



Environment and
Climate Change Canada

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PLASTIC WASTE AND POLLUTION: CANADA'S REGULATORY APPROACH

Partners in Project Green

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Megan Hamilton

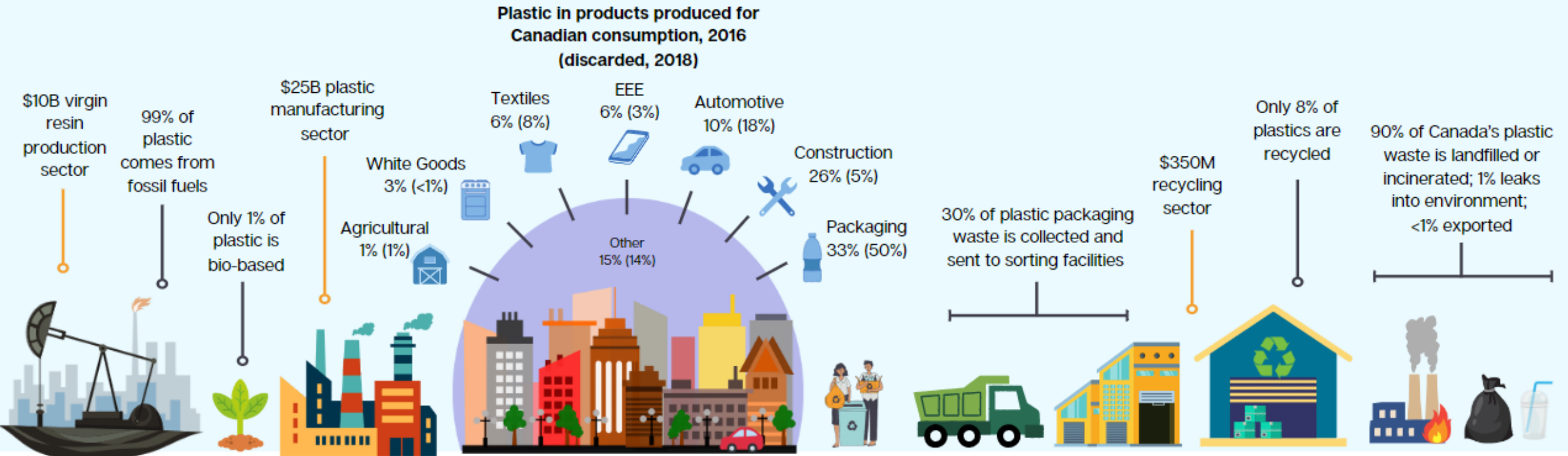
Head, Regulatory Cooperation and Implementation

