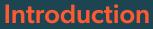


ROADMAP TO 2025 A Shared Action Plan to Build a Circular Economy for Plastics Packaging

V1 October 2021



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Introduction

Plastics are a vital part of daily life and a deeply integrated part of the economy across Canada and around the world. They are high performing, lightweight and low cost. From the grocery store to the office to the hospital's emergency ward – from juice containers to N95 masks – plastic products and plastic packaging enable and enrich our lives each day.

But we also pay a price for these benefits. Plastic waste has become one of the most pressing issues of our time, a growing pollution problem that Canadians broadly agree, along with people in countries around the world, urgently needs to be addressed. For example, a mere 12 percent of Canada's plastic packaging is recycled at present, and the bulk of these plastics are generated from virgin fossil fuel resources, contributing to increasing greenhouse gas emissions and the associated outcomes. This is the crux of the challenge.

We know we can do better. We can eliminate plastic waste while creating new opportunities to innovate and create jobs throughout the economy. We can build a future for Canada in which plastics are valued and never become waste.

The way we can do this is by moving from our take-make-waste linear economy, to a **circular economy** based on three principles:

- 1 eliminate waste and pollution;
- 2 circulate products and
- materials;
- **3** and regenerate nature.

The transition to a circular economy for plastics not only reduces pollution and greenhouse gas emissions, it also creates jobs and fosters economic activity.¹

A global movement is emerging around a circular economy for plastics, uniting leaders in business, government, and the nonprofit sector, to revolutionize how we design, use, reuse, and recirculate plastics. The Canada Plastics Pact has joined the ranks of this movement, bringing together leading actors from across the plastics value chain in a collaboration of unprecedented scale and ambition to create a smarter, cleaner circular economy. Plastics have a crucial role to play in Canada's future. Plastic waste doesn't. We must be the generation that puts a stop to it for good. This is the mission that drives the Canada Plastics Pact and inspires the Roadmap presented here.

¹ "Economic Study of the Canadian Plastic Industry, Market and Waste", Environment and Climate Change Canada, 2019

About This Document

Creating a circular economy for plastics packaging in Canada that eliminates waste requires unprecedented collaboration. This has emerged through the Canada Plastics Pact (CPP), and as a Roadmap for the path this collaboration will take. This document is intended to both speak to the technical details of the issue of plastic waste and engage a wider readership interested in a problem widely recognized as significant and urgent.

While the CPP's focus is plastics overall, the Roadmap focuses on plastics packaging. This has been chosen as the starting point for three reasons:

plastics packaging represents nearly 50% of the plastics produced in Canada each year;² after it's short first-use cycle, an estimated 95% of plastics packaging material value is lost;³ and there is both a clear path and momentum from key businesses, governments and organizations across Canada for addressing the challenge of plastics packaging. The Roadmap is the result of a collaborative, participatory process involving over 200 individuals and organizations from across the plastics packaging value chain in Canada. It intends to present a full view of the challenge, the opportunity, and the path to transition to a circular economy for plastics packaging. It captures the full breadth of what's needed for this transition and asserts that because of their interconnected nature, actions must be pursued simultaneously and systemically to succeed, rather than narrowing in on any one part of the value chain.

To account for this complexity, this document is a Version 1. It's intended to be iterative, revisited, and updated at least yearly to account for the changing context and progress made.⁴

² ECCC, 2019.

³ "The New Plastics Economy: Rethinking the future of plastics", Ellen MacArthur Foundation, World Economic Forum and McKinsey & Company, 2016.

⁴ At the time of publishing the Roadmap, important issues have only begun to be explored within the CPP (for example, how the issue of a circular economy for plastics packaging intersects with social and equity issues and how the plastics ecosystem should best contribute to regeneration of the natural environment) and will be considered more fully in subsequent versions of this document.

Planning Hierarchy

How the Roadmap fits into the overall strategy and context of the CPP to set us in the direction of a circular economy for plastics packaging. New Plastics Economy Vision A circular economy for plastics packaging and Canada Plastics Pact Mission

2035 Vision and Strategy

for Circular Plastics Packaging in Canada

ROADMAP TO 2025

2025 Strategy, Priorities and Outcomes

2025 Targets

Key Opening Moves 12-24 months

CPP Annual Plans

About This Document

The audiences for this document include:

- CPP Partners
- Officials in municipal and provincial governments as well as several departments of the federal government whose work impacts the plastics ecosystem in Canada
- Recyclers and waste managers
- Producers, retailers, and brand owners of products in the plastics value chain
- Investors in companies in the plastics value chain and also those that could bolster technology, innovation and infrastructure investments into circular solutions

- Canadians in general who participate in the plastics value chain in their daily lives
- Other Plastics Pacts and organisations around the world working toward the shared goal of creating a circular plastics economy

For each of these audiences, this document can be both an inspiration for action and allow for alignment of organizational priorities to this shared action plan.

