



Advancing Recycling in B.C.

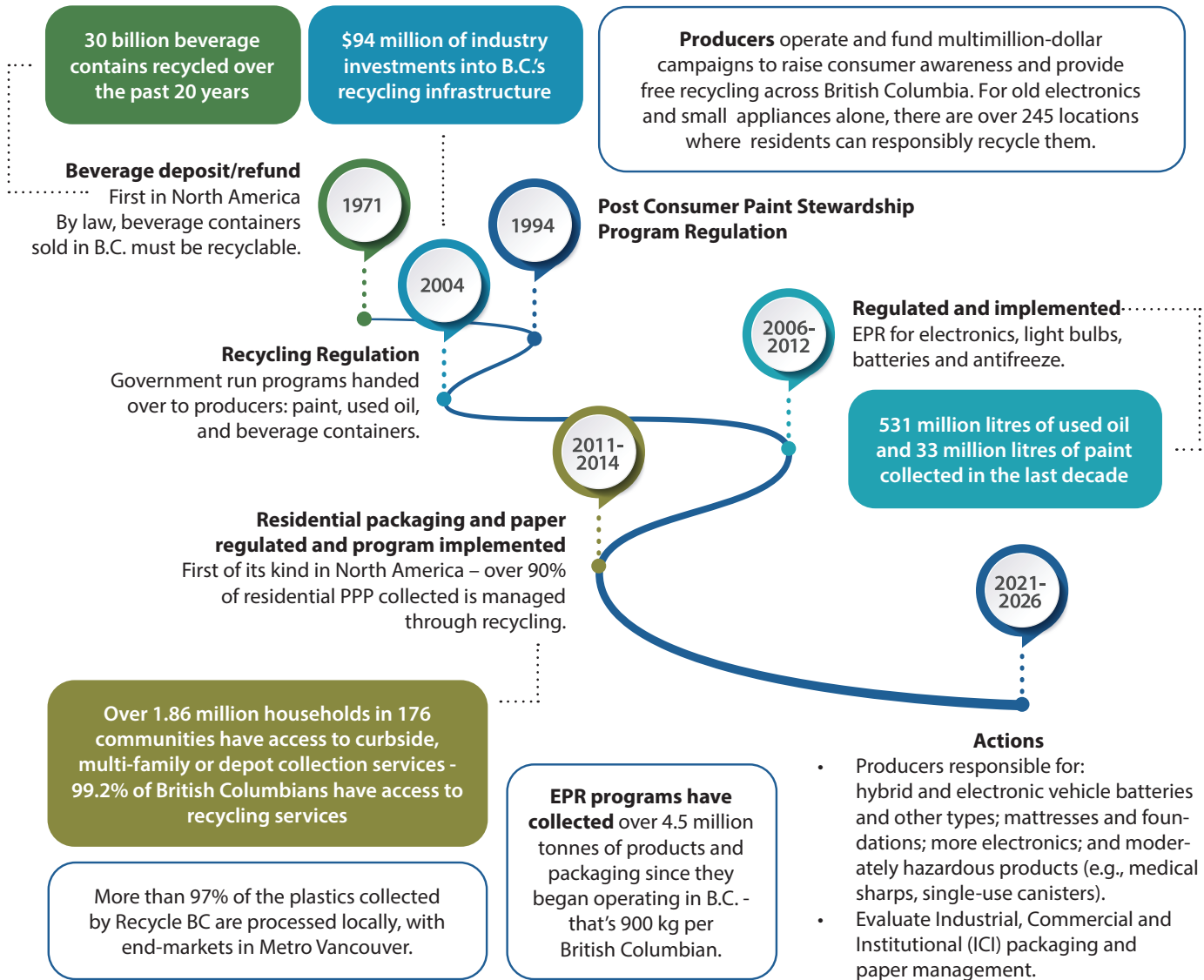
Extended Producer Responsibility Five-Year Action Plan 2021-2026

Introduction

Consumer choice can be powerful. It determines the design, durability and cost of a product, and increasingly it determines what happens to a product once it is no longer needed – finding alternatives to throwing it away, a departure from the traditional “take-make-waste” economy.