Plastics Regulatory Affairs Division



Canada 

CANADA'S PLASTICS VALUE CHAIN



Raw materials Production Manufacturing & Use Disposal & End-of-Life Treatment

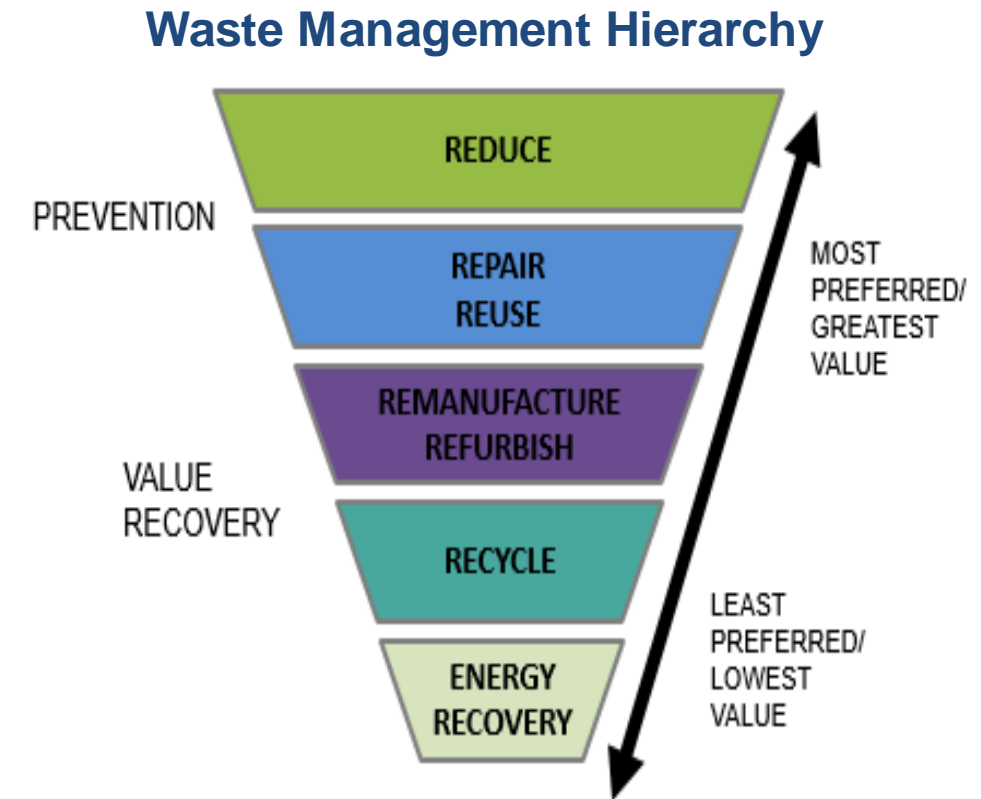


Data Sources:

- 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*

JOINT EFFORTS TOWARD CIRCULARITY

- 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
- The Government of Canada is working with all levels of government, industry, non-government organizations, researchers and Canadians toward a zero plastic waste future where plastics stay in the economy and out of the environment
- Actions will take into consideration the 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 (CCME)

- 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 waste and 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

- Supporting education and awareness-raising initiatives, community solutions (e.g. demonstration and clean-up projects), advancing citizen science, and tackling ghost gear

REGULATORY ACTION UNDER THE *CANADIAN ENVIRONMENTAL PROTECTION ACT*

- The *Canadian Environmental Protection Act, 1999* (CEPA) enables regulatory measures to prevent pollution and manage toxic substances



SINGLE-USE PLASTICS PROHIBITION REGULATIONS

Evidence-Based Decision-Making

Foundational instruments were developed to support evidence-based decision-making and the development of Regulations

Science assessment of plastic pollution

The Science Assessment presented a thorough scientific review of the occurrence and potential impacts of plastic pollution on human health and the environment

A proposed integrated management approach to plastic products

The discussion paper was used to seek input on the proposed integrated management approach to plastics

Management framework for SUPs

The Government developed a management framework that provides a transparent and evidence-based approach to determining how to manage risks to the environment posed by single-use plastics

OVERVIEW OF THE REGULATIONS

The *Single-use Plastics Prohibition Regulations*, published in June 2022, are part of the Government of Canada's comprehensive plan to reduce plastic pollution and move towards a zero plastic waste future

Purpose

To prevent plastic pollution by eliminating or restricting six categories of single-use plastics (SUPs) that pose a threat to the environment, are difficult to recycle and have alternatives

Target

The Regulations prohibit the manufacture, import and sale of single-use plastic checkout bags, cutlery, foodservice ware made from or containing problematic plastics, ring carriers, stir sticks, and straws, with some exceptions for single-use plastic flexible straws



Targeted Single-use Plastics

Checkout bags

- designed to carry purchased goods from a business
- typically given to a customer at the retail point of sale

Cutlery

- knives
- forks
- spoons
- sporks
- chopsticks

Foodservice ware

1. formed in the shape of a clamshell container, lidded container, box, cup, plate or bowl
2. designed for serving or transporting food or beverage that is ready to be consumed
3. contains:
 - a. expanded polystyrene foam
 - b. extruded polystyrene foam
 - c. polyvinyl chloride
 - d. carbon black
 - e. an oxo-degradable plastic

Ring carriers

- flexible
- designed to surround beverage containers in order to carry them together

Stir sticks

- designed to stir or mix beverages, or to prevent a beverage from spilling from the lid of its container

Straws

- straight drinking straws
- flexible straws (have a corrugated section that allows the straw to bend) packaged with beverage containers (juice boxes and pouches)

SUP Foodservice Ware

- These are items that have typically been given to customers at restaurants, food vendors and grocery stores to hold a variety of food and beverages for takeout or to-go meals.
- SUP foodservice ware that meet all 3 of the criteria are prohibited by the Regulations