This document is divided into two main parts:

Part 1: The Vision

This section outlines a national vision for a circular economy for plastics packaging in Canada in 2035 and lays out the broad agenda that CPP's Partners share and that should be embraced ubiquitously across Canada by all those working in plastics packaging ecosystem. This longer-term Vision, 10 years beyond the CPP 2025 targets and specific plan, is intended to catalyze change and inspire bold action among the CPP's Partners and beyond.

Part 2: Route to 2025

This section is the CPP's strategic plan to 2025, providing a clear and detailed overview of the steps the CPP's Partners will be taking together to meet specific plastics packaging targets and send Canada's whole economy well down the road to achieving our 2035 Vision. This section includes details on specific contributions that individuals and organizations across Canada can make to help accelerate Canada's transition to a circular economy for plastics packaging.

Finally, in a separate, supplementary document (Roadmap to 2025 Supplement), you can find details about the context, assumptions, and approach that have informed the Roadmap. It's provided in the spirit of transparency, to allow this thinking to be challenged and revisited in a way that aligns with the iterative approach of the Roadmap.

About the CPP

The Canada Plastics Pact (CPP) is tackling plastic waste and pollution, as a multi-stakeholder, industry-led, cross-value chain collaboration platform. The CPP brings together Partners who are united behind a vision of creating a circular economy in Canada in which plastic waste is kept in the economy and out of the environment.

Launched in January 2021, it unites 70+ businesses, government, non-governmental organizations and other key actors in the local plastics value chain behind clear actionable targets for 2025. The CPP is a member of the Ellen MacArthur Foundation's Global Plastics Pact network. It operates as an independent initiative of The Natural Step Canada, a national charity with over 25 years experience advancing science, innovation, and strategic leadership aimed at fostering a strong and inclusive economy that thrives within nature's limits.

The CPP is committed to the principles established by the Ellen MacArthur Foundation's (EMF) New Plastics Economy initiative and a vision for a circular plastics economy across Canada. Establishing a circular economy for plastics will mean eliminating unnecessary and problematic plastics packaging, innovating to ensure that necessary plastics packaging is reusable, recyclable, or compostable, and circulating all plastic packaging items to keep them in the economy and out of the natural environment.

The CPP is driving toward four 2025 targets for plastics packaging in Canada:



of plastic packaging that is to be designated as problematic or unnecessary and take measures to eliminate them by 2025.

Support efforts towards 100% of plastic packaging being designed to be reusable. recyclable or compostable by 2025.

Undertake ambitious actions to ensure at least 30% that at least 50% of plastic packaging is effectively recycled or composted by 2025.

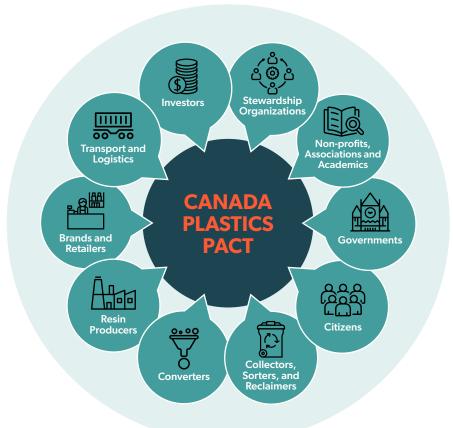
Ensure an average of recycled content across all plastic packaging (by weight) by 2025.

About the CPP

The CPP plans to pursue these targets through a range of initiatives. In the market, the CPP will work to deliver and amplify clear market signals, align partners on standards, and encourage voluntary commitments and business collaborations. On the innovation front, the CPP aims to accelerate innovation and support organizations across the value chain with their pilots, scale-up and on-the-ground learning to address systems challenges. And in policy circles, the CPP will help to encourage alignment throughout the plastics value chain on effective policies and standards that will lead to a consistent regulatory environment. All together this

should be seen as a mix of voluntary initiatives that go over-and-above, and complement and inform the work of all levels of government, including the Canadian Council of Ministers of the Environment.

The CPP will report progress toward these targets publicly each year. The CPP is using its 2025 targets as milestones of progress toward a broader 2035 Vision (introduced in this report) of building a circular plastics packaging economy in Canada, rather than the end goal for the transition. As such, the CPP will also include a regular evaluation of how the targets contribute toward this broader vision.



The Plastics Value Chain

PART 1 THE VISION

The Vision: **A Circular Plastics Packaging Economy in Canada**

We must begin with a vision of what success looks like and in that spirit present an inspiring 2035 vision of a circular plastics packaging economy in Canada.