Over the last 50 years, British Columbia has been building a better way to deal with waste. The public has called for governments and producers to work together to reduce the impacts from waste on the environment and the health of our communities. This call to action has created provincewide recycling programs and a deposit and refund system, under an initiative where companies take responsibility for the full cost of a product called “Extended Producer Responsibility” (EPR). The EPR initiative responds to the consumer’s desire to reduce or eliminate waste, and the producer’s desire to demonstrate a clear commitment to stewardship of their products.

B.C.’s programs have not only continued to collect the same wide variety of packaging and plastics when the global market makes recycling these items unattractive, but are now expanding the items we collect while continuing to ensure they are recycled to the same high standard. B.C.’s EPR initiative requires all producers to track their material and the way it is processed, which must be verified by an independent auditor and the results annually reported to the ministry and posted publicly. This provides the necessary assurance that materials are not improperly disposed of and/or sent abroad for possible recycling.



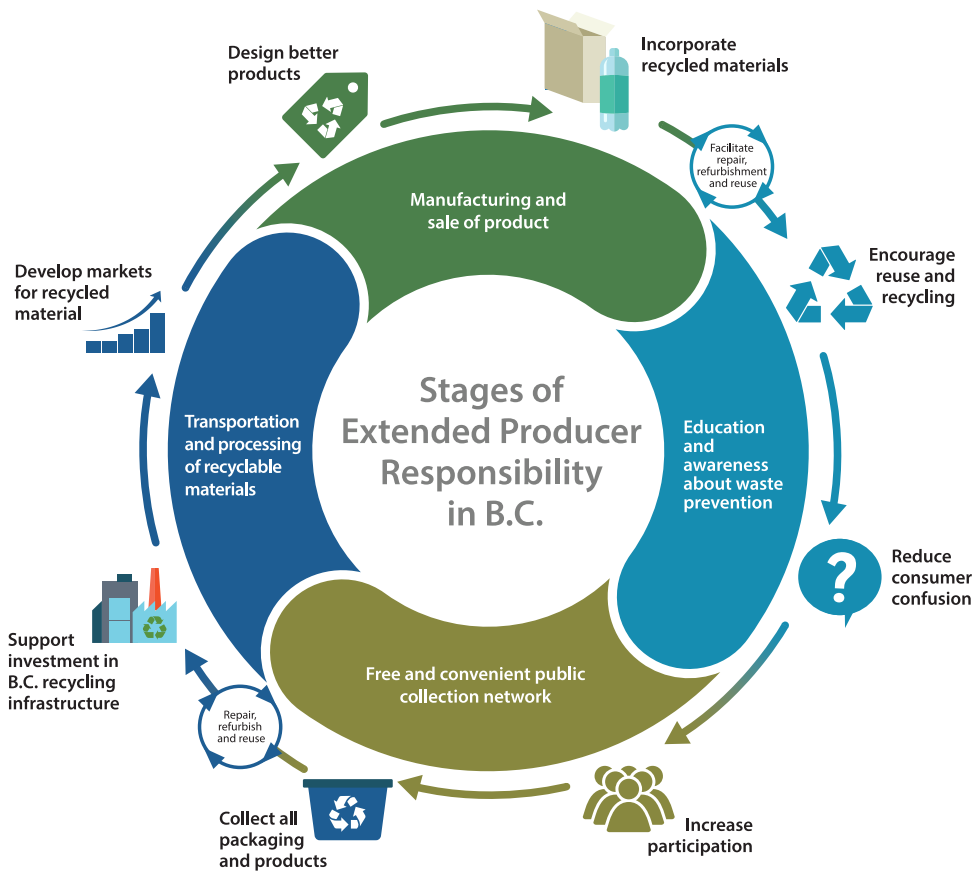
Since 2004, B.C. has regulated the most packaging and products in Canada through EPR under the Recycling Regulation (the regulation). Residential packaging and paper, beverage containers, along with a wide and diverse range of other products (e.g., numerous electronics, light bulbs, tires, automotive oil, antifreeze, paint, etc.) are managed by producers. In one year alone, approximately 315,000 tonnes of plastics, such as those in electronics, beverage containers and other packaging, are captured in B.C.'s EPR programs.