Examples of non prohibited foodservice ware

- Not in one of the shapes listed
 - Plastic trays without a lid, typically used for raw meat, fish and vegetables, wrapped in plastic film
- Not designed for serving or transporting food or beverage that is ready to be consumed
 - Plastic foodservice ware containing frozen food that requires preparation before it can be consumed
 - Containers used for the long-term storage of food, typically found in the middle aisles of a grocery store
- Does not contain one of the prohibited plastics
 - Paper and fibre-based coffee cups with a plastic lining not containing one of the prohibited plastics
 - Clamshell containers, lidded containers, etc. made from non-prohibited kinds of recyclable plastics (e.g., PET, HDPE, PP) or compostable plastics (e.g., PLA)

Non-conventional plastics

- **The prohibitions apply equally to conventional and non-conventional (e.g., biobased, compostable and biodegradable) plastics**
 - SUP checkout bags, cutlery, ring carriers, stir sticks and straws made from non-conventional plastics are prohibited under the Regulations
 - Performance criteria differentiate between single-use and reusable items, and also target non-conventional plastics
- **Recall that for foodservice ware, only items made from problematic plastics are prohibited**
 - Problematic plastics are polyvinyl chloride, polystyrene foam, oxo-degradables, and black plastics made with carbon black
 - Foodservice ware made from other types of conventional and non-conventional plastics are not prohibited under the Regulations

IMPLEMENTATION TIMELINES

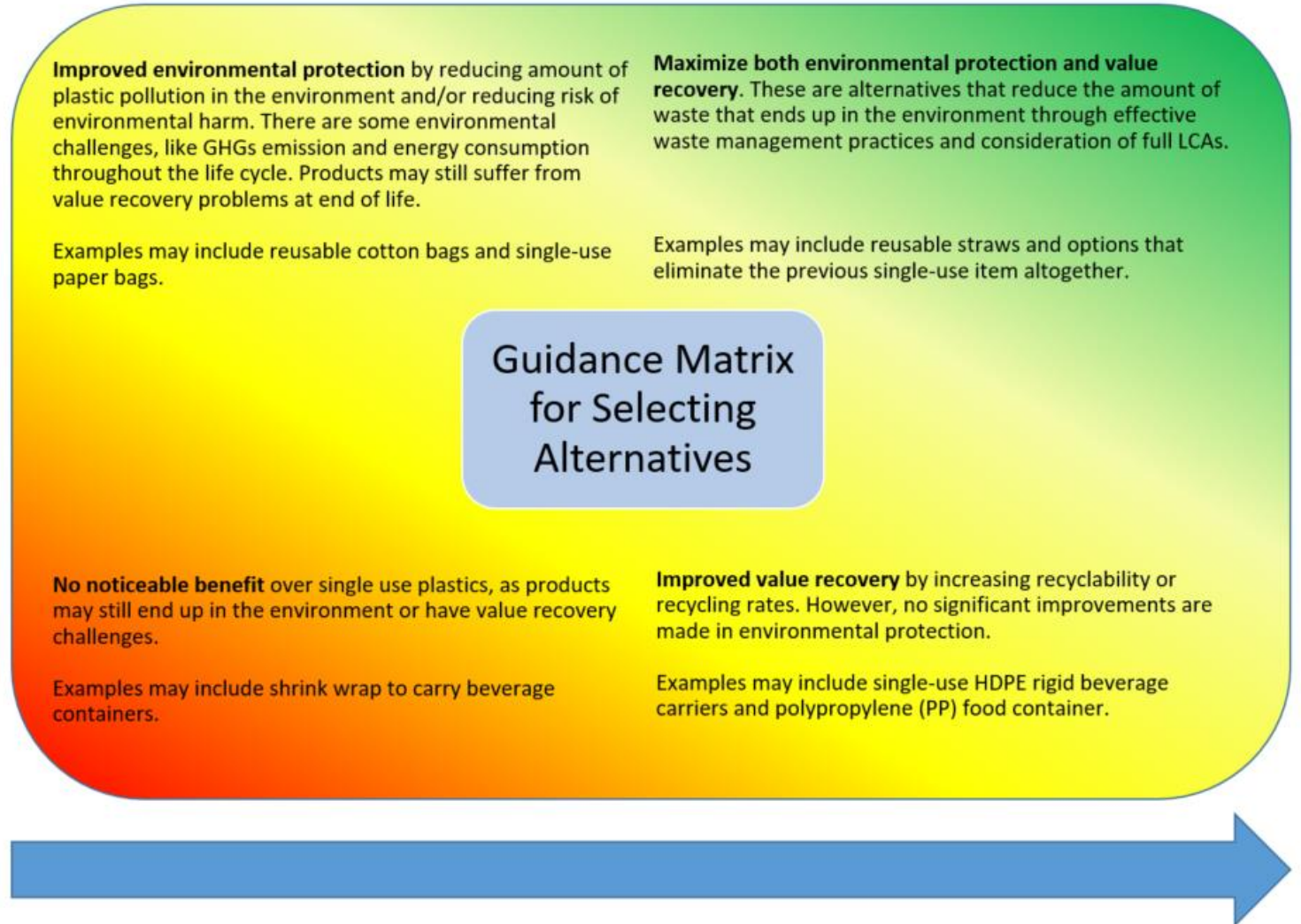
Item	Manufacture and import for sale in Canada	Sale	Manufacture, import and sale for export
Checkout bags, cutlery, foodservice ware, stir sticks, straws*	December 20, 2022	December 20, 2023	December 20, 2025
Ring carriers	June 20, 2023	June 20, 2024	December 20, 2025
Flexible straws packaged with beverage containers	Not applicable	June 20, 2024	December 20, 2025