The CPP has developed this vision with a clear understanding of the Canadian context, aligned with Ellen MacArthur Foundation's Vision for a New Plastics Economy. We know that significant buy-in from both the general public and policymakers at every level of government is vital to our success. We have also identified a crucial role for the industrial, commercial and institutional (IC&I) sector, which is responsible for more than half of the plastics packaging used in Canada. And we recognize that in a highly integrated North American economy, this must be more than a

"made-in-Canada" solution.

The CPP has brought together the broadest coalition of private, nonprofit and public sector partners ever assembled in Canada to address these challenges. Together, we have developed a vision for a circular economy for plastics packaging in Canada and assembled the collective will to drive rapid, unprecedented change. Our strategy (see diagram on next page) is the first major step in pursuit of this vision. This vision of a circular economy in 2035 is not a static target, but rather an inspiring picture representing an ambitious series of strategies, principles, and transformations, leading to a viable new economic order for plastics in Canada and beyond.

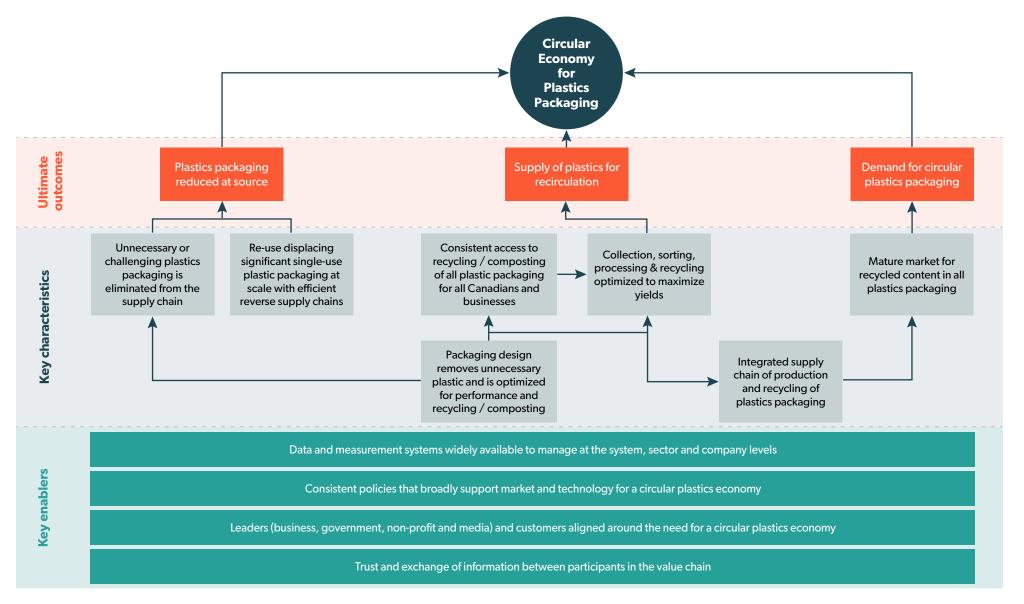
collective will to drive rapid, unprecedented change.

Together, we have developed

a vision for a circular economy

for plastics packaging in Canada and assembled the

2035 Strategy for a Circular Economy for Plastics Packaging in Canada





What would this circular economy look like? Let's look ahead to 2035 and imagine how Canada will operate once this vision of a circular economy for plastics packaging has become reality.



The year is 2035 – a new era in which all countries around the world have prioritized the development of a global circular economy as a means to addressing the unprecedented and unsustainable challenges of climate change, pollution, and biodiversity loss. This has created momentum behind the development of Canada's circular economy for plastics.

Upstream innovations in reuse and refill business models and circular packaging design (packaging concepts, formats, components and material choices) have become widespread. This has helped to optimize and effectively reduce the amount of plastic used for product delivery and minimize waste. More than 90 percent of plastic packaging used in Canada is collected from the residential sector and Industrial, Commercial and Institutional (IC&I) sectors. Overall, 1.5 million tonnes of the plastic packaging used in Canada in 2035 – representing 75 percent of the total put on the market – is being returned to manufacturing as recycled resin or chemical carriers to produce new plastics in North America.

Citizens have come to broadly expect businesses and governments to actively support a circular economy for plastics packaging, and are themselves enthusiastically participating in recycling, reuse, and refill programs that have become both easy and ubiquitous. Plastics are widely recognized as valuable industrial materials and their place in the circular economy is now broadly understood.

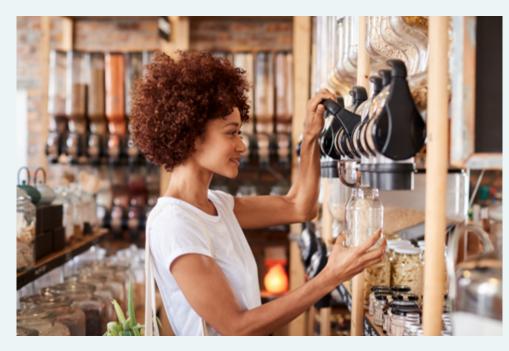
As a result, the overall amount of plastic packaging has not effectively grown since 2025, even as its value has increased. Recycled polymers are now both cost-competitive with virgin polymers and represent the preferred option.