B.C.'s EPR Policy Approach

- Results in less waste in landfills and the environment.
- Ensures convenient, provincewide collection services.
- Reduces consumer confusion and increases participation.
- Requires safe management and higher rates of recycling.
- Producers are responsible for recycling, including the costs, which promotes the design and use of more easily recyclable packaging and products.

EPR requires producers (manufacturers, distributors and retailers) of designated products to take full responsibility for the lifecycle of their products, including collection and recycling. This shifts the responsibility from local and Indigenous governments and taxpayers to the producers and consumers of packaging, paper and products.

B.C.'s EPR initiative supports consumers to make the right choice with end-of-life packaging and products by making curbside and drop-off recycling services widely available at no charge. Producers build the end-of-life costs into the purchase price structure for products and take responsibility in terms of the overall management of a recycling program. This makes it easier for consumers to fulfill their stewardship values for clean communities and protection of the environment.



The success of the EPR program can be measured in both environmental and economic terms. Reuse, recycling and remanufacturing creates more jobs than waste disposal, and supports a circular economy through material reuse and resource-efficiencies:

- A study released in 2016 of B.C.'s EPR system found that in a single year, B.C.'s EPR programs recovered \$46 million worth of materials and reduced greenhouse gas emissions by over 200,000 tonnes (CO₂e).
- As a result of EPR regulation for residential packaging and paper alone, recycling businesses have invested over \$45 million into B.C.'s recycling infrastructure – ensuring not only more packaging and paper is processed locally, but more jobs stay in B.C. as well.

B.C.'s EPR programs collectively generate an estimated \$500 million annually to operate recycling programs and the beverage container deposit-refund system that ensures British Columbians have free and convenient access to recycling services.

Moving Forward – focusing on priorities

The priority actions outlined in this plan are among the most important and immediate actions B.C. must take to advance as a leader in EPR and waste prevention.

B.C. is now expanding the categories of products in the EPR initiative to include:

- Hybrid and electric vehicle batteries and other battery types.
- Mattresses and foundations.
- Compressed canisters, such as single-use camping fuel and fire extinguishers.
- Medical sharps used by people at home.
- Emerging electronics and more moderately hazardous products by clarifying product categories.

More Producers Taking Responsibility

Producers will be responsible for implementing, funding and managing recycling programs for newly added products. A phased implementation based on the product's complexity will give producers the necessary time to establish comprehensive management systems, and submit EPR program plans outlining their operations and performance targets to the ministry for approval. This operational decision making gives producers the flexibility to find the most efficient and innovative ways to meet regulated outcomes – making recycling more accessible for consumers with provincewide collection networks, improving recycling practices, and supporting re-use and resource recovery.

Based on feedback from producers, stakeholders, Indigenous and environmental organizations, and the public, the ministry will work with producers to expand the EPR program to include the following products:

Action: Expanding to include hybrid and electric vehicle batteries and other battery types

- Most single-use and rechargeable batteries are already regulated and responsibly recycled. However, the rapid adoption of batteries in new products and applications, including everything from pet collars to golf carts, has led to some regulatory gaps.



Photo credit: Tire Stewardship B.C.

41 million tires recycled in the last 14 years - many used as a rubberized surface in new playgrounds through EPR program community grants.

- Comprehensive battery management will better safeguard workers from fire risks associated with improper disposal of batteries in the garbage, residential curbside recycling, or the scrap metal industry. The growing inconsistency between regulated and unregulated products also creates inequitable requirements for the producers of similar products. Streamlining the regulation will provide for better oversight and recovery outcomes.

Hybrid and electric vehicle batteries

- By 2040, all new light-duty cars and trucks sold in B.C. will be Zero Emission Vehicles. Unlike other vehicle components that are already regulated and responsibly managed by producers (including lead-acid batteries, tires, oil and antifreeze), a reliable provincewide system to safely repurpose and recycle hybrid and electric vehicle batteries will need to be developed.
- B.C.'s battery recycling sector is already familiar with processing electric vehicle batteries. As B.C. aims to implement the first EPR program for electric vehicle batteries in Canada, it is anticipated that a phased-in approach will support advancements in reuse and recycling, and establish B.C. as a leader in battery recovery and management.