*Single-use plastic flexible straws that are not packaged with beverage containers are excluded from the prohibitions under certain conditions.

ALTERNATIVES

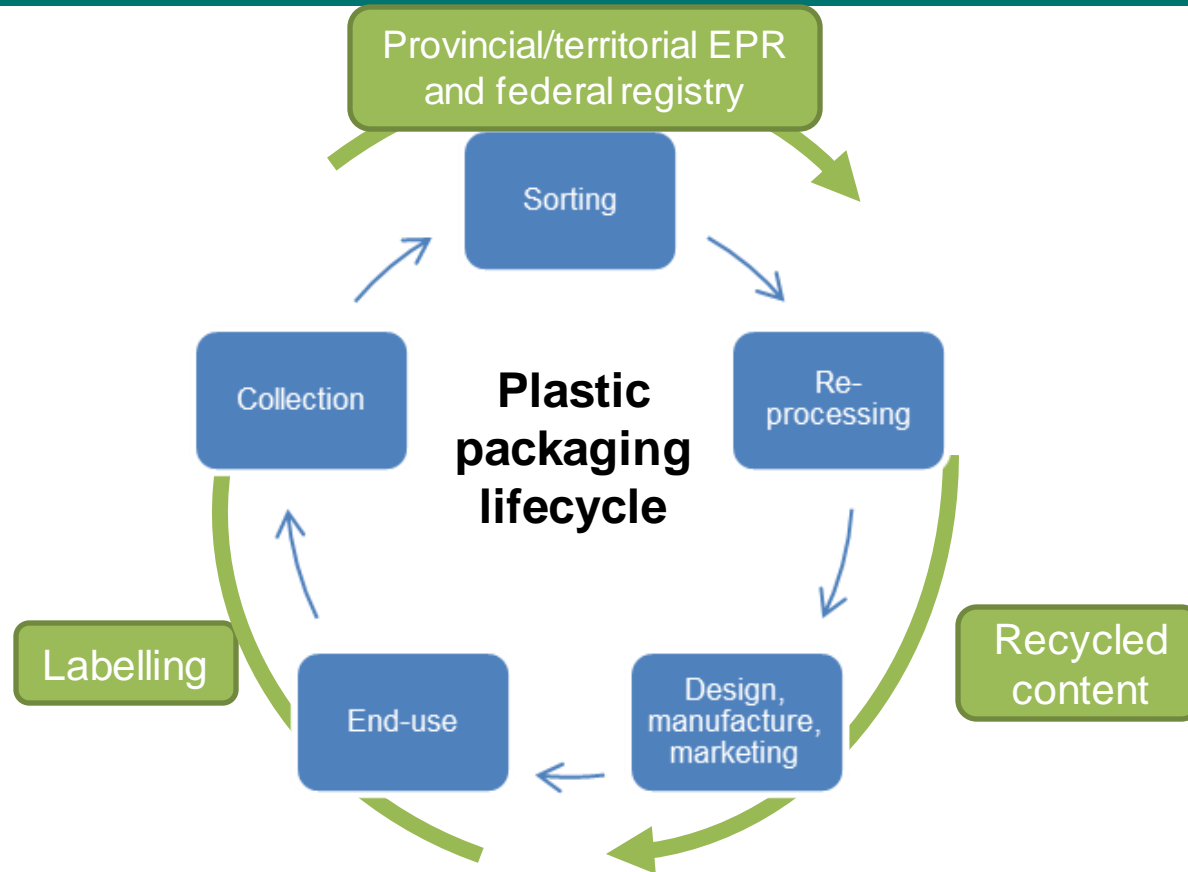
➤ The *Single-use Plastics Prohibition Regulations – Guidance for selecting alternatives* reflects best practices for choosing alternatives to the 6 categories of single-use plastic items identified in the Regulations