The CPP, its signatories, and its partners are recognized as having played a pivotal role in these achievements and served as the incubator for the necessary collaboration throughout the value chain.

Achieving these outcomes in 2035 was driven by three key factors:

- the scaling up of national and international recycling supply chains for the collection and sorting of plastic packaging, driven by Canada's largest consumer product and retail users;
- 2 strong and sustained demand for recycled content by those same actors; and
- 3 a harmonized policy environment, federal and provincial, that has enabled the supply side, the demand side, and the investments necessary for this transition.

What's more, Canada has emerged as a leader as North American and global market forces have shifted sharply toward circular plastics materials, technologies, and business models.



How has Canada reached these goals?

Upstream innovation was prioritized, first and foremost, over downstream changes in the recycling system. Businesses undertook portfolio-wide changes to their plastics packaging; identifying and successfully eliminating unnecessary plastics packaging and those items that remained challenging for recycling systems. Reverse-supply-chain innovators and retailers enabled rapid piloting, testing, and widespread scaling of returnable, refillable and reusable packaging systems to supplement and reduce the need for recycling. These took advantage of the steady decarbonization of transportation and new commercial relationships between consumer products companies and retailers. In the case of producers assuming responsibility for residential recycling, British Columbia, Ontario, and Quebec led the way. This leadership then drove systemic change in the collection and sorting of fossil and organic plastic packaging, with producers eventually assuming this responsibility nationwide, using consistent performance standards across all provinces.

Producer-funded regional recycling programs, meanwhile, have driven scale in the collection, consolidation, transfer, sorting, and processing of materials. And Canada-wide commercial arrangements have been made with private and municipal waste collection and recycling service providers to deliver residential recycling of all plastics on behalf of producers. Materials recovery facilities (MRFs) deployed on behalf of producers have been designed to incorporate state-of-the-art plastics sorting, meeting the material quality specifications of downstream recycling processes.

There has also been a significant acceleration in the technological evolution of plastics recycling since the announcement of national recycled content standards. Resin producers across North America, and especially in Canada, have taken measures to secure access to sustained volumes of sorted postconsumer-resin (PCR) plastics.

With both a guaranteed supply of sorted plastics and demand from resin producers and plastics converters, mechanical recyclers have scaled up their operations significantly. Chemical recycling technologies burdened by previously marginal economics have also been able to accelerate innovation and scale up with investment by forward thinking investors and governments in the development of technology along with national and regional infrastructure required to make this possible.

Plastics recycling has further benefited from the transmission of performance data and price signals. These are being generated by producer systems to sort, collect, and recycle plastics, and to inform producers of the impacts that their packaging choices have on recycling systems. These impacts are now captured in detailed information generated by the Enterprise Resource Planning (ERP) systems of producers and retailers. Improved traceability and consistent certifications for recycled content have given further strength to the circular plastics packaging economy.

Leading businesses and facilities in the IC&I sectors, meanwhile, have taken bold action to improve the reuse, recycling, and recycled content of plastics packaging, efforts later reinforced by Canadian jurisdictions that have instituted policies for these sectors to drive the broader transition. This has led to the diversion of plastics from disposal to MRFs established to process residential materials, further improving their sorting and recycling economies of scale and helping to continually optimize the system.



By 2035, alternative ways of making plastics, using less carbon intensive methods and feedstocks (including biobased sources), have become commercially viable and socially and ecologically sustainable.

Canada's competitiveness in these new chemical enterprises is the product of innovation in chemical catalysts and abundant low-cost renewable energy. These innovations have helped to enable both the low-cost capture of carbon dioxide and the production of renewable hydrogen.

The management of certified compostable plastics at the end of life, including the development of standards, processes, and infrastructure have helped to resolve the challenge of contamination in post-consumer-resin and industrial composting content streams.

PART 2 ROUTE TO 2025

The Current Status of Plastic Use in Canada

In order to take action toward a circular economy for plastics in Canada it is important to take note of where we are starting and where members of the plastics packaging value chain have already made some progress and innovations.

In April 2021, the CPP published a foundational research study on Canadian plastic packaging flows. The report reviewed the quantity of plastic packaging generated across Canada to understand how plastic packaging is being managed, drawing on the best available data and estimates. The CPP found that as of 2019, Canadians consumed approximately 1.89 million tonnes of plastic packaging per year, with rigid packaging making up 53 percent of that total and flexible packaging contributing 47 percent. The overall recycling rate for all plastic packaging is approximately 12 percent, with rigid packaging

recycled at a rate of 21 percent and flexible packaging recycled at a rate of one percent.

