

2024 CONFERENCE ON CANADIAN STEWARDSHIP
September 2024, Toronto

ZERO PLASTIC WASTE:

ADVANCING A CIRCULAR PLASTICS ECONOMY FOR CANADA

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Canada 



KEY CHALLENGES

Canada's large and complex plastics economy is mostly linear with key systemic market challenges



KEY CHALLENGES

- **COSTS OF PLASTIC POLLUTION BORNE BY INDIVIDUALS AND COMMUNITIES:**
municipalities, civil society organizations and volunteers left to deal with plastic pollution, citizens live with negative impacts
- **PRIMARY (VIRGIN) AND SECONDARY (RECYCLED) PLASTIC MARKETS COMPETE:**
recycling has a more labor-intensive cost structure but can produce lower embodied carbon resins, compared to primary resin production, with its high upstream GHGs but historic subsidies and economies of scale
- **WEAK END-MARKETS FOR RECYCLED PLASTICS:**
an inconsistent supply of quality feedstock at competitive prices undermines the establishment of viable and lasting end-markets
- **MATERIAL COLLECTION RATES ARE LOW:**
only 21% of plastic packaging is collected and sent to sorting facilities and under 10% is recycled because of consumer confusion, contamination, infrastructure deficiencies, and lack of markets
- **NEED TO SCALE RECOVERY OPTIONS:**
limited high-volume recovery options compete with low-cost disposal alternatives such as landfills – recycling receives the most attention, but upstream innovations in product design, recyclability, and reuse business models are also necessary