Improved Environmental Protection



Improved Value Recovery

OTHER REGULATORY TOOLS IN DEVELOPMENT



Combined impact of measures aims to drive necessary systems changes that create a circular plastics economy

FEDERAL PLASTICS REGISTRY

A Federal Plastics Registry will:

- Serve to improve our knowledge of plastic waste, value recovery, and pollution across Canada
- Provide important information to inform the government on future compliance promotion and enforcement activities
- Help to identify gaps in the plastics value chain where further government action may be required
- Be a key source of information that the Government of Canada will use to support the implementation and monitoring of different measures that part of the government's zero plastic waste agenda
- Standardize the data that is collected and provide useful information for stakeholders and government
- Support provincial and territorial EPR programs in force or under development and provide useful baseline data to provinces and territories when expanding EPR into new product categories.

FEDERAL PLASTICS REGISTRY

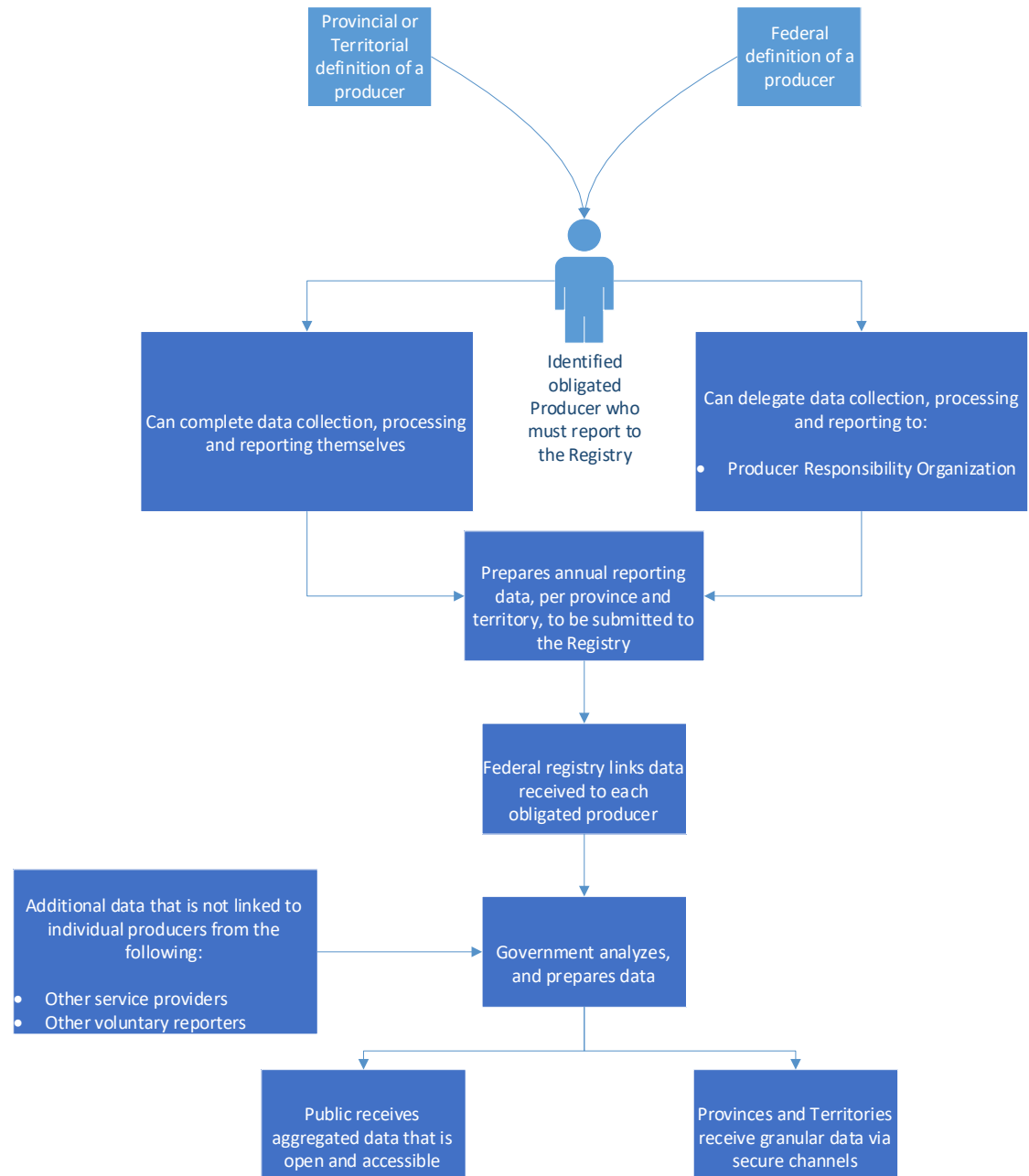
Federal producer definition*

- An obligated producer is defined as a brand owner or IP holder that resides in a province or territory
- If the brand owner is not a resident of a province or territory, then the first person to manufacture/ import and/or distribute a product in a province is defined as the obligated producer
- If there is no resident importer or distributor, then an obligated producer is the retailer that places plastic products on the market in a province or territory

The federal producer definition would also allow a company to voluntarily assume the reporting obligations of others. For example, a national brand owner may wish to report on their products in place of local distributors or retailers.

*The Government of Canada is proposing to use a generic definition of “producer” only where a provincial or territorial definition does not exist. In a jurisdiction that has a definition of producer, that definition would continue to apply.