This foundational study has helped the CPP identify the main challenges to meeting its targets and highlights unique aspects of the Canadian context that must be taken into account to build a circular economy nationwide. The study has also reinforced the need for the CPP's unprecedented collaboration of public and private partners to harness the power to drive rapid, large-scale change, coordinating all initiatives toward our collective vision.

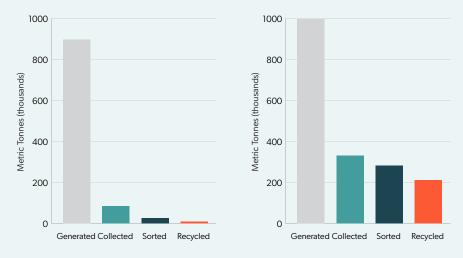
Canada generated **1.89 million tonnes** of plastic packaging in 2019.



47% flexible packaging 53% rigid packaging

Recycling Performance of Flexible Packaging

Recycling Performance of Rigid Packaging



Source: CPP Foundational Research and Study, Canadian Plastics Packaging Flows

2025 Strategic Priorities

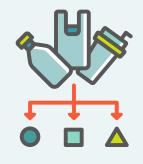
As a broad and diversified network of leaders in Canada's plastics value chain, we will continue to work on a spectrum of projects and issues that help evolve a circular economy for plastics – adjusting over time to changes in our context, and seizing opportunities as they arise.

To have the greatest influence on the broader system, the CPP and it's Partners will need to invest their time, energy, and resources wisely.

As such, establishing our strategic priorities represents one of the most important choices the CPP has had to make, determining where our focus will be – and where it won't – as we embark on the first opening moves in this transition.

Here are our three top strategic priorities at present:

Priority 1: Reduce, reuse, collect.



Over two-thirds of the plastics packaging that is produced in Canada goes to landfill or leaks into the environment, before ever being placed in a blue bin or entering the recycling system. Addressing this challenge will require a multi-dimensional approach, in particular innovation upstream of the recycling system. Unnecessary, hard-tocollect, hard-to-sort, and hard-to-recycle

packaging – formats and resins that almost exclusively end up in landfill, are not collected, or which leak into the environment – must be phased out entirely. The CPP will drive the development of an innovation ecosystem for reuse and refill business models, ensuring new investments (with a particular focus on food contact and IC&I packaging), and informing relevant policies. We will bring an aligned approach to citizen and customer engagement, from businesses, governments, nonprofits, and media, reducing confusion and improving collection.

2025 Strategic Priorities

Priority 2: Optimize the recycling system.



Recirculating plastics packaging presents significant challenges – both in the supply of plastics to the recycling system and on the demand side, regarding the incorporation of recycled content. To overcome these, the CPP will improve the quality of inputs to the recycling system by driving wide

adoption of circular packaging design standards, which will improve recyclability, and drive changes that will reduce fossilbased plastic packaging use overall. The CPP will also gather and share evidenced-based research to ensure producers and others financing the recycling system have the best information to make investment decisions for new recycling infrastructure. And, we will boost demand for recycled resin through focused efforts to address some of the technical challenges for incorporating recycled resins, particularly in food contact and flexible applications, and inform relevant policies.

Priority 3: Use data to improve the whole system.



There are significant challenges facing the identification of the most crucial activities and strategies to accelerate the circular transition, including: the absence of a common language; poor communication between key actors in the plastics packaging ecosystem (for example,

between packaging designers and MRF operators); and lack of information about what plastic packaging is generated, where it goes, and how it is used and collected, particularly for the IC&I sector. The CPP will improve the performance of recycling systems by championing standard definitions and measurement practices. The CPP will also champion development of a nationally comprehensive view of what packaging is put on the market, where it goes, and what is collected, sorted, recycled, and reprocessed, with a specific focus on areas of weakness (e.g. the IC&I system). And, we will work to drive investment into better real-time data and monitoring.

2025 Strategic Priorities

Cross-cutting theme: Films and flexible packaging

Given the activities our partners are engaged in across all aspects of a circular economy for plastics packaging, the CPP is uniquely positioned to address "first move" areas in highly under-optimized systems and turn them into major opportunities. Films and flexible packaging is one such underperforming area already identified by the CPP – with recycling rates of only 1%. We will make this a special cross-cutting focus across all of the strategic priorities and many of the key outcomes.

We will also collaborate with other organizations and initiatives from the Ellen MacArthur Foundation's network, including the global Small Format Flexibles project, ANZPAC, the UK Plastics Pact, and the US Plastics Pact, to maximize collective learning and accelerate collective progress in this area.

Regarding the CPP's top three strategic priorities, our partners have collaborated to identify Outcomes (linked to specific CPP targets as noted in Part 1) and Key Opening Moves, as enumerated on the following pages. Outcomes are long-term results the CPP expects to achieve in 2025, while Key Opening Moves are opportunities for immediate action in the next 12 to 24 months (through 2023) that will be updated as progress is made.