FEDERAL ZERO PLASTIC WASTE AGENDA



SCIENCE



MEASURE & SUPPORT



PLASTICS INNOVATION



GREENING GOVERNMENT



CANADIAN COUNCIL OF MINISTERS
OF THE ENVIRONMENT



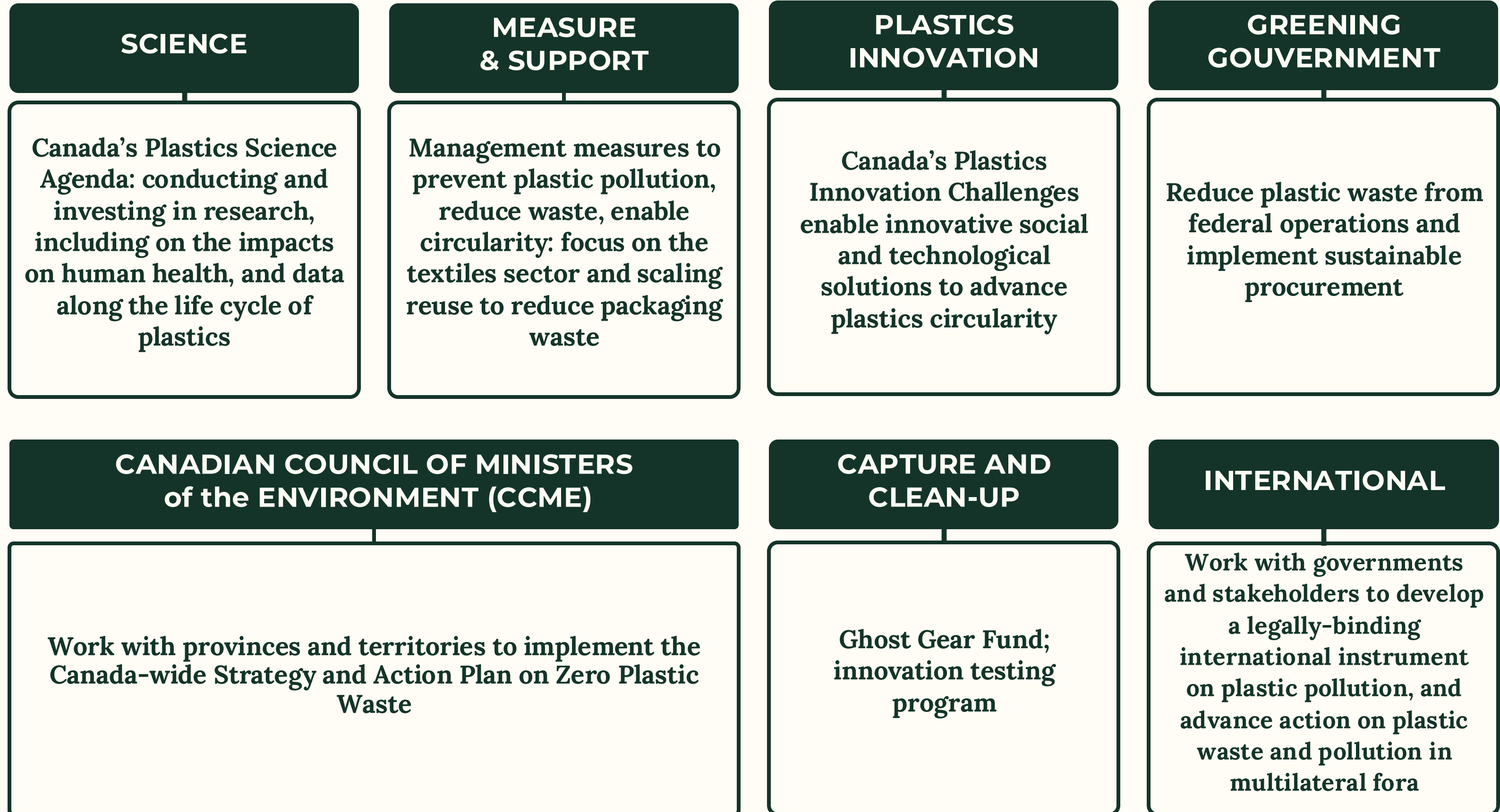
CAPTURE AND CLEAN-UP



INTERNATIONAL



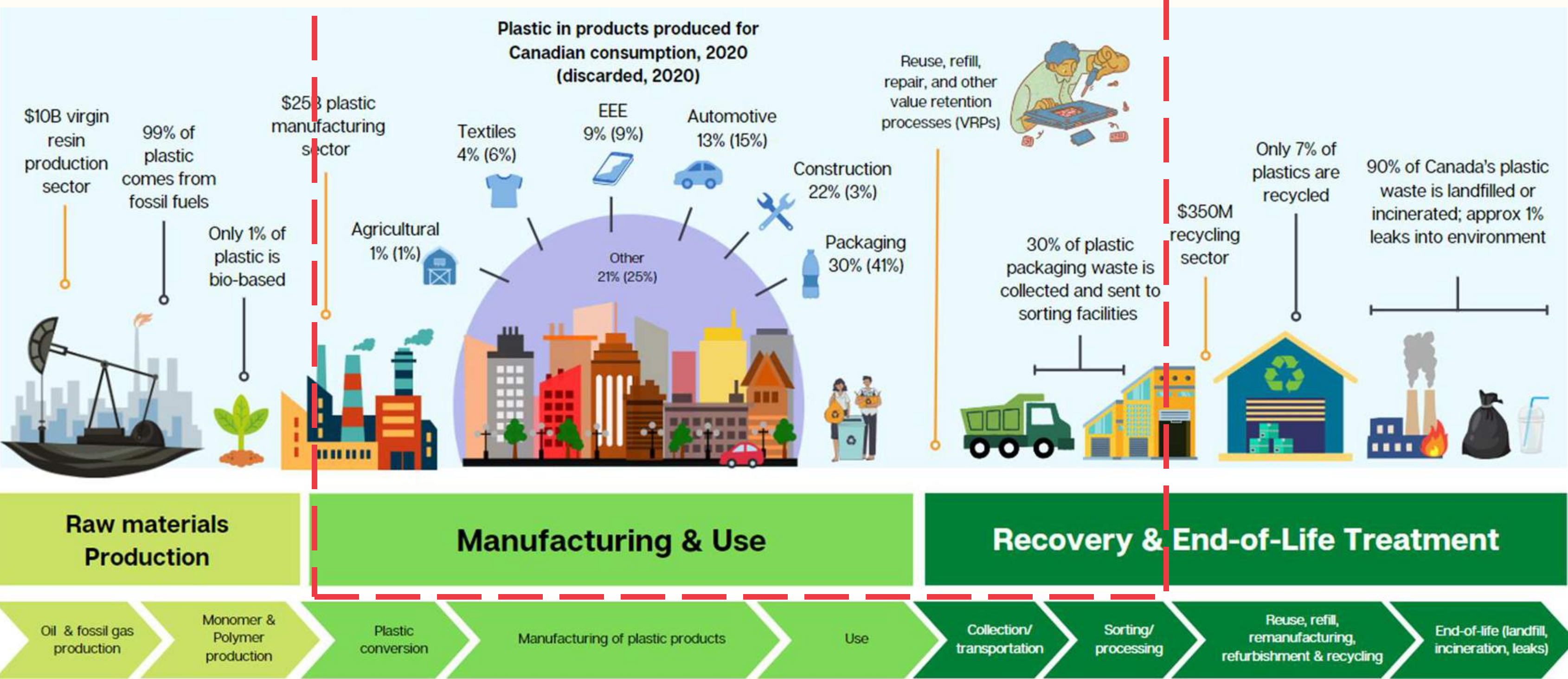
FEDERAL ZPW AGENDA



CANADA'S PLASTICS VALUE CHAIN



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. 2024. *Physical flow account for plastic material*