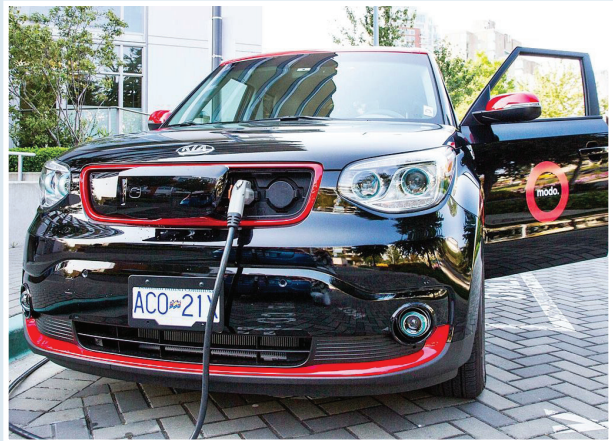


Photo credit: B.C. Ministry of Energy, Mines and Low Carbon Innovation

Action: Expanding to include mattresses and foundations

Mattresses and foundations are highly recyclable products, but at their end-of-life landfilling is currently the only option in some parts of the province, and there is often a drop-off recycling fee where recycling services are available. A formalized provincewide EPR program will help British Columbians by eliminating the financial and accessibility barriers that are preventing many from being able to recycle their used mattresses. These barriers cause unnecessary disposal and lead to high rates of illegal dumping in alleyways and wilderness areas. In Metro Vancouver alone, approximately 10,000 mattresses are abandoned each year, costing municipalities up to \$1.5 million to manage.

The feedback we received shows that EPR for mattresses is a priority for local governments, Indigenous organizations and members of the public. The ministry plans to regulate mattresses and foundations in 2023, with implementation to follow—making B.C. the first province in Canada to establish an EPR program for mattresses.

Though the consultation showed a lot of support for regulating mattresses, we also heard there are some concerns and other key factors that need to be considered, such as:

- Prioritizing safe handling practices for front-line staff from bed bugs, mold and moisture.
- The complex challenges given the different generation sources for mattresses, such as from residential and commercial sectors.

- Consideration of existing reuse and recycling systems in an EPR approach. For example, mattresses are already recycled in some communities; gently used mattresses are often donated to charities and non-profits; and B.C. recyclers have already invested in infrastructure and local processing capacity.
- B.C. retailers need to remain competitive, and the majority already have mattress recovery programs that need to be considered.

Action: Expanding to include moderately hazardous products

Making producers responsible for the products they sell has been demonstrated to drive proper management and responsible recycling, and this level of oversight and diligence is needed for more moderately hazardous items.

Feedback on a wide range of moderately hazardous products varied in some cases, but generally the ministry heard that certain products are consistently showing up for disposal in large volumes throughout British Columbia. These are very costly to manage and can be improperly disposed into the blue box or waste stream, posing serious safety risks to collectors and processors. These include compressed canisters, such as single-use fuel canisters and fire extinguishers, medical sharps and batteries.

Compressed canisters and fire extinguishers

- EPR will support B.C. businesses and technicians operating provincially that safely remove residual gas from canisters, which can be collected to be used again or safely disposed depending on the gas, with the container itself being recycled.

Keeping Mattresses Out of our Landfills



Photo credit: Carston Arnold

It is estimated that regulating mattresses under a provincially EPR approach will mean an additional 100,000 cubic meters of landfill space will be freed up every year. All those mattresses laid end to end would stretch half the length of Vancouver Island.

Making Camping Greener



Photo credit: BC Parks

BC Parks hosted three million campers this summer with most needing to recycle empty single-use fuel canisters. By regulating these canisters, free drop-off locations will be provided throughout B.C.