Priority 1: Reduce, Reuse, Collect.

Outcome linked to CPP targets 1234

					Ro	oles									Tim	ing					
Outcomes	Key Opening Moves		Le	ad (L) (Co-Lead	d (CL) S	Support	: (S)			20	21			20	22			20	23	
		CPP	B&R	M&C	C&R	KP	NGO	G	O&E	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Ql	Q2	Q3	Q4
Outcome 1.1 By 2025, additional	1.1.1 Define robust criteria for assessing "problematic" or "unnecessary" plastics packaging.	L	CL	S	S	S	S														
unnecessary and challenging plastic packaging are phased out, beyond what is	1.1.2 Identify a full list of plastics packaging for elimination and/or reduction along with timelines ("beyond the GDRs").	L	CL	S	S	S	s														
identified in the Golden Design Rules (GDRs) and related Canadian guidance (referenced under Outcome 2.1) and	1.1.3 All CPP signatories will have a phase-out plan for plastic materials identified by the federal government under the proposed regulatory instruments.	S	CL	CL																	
any federal regulation.	1.1.4 Every CPP signatory will put an action plan in place to eliminate the items identified by the CPP.	S	CL	CL																	
12	1.1.5 Compile research that will provide guidance on alternatives to eliminated formats based on recyclability and sustainability criteria.	L	S	S	S	CL	S														
Outcome 1.2 Drive investment into reuse and refill innovations.	1.2.1 Define the state of plastics packaging reuse and refill models and innovations in Canada, identify the barriers to achieving scale, and propose a set of recommendations regarding areas where scale could have a high impact (e.g. foodservice packaging and B2B).	L	S	S	S	S	S	S													
	1.2.2 CPP signatories will participate in 10 reuse or refill pilot projects (some of which may already be underway) and compile lessons to inform future directions.	L	S	S	S	S	S	S													
	1.2.3 Establish a coalition of organizations that are investing in reuse and refill business model innovation, such as business accelerators, incubators and universities.	L	S				S	S													

CPP: CPP Secretariat **B&R:** Brands and Retailers **M&C:** Manufacturers and Converters **C&R:** Collectors and Reclaimers **KP:** Knowledge Partners and Resin Producers **NGO:** Non-profits, non-governmental organizations, and academic institutions **G:** Governments **O&E:** Other experts and stakeholders

By 2025, establish broad alignment across Canada on communication with businesses, governments, media and citizens, including program or packaging- level (labelling) communication and behaviour-change interventions in order to improve collection and address business and consumer level confusion. 1 2 3 Outcome 1.4 Inform innovation, technology and R&D strategies and policies for achieving a fully circular, net-zero emissions plastics		1				·				1			Cu				· tang	,010			
					Rc	oles									Tim	ning					
Outcomes	Key Opening Moves		Le	ad (L) (Co-Lead	d (CL) S	Support	t (S)			20	021			20	022			20	23	
		СРР	B&R	M&C	C&R	KP	NGO	G	O&E	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Ql	Q2	Q3	C
By 2025, establish broad alignment across Canada on	1.3.1. Conduct a full jurisdictional scan (in Canada and in other Plastics Pact regions) of dominant narratives and messaging, and resultant behaviours and perceptions, regarding plastics packaging.	L					CL	s	S												
with businesses, governments, media and citizens, including program or packaging-	1.3.2 Develop a communications plan that defines key messages and main audiences and provides assets, including case studies, for CPP Partners to demonstrate circular solutions for plastics packaging in Canada.	S	CL	CL	S																
behaviour-change interventions in order to improve collection	1.3.3 Carry out continuous monitoring of narrative effects and feedback and refine the communications approach based on this feedback and other requirements identified by CPP Partners.	L						S													
and consumer level confusion.	1.3.4 Review existing and emerging on-pack labelling for effectiveness and uptake, and provide guidance on opportunities for improvement.	L	S				S	S	S												
	1.3.5 Convene retailers, brands, stewardship organizations, NGOs, and governments across the entire plastics value chain to collect best practices and build a common roadmap for citizen education and behaviour change to improve collection and reduce confusion.	L	S	S	S	S	S	S													
Inform innovation, technology and R&D strategies and policies for achieving a fully circular, net-zero	1.4.1 Urgently galvanize CPP Partners and outside experts to build a comprehensive plan for addressing the complex challenge of flexible plastic packaging, in coordination with the work of other plastics pacts and the Ellen MacArthur Foundation, among others globally. ⁵	L					S														
packaging economy,	1.4.2 Host or co-host a series of workshops to explore emerging technology innovations, including advanced recycling and carbon neutral or carbon negative chemistries.	L					CL	S													
by 2025.	1.4.3 Produce a report on emerging technology innovations, along with recommendations for policy-makers and business leaders.	L			S	S	CL	S	S												

⁵ For example, the UK Plastics Pact has recently published a roadmap for flexible plastic packaging aligned with the European programme Circular Economy for Flexible Packaging (CEFLEX).