TEXTILE WASTE AND POLLUTION

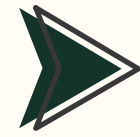


TEXTILE WASTE AND POLLUTION



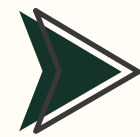
CANADA MOSTLY IMPORTS CONSUMER APPAREL

domestic manufacturing focused on **high-value, technical-use textiles** for workwear applications and **geosynthetics**



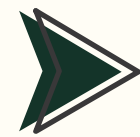
TEXTILES IN CANADA WERE THE FIFTH-LARGEST CATEGORY OF PLASTIC WASTE DISCARDED (2020)

very few products are **recycled** due to **lack of technology** - the **secondhand market** segment is **growing**



STAKEHOLDERS

include **domestic and foreign apparel brand owners, first and secondhand retailers, charities, recycling industry, industry and household users, NGOs, all levels of government**



ECCC DEVELOPED A CONSULTATION DOCUMENT TO ADDRESS PLASTIC WASTE AND POLLUTION FROM THE TEXTILE & APPAREL SECTOR

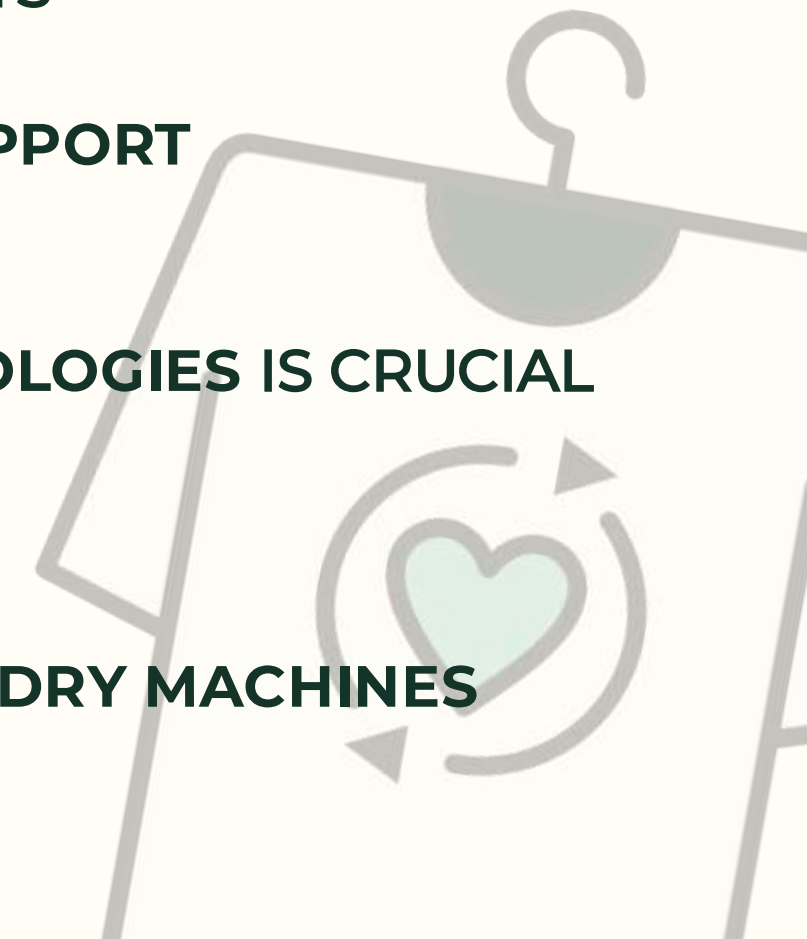
Proposes a **waste management hierarchy** approach that **prioritizes redesign, reduce, reuse, repair, and recycling** of products over energy recovery and landfilling



TEXTILE WASTE AND POLLUTION

KEY MESSAGES HEARD DURING CONSULTATIONS:

- GENERAL SUPPORT FOR DEVELOPING A HARMONIZED EPR PROGRAM FOR TEXTILES
- PRIORITIZE INCREASED DURABILITY AND REPAIRABILITY OF PRODUCTS
- NEED GREATER PUBLIC AWARENESS OF REUSE AND REPAIR, AND SUPPORT FOR THIS ECONOMIC SECTOR
- INVESTMENT IN INFRASTRUCTURE, SORTING AND RECYCLING TECHNOLOGIES IS CRUCIAL
- NEED TO REDUCE THE IMPORT OF FAST FASHION
- SOME DISAGREEMENT ON THE USE OF MICROFIBRE FILTERS ON LAUNDRY MACHINES



