONS	MINIMUM RECYCLED CONTENT REQUIREMENTS	RECYCLABILITY AND COMPOSTABILITY LABELLING RULES	FEDERAL PLASTICS REGISTRY	PLASTIC BOTTLES
• Regulations finalized • As of **December 20, 2022**, the manufacture and import for sale in Canada of checkout bags, cutlery, foodservice ware, stir sticks and straws (i.e., straight straws), as defined in the Regulations, will be prohibited. • Prohibition on manufacture, import and sale for export will come into force on **December 20, 2025**	• Requirement would have plastic packaging in Canada contain at least 50% recycled content by 2030 • Government is currently reviewing feedback received during consultations in fall 2020, winter 2022	• Rules would require plastic packaging and single-use items be assessed for recyclability according to specific criteria before it could be labelled as recyclable • Rules would also regulate the use of terms such as “compostable”, “degradable” or “biodegradable” in the labelling of plastic packaging and single-use items • Government is currently reviewing feedback received during public comment period that ended in fall 2022	• Registry would support provincial and territorial EPR efforts by requiring producers to report on plastics in the Canadian economy • Government is currently reviewing feedback received during public comment period on July consultation paper • Consideration being given to product categories, data points, reporting data, and open data and Confidential Business Information • Phased implementation approach would see reporting begin in 2025	• The government is committed to implementing and enforcing a recycling target of 90% • Government is working with provinces and territories to implement and enforce an ambitious recycling target of 90 per cent by 2029 for plastic beverage bottles

A regulation in two parts will help mobilize the supply chain, increase supply of recycled resin, divert more plastics from landfills and the environment, and strengthen the path to a more circular economy

- Labelling targets inputs to recycling stream **(supply)**
- Recycled content requirements drive production of outputs (**demand**)

Publication of proposed regulations in the Canada Gazette, Part I targeted before the end of 2023

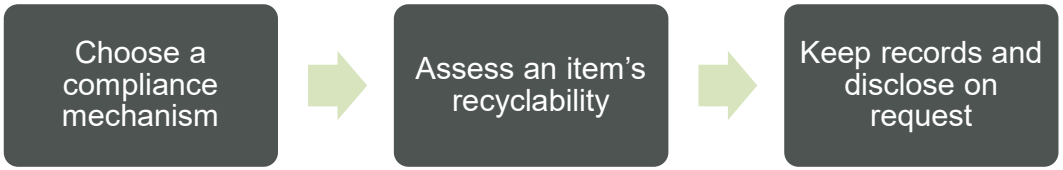
PROPOSED RECYCLED CONTENT & LABELLING FOR PLASTIC PRODUCTS REGULATIONS

- Recycled Content Requirements
  - Minimum requirements would reduce the amount of plastic waste that ends up in landfills, incinerators and the environment, while also decreasing greenhouse gas emissions associated the with production of virgin plastic resins
  - Strengthening demand for recycled plastic could have cascading positive impacts across the entire recycling chain, such as spurring investment in recycling infrastructure, and incentivize design for recyclability
  - Regulations are currently under development following the publication of a Notice of Intent and Technical Issues Paper in February 2022
- Labelling Requirements
  - Proposed scope intended to focus on product categories that Canadians are asked to prepare for recycling (e.g., via sorting, separating, cleaning)
  - Packaging and single-use plastics are most common plastics collected from Canadians

Proposed RC product scope
Beverage containers
Bottles*
Non-bottle rigid containers and trays*
Foam packaging*
Film and flexible plastic packaging*
Garbage bags
Waste bins

* Excludes primary food packaging

Proposed recyclability assessment process



LABELING RULES FOR COMPOSTABILITY

Proposed rules for compostability labelling

- Label with terms like “compostable”, “biodegradable”, “degradable” or like terms, only in accordance with regulations
- **Third-party standards** provide assurance that compostable plastics have been designed to biodegrade in the conditions of an industrial composting facility
- **Certification programs** could include:
  - BNQ (certifies to CAN/BNQ 0017-088)
  - BPI (certifies to ASTM D6400 and ASTM D6868)
- Maintain records and disclose certification on request