Outcome linked to CPP targets 1234

Priority 2: Optimize the Recycling System

Outcome linked to CPP targets

					Rc	oles									Tim	ing					
Outcomes	Key Opening Moves		Le	ad (L) (Co-Lead	d (CL) S	Support	: (S)			20	021			20	22			20	23	
		CPP	B&R	M&C	C&R	KP	NGO	G	O&E	Q1	Q2	Q3	Q4	QÌ	Q2	Q3	Q4	Ql	Q2	Q3	Q4
Outcome 2.1 By 2025, enable the broad adoption of specific packaging design guidelines	2.1.1 Complete Canadian guidance for the Golden Design Rules (developed by the Consumer Goods Forum at the global level) along with commitment and reporting framework for CPP Signatories.	L	CL			S	S														
and commitments, consistent between Canada and the United	2.1.2 CPP signatories commit to adhering to most, if not all of the Golden Design Rules by 2025 and build plans to align their packaging portfolio.		L			S	S														
States, to improve supply.	2.1.3 CPP Partners will develop and deploy an industry- focused education program for the Golden Design Rules, including synthesizing best practices from Canadian and global companies.	S	S				L														
	2.1.4 CPP Partners will deploy individualized support for CPP signatories to implement GDRs.	S					L														
	2.1.5 Define common first-order principles for circular design in collaboration with the US Plastics Pact.	L	CL		S				S												
	2.1.6 Establish alignment on design guidelines in collaboration with US Plastics Pact Activators.	L	CL		S	S	S		S												
Outcome 2.2 By 2025, recycling infrastructure investments have been scaled up and directed to the technologies and systems most effective	2.2.1 Compile a high-level techno-economic and environmental assessment ⁶ of recycling (including advanced recycling) and sorting technologies – including a map of existing recycling program and material recovery facility capabilities – and use this to recommend standards for national consistency, and identify gaps for pilots and scale-up.	L			S	S	S	S													
for circular outcomes.	2.2.2 CPP signatories will incorporate recycling technologies that are most effective for circular outcomes into new infrastructure investment resulting from the new Ontario EPR regulation (or emerging EPR regulations elsewhere in Canada).		L		CL	S	S	S													
	2.2.3 Organize two to four pilots on collection, sorting and recycling innovations that address supply chain challenges and have the potential for scale.	S	CL	CL	CL	S															

⁶ A techno-economic assessment uses modeling to analyse and evaluate the economic performance of an industrial process, product or service. It's typically done to understand economic feasibility and guide innovation pathways.

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				ad (L) (upport	· (C)			 				ning					
Outcomes	Key Opening Moves	СРР	B&R	M&C	C&R	KP		G	O&E	Q1	D21 Q3	Q4	Q1	20 Q2	22 Q3	Q4	Q1		23 Q3	Q4
Outcome 2.3 By 2025, the CPP has generated informed policy approaches that are supportive of system improvements	2.3.1 Establish a fact-base and point-of-view on the nature and scale of recycling investments necessary to achieve Target 3 (in collaboration with producers who are part of the Consumer Goods Forum, using data from Environment and Climate Change Canada-commissioned infrastructure studies).	L	S	S	S			CL												
to increase the quality and quantity of material for recycling, including consistency between Canada and the United States.	2.3.2 Define and agree on a list of first-order principles supportive of a circular economy that can inform emerging legislation (including, where relevant, EPR) and relevant policies at other jurisdictional levels.	L	S	S	S	S	S													
3	2.3.3 Develop and deploy informational materials on plastics circularity and recycling infrastructure focused on institutional investors.	L					S		S											
	2.3.4 Host conversations with ECCC and other CPP Partners to inform product and market considerations for recycled content regulations.	L	S	S	S	S		CL												
	2.3.5 Engage with the US Plastics Pact and ECCC to ensure emerging PCR standards are aligned across North America for market consistency.	L						S												
Outcome 2.4 By 2025, the CPP has established	2.4.1 Define criteria for "compostable" and "compostable at scale within the packaging ecosystem".	L	S	S	S	S	S	S												
clear guidance on compostable packaging that helps bring design and policy coherence across Canada.	2.4.2 Finish an assessment of Canadian composting infrastructure and regional variability, as well as analyzing how these findings match up against existing compostability standards and certifications.	L																		
2 3	2.4.3 Provide guidance to CPP signatories (and other brands/retailers in Canada) on when and where to use compostable packaging.	L	CL	S				S	S											