WASTE FROM END-OF-USE ELECTRONICS



WASTE FROM END-OF-USE ELECTRONICS

- **ELECTRICAL AND ELECTRONIC EQUIPMENT IN CANADA WAS THE 4TH-LARGEST CATEGORY OF PLASTIC WASTE DISCARDED IN 2020**
 - ➔ 5% was recycled - from 13% that was collected for material recovery
 - ➔ 1% leaked into the environment, and the remaining 94% was disposed of
- **UPSTREAM PRODUCT LIFE EXTENSION SOLUTIONS HAVE GREATER RETENTION POTENTIAL FOR MATERIALS SUCH AS PLASTIC THAN RECYCLING**
 - ➔ Notably, these materials savings are more beneficial than recycling because they are materials in products that are re-used as-is with very little energy input
- **ECCC WILL PUBLISH A CONSULTATION DOCUMENT HIGHLIGHTING ELEMENTS OF A POTENTIAL ROADMAP TO EXTEND THE LIFE OF PLASTICS IN END-OF-USE ELECTRONICS**
- **TARGET PUBLICATION DATE IS IN FALL 2024, WITH A 60-DAY COMMENT PERIOD**
- **IT AIMS TO IDENTIFY ACTION AREAS THAT CAN BE LEVERAGED BY THE FEDERAL GOVERNMENT, IN COLLABORATION WITH KEY PARTNERS/STAKEHOLDERS, SUCH AS OTHER GOVERNMENT LEVELS AND INDUSTRY PLAYERS INCLUDING MANUFACTURERS, REPAIRERS, REFURBISHERS, RECYCLERS, AND OTHERS**

REDUCE

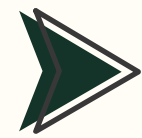
REUSE

RECYCLE

REUSE & REPAIR

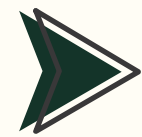


REUSE & REPAIR



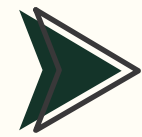
FILL DATA AND KNOWLEDGE GAPS

collecting data through the **StatCan Households** and the **Environment Survey**, the **Federal Plastics Registry**, the **CPP Annual Report**; and **measuring the socio-economic impacts of reuse businesses**



UNDERSTAND ATTITUDES AND BEHAVIORS

77% of Canadians believe that **preventing plastic waste is important** and **72% are willing to participate in reuse systems**, given price parity with **single-use packaging alternatives***



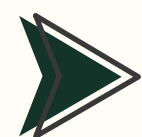
DEVELOP POLICY STANDARDS FOR REUSE

PR3's Reusable System Design Standard



ACCELERATE INNOVATION AND MARKET INFORMATION

- **Canada Plastics Pact's Reuse accelerator pods** including **reusable food containers** at university campuses and **refillable windshield washer fluid containers**.
- **Circular Innovation Council's reusable food take-away container pilot** with major grocery stores in Ottawa (**Fall 2024 launch**)



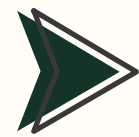
RAISE PUBLIC AWARENESS AND OUTREACH

PACK EX REUSE SHOWCASE, Montréal, 13-14 November 2024

***2024 Impact Canada Survey**

REUSE & REPAIR

Industry Canada's consultation is gathering input to develop a **federal right-to-repair or repairability policy approach, focusing on durability, repairability and interoperability** for home appliances and consumer electronics.



OPEN UNTIL TOMORROW, SEPTEMBER 26, 2024 [ON THE 2024 IMPACT CANADA SURVEY WEBSITE.](#)