- Bioplastics offers potential **upstream environmental benefits** such as
  - **carbon savings** over fossil-based plastics and
  - the potential to contribute to Canada’s **bio-economy**,
- Bioplastics are currently problematic to manage at their **end of life**, with significant variation in performance along with inconsistent labelling
- Standards for anaerobic digestion or home composting do not currently exist in North America
- Compostable plastics often **screened out** by organics processing facilities and sent to landfill, due to
  - **confusion and contamination** with other plastics (for example, conventional and other types of degradable plastics), and
  - generally **longer biodegradation times** than food and yard waste
- Labelling rules would seek to
  - **increase diversion** of organic waste from landfills and **improve outcomes** in organic waste and recycling systems, and
  - reduce public and industry confusion surrounding terms such as “compostable” and “biodegradable”

MEASURING AND VERIFYING RECYCLED CONTENT ROLE OF STANDARDS

- Currently **no widely-applicable analytical methods** for determining the amount of recycled content in plastic products, and no known methods under development that could be applied to all plastic resins and recycling processes.
- Current verification methods require **chain of custody** tracking of plastics from waste received at the sorting facility (MRF) to the recycler, converter, and brand owner.
- Available certification schemes were analyzed in a 2021 report by Eunomia commissioned by ECCC and the Standards Council of Canada. The report found **significant differences between measurement methods in existing schemes.**
- ECCC provided funding support to the standard developer BNQ to develop a recycled content measurement and verification standard in Canada. Standard expected to be published summer 2023.
- ECCC considering the role of standards, certifications and verification methods in recycled content requirements (proposed recycled content & labeling regulations).
- May be a need for additional standards and measurement methods in future to support recycled content in plastics.

Eunomia. 2021. A Comparative Assessment of Standards and Certification Schemes for Verifying Recycled Content in Plastic Products

WHAT WE HEARD

- Recycled Content Requirements
  - **Quantity and quality** of recycled resin is a major concern for producers, particularly food grade resin
  - **Phased-in approach** for products and requirements between now and 2030 (and beyond) preferred
  - Level of tracking and ability to verify could create a significant **administrative burden** for regulatees
  - **Trade barriers** could be created by restricting the Canadian market for exporting countries
- Labelling Requirements
  - Need for **harmonization** of labelling across regions within Canada and North America
  - Need for clarity on **compliance mechanisms**
  - Need for robust **enforcement, label designs,** treatment of **compostable plastics**
  - Need for clarity on **definition of reliable end market**
  - Concerns about **implementation timeline, regional breakdown proposed**
  - Need for **alignment with P/T EPR programs**

ESTABLISHMENT OF A FEDERAL PLASTICS REGISTRY FOR PLASTIC PRODUCTS

- The Government of Canada has committed to supporting provincial and territorial extended producer responsibility (EPR) efforts by establishing a federal plastics registry and requiring producers to report annually on plastics in the Canadian economy
- EPR is a policy approach in which a producer's responsibility, physical and/or financial, for a product is extended to the post-consumer stage of a product's life cycle.
- A federal plastics registry will support adoption of EPR rules in Canada that are consistent, comprehensive and transparent and improve the efficiency and effectiveness of EPR as it is practiced in Canada

WHY IS THE GOVERNMENT OF CANADA INTERESTED IN EPR?

- EPR is crucial in the move towards a circular economy for plastics
- Work with provinces and territories to advance EPR across Canada that is:
  - Consistent: rules and definitions need to be consistent across jurisdictions
  - Comprehensive: extend EPR to all major sectors of the economy that generate large amounts of plastic waste.
  - Transparent: companies are made responsible for meeting outcomes, but they can decide how to meet those outcomes
- The Canadian Council of Ministers of the Environment has developed guidance to facilitate consistent EPR
  - Key performance indicators include rates of diversion, repair, remanufacture and refurbishment; and recycling
  - Data inputs allow for the calculation of the KPIs (e.g., plastics in products supplied to the market and plastics collected for diversion)

WHAT ARE SOME OF THE LIMITATIONS IN CURRENT EPR PROGRAMS?

Difficult or impossible to measure performance

- Performance data generated from EPR programs can be difficult or impossible to accurately compare between jurisdictions and across product categories.

Lack of baseline data for future EPR policies

- Lack of baseline data can complicate and lengthen the time needed to develop EPR policies for different categories of plastic products.