Medical sharps

- Producers are already operating a voluntary collection system for residents to safely return medical sharps. Building on this, regulation will ensure more comprehensive program delivery, in which producers will be required to make consumers aware of safe disposal practices to ensure public and worker safety while also providing greater access to collection locations across the province – both of which will help to reduce instances of dangerous disposal in public spaces, residential curbside recycling and garbage.

Action: Expanding product categories through broader product definitions

We know that we must both expand and accelerate our action on recycling and preventing waste. While we work at adding new products to the regulation, we will also continue to work on redefining the existing product categories for electronics and moderately hazardous products. Our focus will be on broader, more generalized definitions as opposed to product-specific lists, with the intention to capture most products, including new ones that enter the marketplace in the future. This change will create greater certainty for producers and regulators to plan for more material recovery and recycling. This will also ensure new electronics and moderately hazardous products are easy to identify under the program—reducing confusion for consumers, retailers and collection facility staff alike.

Phased Approach for Packaging and Paper from the Industrial, Commercial and Institutional (ICI) Sector

Action: Evaluating opportunities and policy options for ICI materials

In 2014, B.C. led the nation by being the first province to make producers fully responsible for managing residential packaging and paper products. Today, producers successfully operate an efficient provincewide recycling system that collects and manages over 186,000 tonnes of material each year. Most materials are collected through curbside programs, from multi-family residences, or a network of more than 200 recycling depots across British Columbia.

However, packaging and paper products beyond the residential stream are not regulated, and are independently managed as waste or through recycling. These products are found in office buildings, warehouses, stadiums, grocery stores and food services, institutions, and agricultural applications. Collectively, they are referred to as the Industrial, Commercial and Institutional (ICI) sector.

Stakeholders and key partners have identified the ICI sector as a large contributor to overall waste in the province, and expressed a desire to expand EPR to include ICI-generated waste and recyclables. For example, Metro Vancouver alone reported 95,000 tonnes of plastic and paper were landfilled in 2020 by commercial and institutional businesses and organizations in the region. Rural communities with limited services and market accessibility report that considerable amounts of packaging from the ICI sector is still landfilled. However, feedback from stakeholders on this product type has varied significantly, confirming the ICI sector is complex and requires a measured, phased approach.

The first step is to better understand how ICI material is diverted from landfills and the recycling rates for the broad range of material types generated from this sector. There are many factors to consider, such as the accessibility and cost to recycle in rural and remote communities, the types and quantities of recyclable materials being generated, and contamination levels of the materials. To that

end, during the first year of the plan, the ministry will support data collection and research to better understand the management of packaging and paper in the ICI sector. The results will be used to determine a policy approach to manage ICI materials that drives the best environmental outcomes, considers the management systems already in place, and supports a circular economy.

Contributing to the Circular Economy

Recycling is a key component to support a circular economy

Unlike waste management, where local and Indigenous governments are typically responsible for providing collection services to their residents (think garbage), under EPR in B.C. the producers of products co-ordinate and operate comprehensive, provincewide recycling systems that keep materials in use. These systems support one of the contributing key elements that helps drive a circular economy.

Circular economy is an approach that maximizes value and eliminates waste by improving, and in some cases transforming, how goods and services are designed, manufactured and used. It touches on everything from material to business strategy to the configuration of regulatory frameworks, incentives, and markets.¹

Taking action on plastic waste and marine debris

Recognizing that British Columbians want action on waste prevention, the 2019 [CleanBC Plastics Action Plan](#) engagement process gathered valuable feedback on new policy opportunities and regulatory amendments to address plastic waste. This led to action on a number of interconnected initiatives to support B.C.'s circular economy, preventing waste in the first place and expanding recycling and recovery. This will keep waste out of the natural environment, off the streets of our communities, and out of our lakes, rivers and shorelines – while reducing the amount that ends up in the landfill.