REPORTING PROCESS FLOWCHART

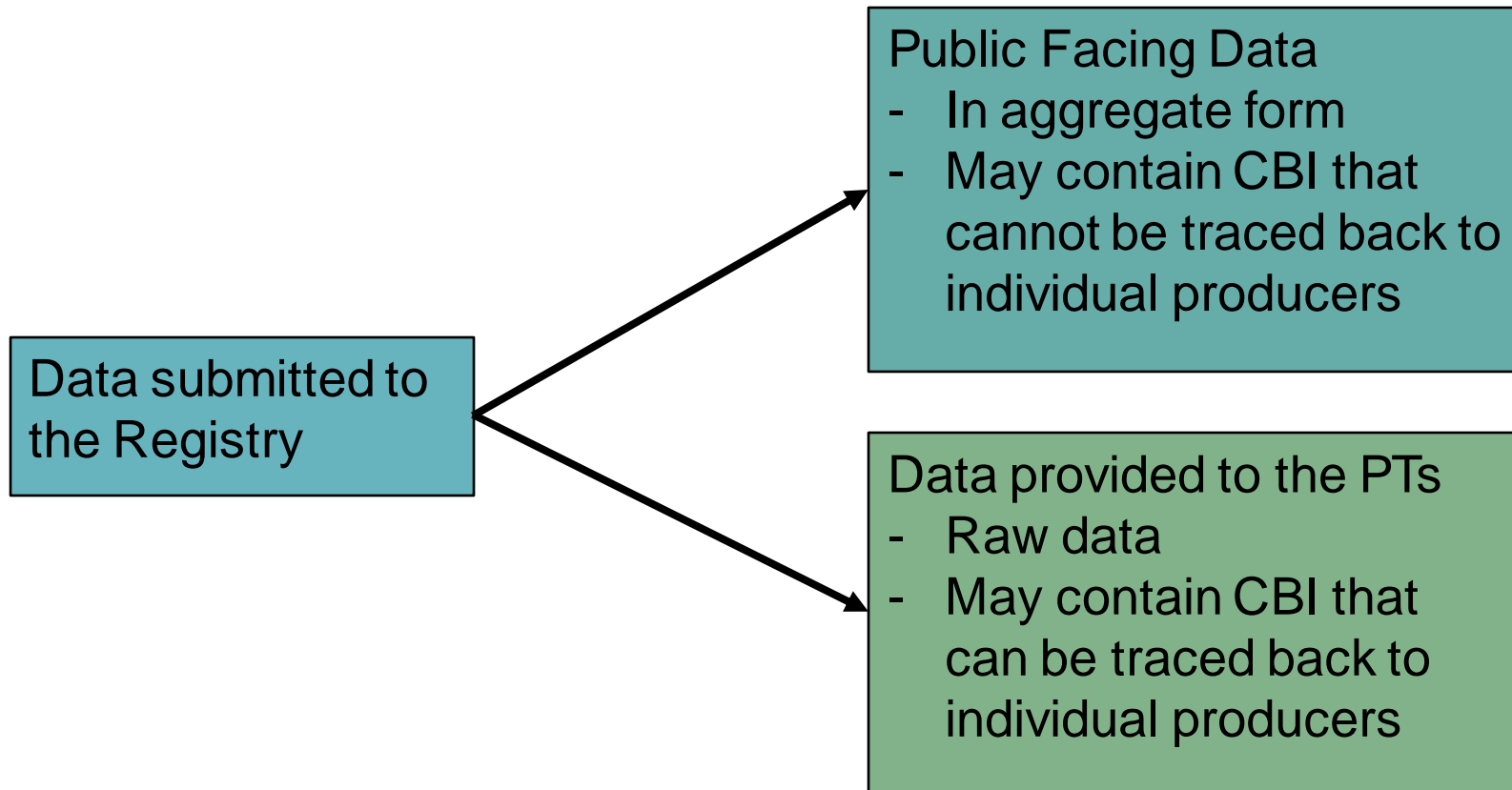


FEDERAL PLASTICS REGISTRY

	Data point (in tonnes)	Description
Upstream data point	Plastics placed on the market	The total amount of plastic in products within a given category placed on the Canadian market in a given year.
Downstream data points	Plastics collected for diversion	The total amount of plastic collected and recycled by an EPR program and sent to a sorting facility for diversion.
	Plastics successfully reused	The total amount of plastic collected for reuse and sold on to secondary markets to be used again without intensive repair, remanufacture, refurbishment, or recycling whether for its original purpose or to fulfill a different function.
	Plastics successfully repaired, remanufactured or refurbished	The total amount of plastic collected for diversion and either sold on to secondary markets or returned to the original equipment manufacturer for repair, remanufacturing or refurbishment via intensive, standardized industrial processes that provide an opportunity to add value and utility to a product's service life.
	Plastics successfully recycled	The total amount of plastic collected for diversion, and treated by some or any of the following processes: <ol style="list-style-type: none"> a. conventional mechanical activities that separate, grind and heat products to produce plastic feedstocks or resins, composting and digestion of some plant-based plastic-like materials to produce soil amendments, b. chemical or thermal processes such as depolymerization, pyrolysis or gasification that convert plastics into monomers or petroleum products (e.g., methanol, diesel).