Data can be difficult to access

- EPR data is typically only accessible in annual reports published by producer responsibility organizations
- No central source for EPR data across Canada

Lack of accurate verification and public reporting

- EPR data that is verifiable and publically reported increases transparency and usability of data for stakeholders and Canadians

OBJECTIVES & BENEFITS OF A FEDERAL PLASTICS REGISTRY

Open Data

By housing the data in a single repository, Canadians will be able to access data related to plastic waste diversion more easily

Comparable Information:

Data would be comparable across jurisdictions and product categories, which will support effective performance measurement of EPR

Baseline for future EPR

Provinces and territories will have a better understanding of sectors that place plastics on the market, which will facilitate the expansion of EPR into new sectors

Supports Compliance

Provinces and territories will have access to data to support enforcement and compliance promotion activities, to contribute to fairer EPR

Encourage Investment

Businesses along the plastics value chain will be better placed to make investment decisions that will improve the management of plastics

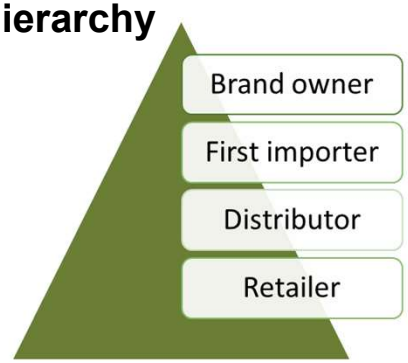
MAKING DATA OPEN AND TRANSPARENT

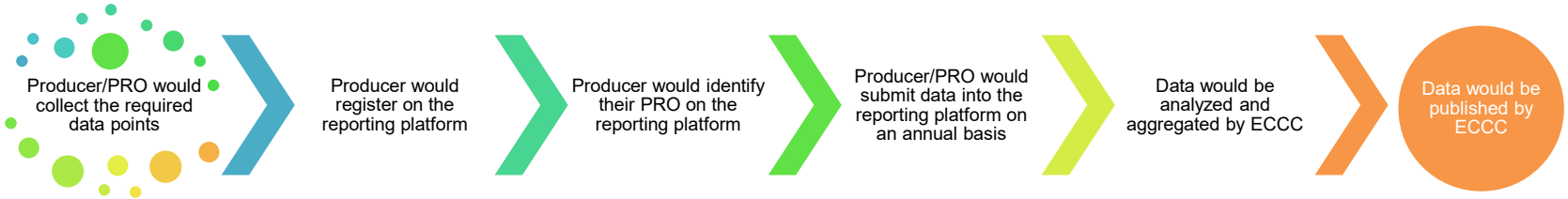
- Open data means structured data that is machine-readable, freely transparent used and built on without restrictions.
- Data sets should be easily compared to one another, having the same format, definitions, structuring, manipulation, use and management principles.
- Canadians should be able to access data related to EPR and plastics to make informed decisions.
- Considering making data received from producers open by default on the reporting platform
- Canadians could download or visualize the data collected via the registry using various data filters

REPORTING REQUIREMENTS

- **Data points to be collected**
  - Plastics placed on the market
  - Plastics collected for diversion
  - Plastics successfully reused
  - Plastics successfully repaired, remanufactured, or refurbished
  - Plastics successfully recycled
  - Plastics incinerated for energy recovery
  - Plastics imported or exported

- **Reporter hierarchy**





REGULATIONS: NEXT STEPS

- **Recycled Content and Labelling for Plastic Products Regulations**
  - The Government intends to publish the proposed regulatory framework for recycled content requirements and labelling rules and for public comment in spring 2023.
  - Draft regulations are targeted for publication in *Canada Gazette*, Part I before the end of 2023, followed by another public comment period
- **Federal Plastics Registry**
  - Draft instrument also to be published in *Canada Gazette*, Part I in before the end of 2023, followed by another public comment period
- **Government looking to industry to advance path forward for a circular plastics economy**
  - Encourages ongoing, active engagement

GLOBAL AGREEMENT

- **Canada is working with governments and other stakeholders to develop an ambitious legally binding global agreement to end plastic pollution**, pursuant to United Nations Environment Assembly resolution 5/14

- Through the Intergovernmental Negotiating Committee (INC), the global community will **advance an agreement that addresses the full lifecycle of plastics**, including provisions to:
  - Promote sustainable consumption and production
  - Develop and implement national action plans
  - Enable a circular economy
  - Advance science and increase knowledge through awareness raising, education and information exchange

- Ongoing **engagement and discussion to inform Canada's voice** in negotiating an ambitious global treaty on plastic

- Canada recently joined the **High-Ambition Coalition to End Plastic Pollution**

- Agreement **to be developed by 2024** via 5 negotiation meetings

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