- *B.C. is a partner of the [Canada Plastics Pact](#)*
 - Collaborating with industry, government and non-profit organizations from across the entire plastics sector to address plastic waste, keeping it in the economy and out of the environment.
- *B.C. is phasing out single-use plastics and working with all levels of government*–The Province recently gave municipalities throughout B.C. the authority under the [Community Charter](#) to ban plastic bags and certain single-use plastics without the need for ministerial approval, making it easier to prevent plastics from polluting their communities. B.C. is also actively involved in the development of a Canada-Wide Strategy and Action Plan on Zero Plastic Waste. The Province continues to develop a legal framework that could allow the province to ban single-use and plastic items provincewide.

The Recycling Council of BC

With financial support from the Province, the Recycling Council of BC (RCBC) is B.C.'s most comprehensive single-source of recycling information.

Their 1-800 Recycling Hotline and Recyclepedia app has the answers people need about how and where to recycle and safe disposal options. In 2020 alone, the organization answered over 247,000 questions on recycling, reuse, and general waste prevention.

¹ Circular economy as defined by Canada's Circular Economy Lab

- B.C.'s [Clean Coast, Clean Waters Initiative](#) - A collaboration of tourism and nonprofit sectors working with Indigenous nations; the initiative funds projects to remove marine debris and plastics from B.C.'s shorelines, maximizing the amount of material reused and recycled.
- The [CleanBC Plastics Action Fund](#) - Launched in 2020 to support B.C.-based innovators and companies to reduce the use of virgin plastics and make better use of post-consumer recycled plastic in manufacturing processes.

Furthering B.C.'s position as a leader in EPR

- *EPR is a critical component to address single-use plastics recovery and recycling* - The ministry made regulatory changes in 2020 that help modernize the Recycling Regulation and will see all beverage containers part of the deposit-refund system in 2022. This includes milk containers, which will lead to an estimated 20 to 40 million more milk containers being recycled annually. Single-use items and more packaging products such as boxes of sandwich bags will also be collected under the regulation's packaging and paper products category as of 2023.
- *Taking our success national* - With many other provinces now embarking on EPR, there is a desire by all involved to support national EPR consistency, such as priority products and reporting. We will continue working with other jurisdictions on common approaches to EPR that will bring greater consistency and better outcomes.
- *Focus on Indigenous communities* - B.C.'s EPR producers and their agencies have created the First Nations Recycling Initiative to ensure these smaller and often remote communities can participate.

Recycling in Remote and Indigenous Communities



Photo credit: ElectroRecycle

The First Nations Recycling Initiative (FNRI) is a collective of nine B.C. EPR programs working with Indigenous communities to support recycling in communities throughout British Columbia. A First Nations Field Services Specialist works to raise awareness, and offer resources to support recycling, and community collection events. To increase recycling access across B.C., there is also collaboration with Indigenous Services Canada (ISC) and the Indigenous Zero Waste Technical Advisory Group. In 2020, 44 Indigenous nations participated in the RecycleBC program for residential packaging and paper.

Accessible only by water, Ahousaht First Nation continues to be the most remote collection event for small appliances. The community has also partnered with RecycleBC to collect residential packaging and paper through curbside and depot collection. Working with community recycling partners is key to their success.