	Plastics incinerated for energy recovery	The total amount of plastic collected for diversion and recovered for energy recovery (for example engineered fuel, mass burn).
	Plastics imported, exported	The total amount of plastic waste imported or exported for recycling or final disposal.
	Plastics sent to landfill	The total amount of plastic waste sent to final disposal.

- **Province or territory** in which plastic products were placed on the market/collected for diversion
- **Resin Type** in Plastic Products
 - 19 resins groups as identified in Statistics Canada's *Pilot physical flow account for plastic material, 2012 to 2019*
- **Category** of Plastic Products
 - Packaging
 - Electronics and electrical equipment
 - Construction
 - Automotive
 - White goods
 - Agriculture
 - Textiles
- **Sub-category** of Plastic Products
- Whether plastics belong to **residential or ICI streams**

FEDERAL PLASTICS REGISTRY



SCOPE (RECYCLED CONTENT & LABELLING)

In scope

Primary packaging

Secondary packaging

E-commerce packaging

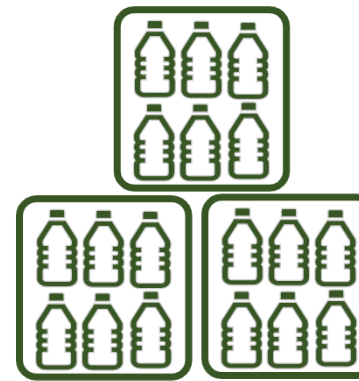
Single-use plastics (labelling only)



Primary packaging



Secondary packaging



Tertiary packaging

Out of scope

Packaging that is waste

Reusable packaging

Tertiary packaging

Packaging for goods in transit

Packaging for goods intended for export

RECYCLED CONTENT REQUIREMENTS

Schedule: Required minimum annual percentage of recycled content

Packaging category	Product category	2025	2026-27	2028-29	2030-31	2032-34	2035
Rigid	Beverage bottles	Report only	20%	40%	60%		
	Rigid PET/HDPE	Report only	20%	30%*		50%	60%
	Other rigid	Report only					
	Special categories, rigid	Report only			30%	50%	
Flexible*	Waste bags	Report only	10-30%	10-30%	20-40%	30-50%	50%
	Flexible packaging	Report only					
	Special categories, flexible	Report only			20%	30%	50%