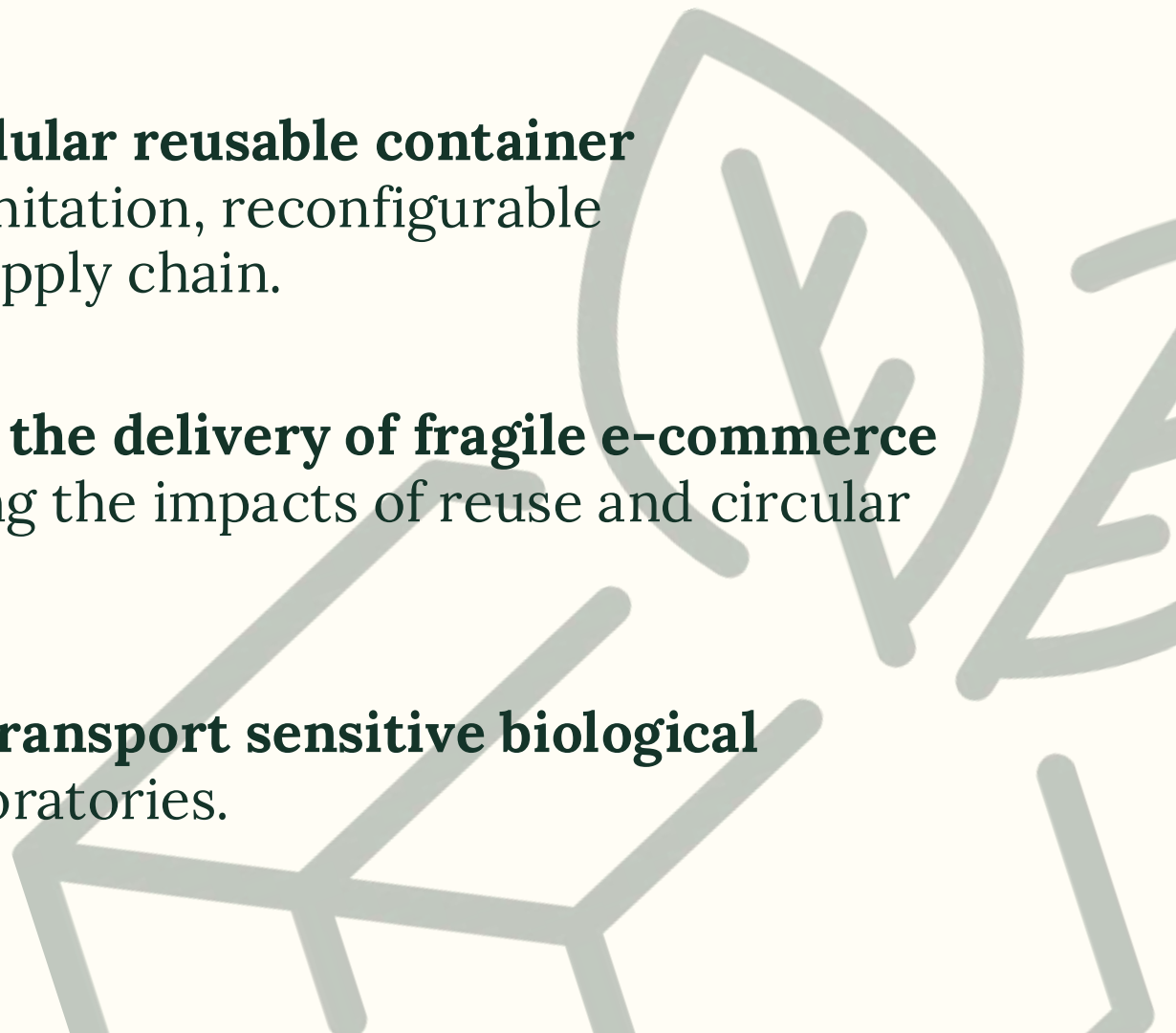
**2024-25 CANADIAN PLASTICS
INNOVATION CHALLENGE
REUSE PROJECTS**



2024-25 CANADIAN PLASTICS
INNOVATION CHALLENGE
REUSE PROJECTS

CHALLENGE: ADVANCING REUSE TO REPLACE SINGLE-USE PLASTICS

COMPANY	DESCRIPTION
ALLIX INDUSTRIES INC.	Develop an automated reusable replacement to single-use industrial plastic wrap for shipping pallets.
CIRCULR INC.	Create a modular reverse vending machine for the collection of reusable goods.
FORPHENO TECH INC.	Research and develop a standardized modular reusable container that allows for automated high-volume sanitation, reconfigurable labelling, and reuse in the food product supply chain.
LES EMBALLAGES PICKPACK INC.	Develop rigid and reusable packaging for the delivery of fragile e-commerce products , as well as a system for measuring the impacts of reuse and circular logistics.
GENEBIO SYSTEMS, INC.	Create a reusable shipping container to transport sensitive biological substances and clinical specimens to laboratories.



KEY QUESTIONS





Stewardship has traditionally focused on **collection and recycling**, and their associated **costs**. What are **producers and PROs** looking at **further up their value chains** to **lower their business costs**, and the **costs of products**? How can the federal government help?

How many companies (or their **PROs**) are looking at the **Scope 3 GHG emission reductions** they can gain through **using recycled plastics** in their **products**? Is anyone working on **quantifying these reductions**? How can the federal government help?

CONTACTS

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

www.Canada.ca/zero-plastic-waste

Canada

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