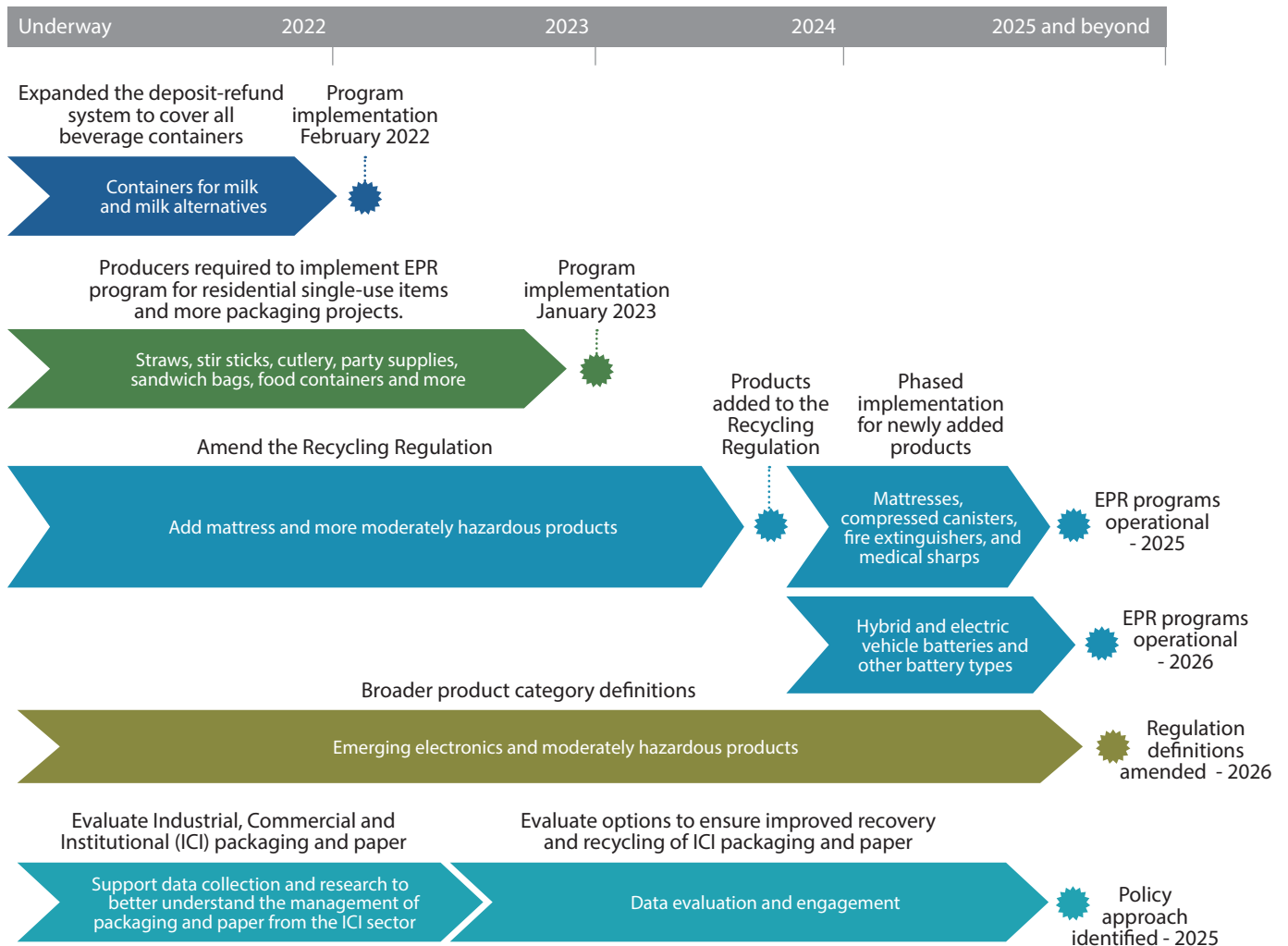
- *Responsible recycling is supported by B.C. businesses and workers* - The materials collected through our vast depot and curbside network are transported to material processing facilities in B.C. Throughout this process, producers ensure the workers handling and processing their materials are kept safe, and the environment protected by adhering to high standards.

The Province is committed to keeping pollution out of our oceans and waterways, reducing waste, and incentivizing a circular supply chain for plastics. Meeting these goals requires a determined effort to increase recycling and recovery of materials. B.C. was an early supporter of implementing waste-reduction policies and continues to lead the nation with a robust and successful EPR initiative.

To date, EPR programs have collected over 4.5 million tonnes of packaging and products since they began operating in B.C. At the individual level, British Columbians disposed of an average of 501 kg of municipal solid waste per person in 2019 – a reduction of 66 kilograms per person since 2012. This downward trend is positive, but without more action, B.C.’s landfills will run out of space.

Adding more product categories under EPR and increasing resource recovery is critical to help shift the way most people view waste – from something that is meant to be used and then disposed of to reclaiming and reusing materials again and again as part of a growing circular economy.

Extended Producer Responsibility Implementation Timeline



We recognize the need for timely action. We have a pathway to implement initiatives with our partners and we will accelerate timelines if we can.