RECYCLABILITY LABELLING RULES

Measuring Recyclability

80% access to collection in a province/territory

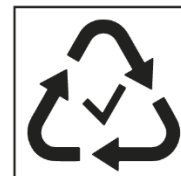
80% bale yields going to NA re-processors (sorting)

80% re-processing rate at minimum for NA

(NA = North America)

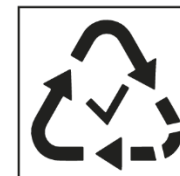
- Three labelling categories listed
- Regulated parties would add **QR code** to label
- Code contains additional recyclability information

Recycling Labels

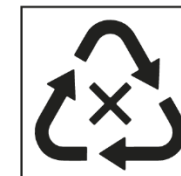


Recyclable
Recyclable

Empty and
replace lid
Videz et remettre
le couvercle



Collected for
recycling
Collecté par
les systèmes
de recyclage



Non recyclable
Non recyclable



Scan for more
information
Scanner
pour plus
d'information

COMPOSTABILITY LABELLING RULES

Regulated terms



Prohibited:

- “Biodegradable”
- “Degradable”
- Like terms
- Home/backyard compostable



Regulated:

- “Compostable” plastic product must
 - be certified (see right)
 - be green
 - use specific terms
 - be labelled “non-recyclable”

* All plastic PLU produce stickers must be compostable

Certification Requirements

Third-party certification:

- ASTM D6400
- ASTM D6868
- ISO 17088
- Equal to or more stringent standard

In addition to:

- **Field testing** in Canada
- Association with **organic wastes**
- **Product composition** requirements

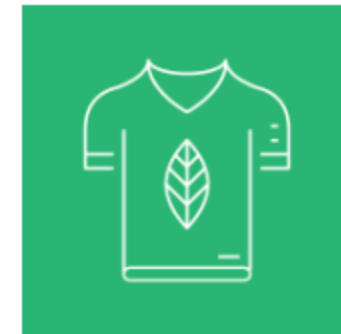
SUPPORTING POLICIES AND APPROACHES

- **Promoting Reuse**

- Supported Scout Environmental's "A Guide to Opening and Running a Bulk-Reuse Refillery in Canada" (2021)
- Co-hosted Symposium on Advancing Reuse in Canada (Fall 2022)

- **Supporting Innovation: Canadian Plastics Innovation Challenges**

- Since 2018, 9 federal departments have invested over \$23M CAD in 17 challenges
- **Challenge Stream:** for early-stage innovations to develop proof of feasibility and prototypes
 - Examples: *Mitigating the Release of Microplastics from Tire Wear Challenge (2022)*, *Sustainable Alternatives to Plastic Packaging (2020)*, *Food Packaging Challenge (2018)*
- **Testing Stream:** for late-stage innovations to further test innovations in preparation for commercialization



CONTACT INFORMATION

Megan Hamilton

megan.hamilton@ec.gc.ca

For questions on the implementation of the Single-use
Plastics Prohibition Regulations:

plastiquesUU-SUPlastics@ec.gc.ca

For questions or to submit comments on the Registry,
Recycled Content or Labelling:

plastiques-plastics@ec.gc.ca

Learn more about Canada's Zero Plastic Waste efforts at:

www.Canada.ca/zero-plastic-waste

USEFUL LINKS: SINGLE-USE PLASTIC PROHIBITION REGULATIONS

- [Canada Gazette, Part 2, Volume 156, Number 13: Single-use Plastics Prohibition Regulations](#)
- [Single-use Plastics Prohibition Regulations: Overview - Canada.ca](#)
- [Single-use Plastics Prohibitions Regulations fact sheet - Canada.ca](#)
- [Fact sheet: Exceptions for Single-use Plastic Flexible Straws - Canada.ca](#)
- [Single-use Plastics Prohibitions Regulations Technical Guidelines - Canada.ca](#)
- [Single-use Plastics Prohibition Regulations – Guidance for selecting alternatives - Canada.ca](#)
- [Science assessment of plastic pollution - Canada.ca](#)
- [Canada's Zero Plastic Waste Agenda - Canada.ca](#)
- [A proposed integrated management approach to plastic products: discussion paper - Canada.ca](#)