Outcome linked to CPP targets 1234

					Ro	les									Tim	ning					
Outcomes	Key Opening Moves		Le	ead (L) (Co-Leac	1 (CL) 5	Support	t (S)			20	021			20	22			20	23	
		CPP	B&R	M&C	C&R	KP	NGO	G	O&E	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Outcome 2.5 By 2025, an undisputed	2.5.1 Ensure all CPP Signatories publicly state PCR demand/use commitments for 2025.	L	S	S																	
signal has been sent to the entire market through the recycled content commitments of CPP signatories that will help drive material	2.5.2 Develop guidance on contracting and technical inputs to aid the procurement practices and policies of CPP signatories (including municipal governments) to promote increased use of PCR content.	L	CL																		
supply and investments in related infrastructure.	2.5.3 Analyze the current supply of recycled plastics and map it against demand and promising applications.	S	CL	S	CL	CL															
4	2.5.4 Analyze and model scenarios for achieving 30 percent PCR content by resin and format.	L	CL	S	CL	CL															
	2.5.5 CPP signatories will each identify areas of their greatest opportunity to increase PCR content and put a plan in place to reach their commitments.		L	S	S	S															
Outcome 2.6 By 2025, promising innovations have	2.6.1 Develop criteria and an approach for assessing promising innovations for PCR content in flexible and/or food-safe packaging.	S	CL	CL	S	S	S														
been made and meaningful scale achieved for recycled content in flexible and food contact packaging consistent	2.6.2 Develop a roadmap for a recycled plastic food- grade approval process, including engagement of Health Canada and Environment and Climate Change Canada, working together with the Circular Plastics Taskforce in Quebec.	L	S	S	S	S	S							-							
with health and safety requirements.	2.6.3 Assemble a portfolio of pilot and proof-of-concept projects that CPP Partners and other stakeholders can initiate or already have underway and which can be completed by end-2022.	CL	S	CL	CL	S	S														
	2.6.4 Evaluate pilot projects, including barriers and opportunities to scale, and use this to inform investment and policy.	L	S	S	S	S	S	S													

Outcome linked to CPP targets 1234

Priority 3: Use Data to Improve the Whole System

					Ro	oles									Tin	ning					
Outcomes	Key Opening Moves		Le	ad (L) (Co-Lead	d (CL) S	Support	t (S)			20	021			20	022			20	23	
		CPP	B&R	M&C	C&R	KP	NGO	G	O&E	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Qì	Q2	Q3	Q4
Outcome 3.1 By 2025, the CPP	3.1.1 Develop a results framework, including emergent (leading) indicators and context tracking.	L																			
reporting and evaluation framework will allow for further	3.1.2 Develop guiding principles for the CPP reporting process.	L	S	S	S	S	S														
tuning of the CPP strategy and clearly illustrate progress toward 2025 targets.	3.1.3 Launch Year One/Baseline Reporting, harmonized for a North American approach and coherent with complementary reporting requirements (e.g. GDR, Global Commitment).	L	S	S	S	S	S														
1234	3.1.4 All CPP Partners will submit Year One information and a baseline report will be published.	L	S	S	S	S	S														
	3.1.5 Establish a reporting framework and requirements for Years Two-plus.	L	S	S	S	S	S														
	3.1.6 Work with the US Plastics Pact to establish principles for data gathering and analysis to aid in cross-border data exchange and knowledge sharing.	L	S																		
Outcome 3.2 By 2025, support the development of harmonized, nationally	3.2.1 Develop an agreed-upon set of definitions among CPP Partners, consistent with EMF definitions, for use in CPP activities and communications.	L																			
accepted definitions and measurement standards.	3.2.2 Provide input into emerging definitions and standards for key terms (e.g. recyclable, problematic).	L	S	S	S	S	S														

Outcome linked to CPP targets 1234 Timing Roles Lead (L) Co-Lead (CL) Support (S) **Key Opening Moves** 2021 2022 2023 Outcomes 3.3.1 Catalogue available plastics flow data across the Outcome 3.3 L S S S S S By 2025, establish a set system and identify key gaps. of recommendations for a national, accessible, consistent flow of 3.3.2 Establish alignment on a future vision of an ideal L S s S S S plastics data in support state for plastics flow data quality and availability, of ongoing optimization and develop recommendations and convene key of the system. organizations around a plan moving forward. L S s s S s Outcome 3.4 3.4.1 Undertake a detailed study on IC&I sector By 2025, solve the diversion data at the provincial level, using British data transparency, Columbia and a small number of other provinces quality and consistency as case studies, to develop and demonstrate challenges for plastics a methodology and set of definitions for packaging in the IC&I measurement. sector. CL 3.4.2 Develop a set of recommendations for addressing L data challenges in the IC&I sector, and help align provincial and federal governments along with key organizations around a plan moving forward. S Outcome 3.5 3.5.1 Catalogue and provide guidance to CPP L S By 2025, ensure that signatories on emerging innovations in digital promising innovations traceability of plastics. into real-time 3.5.2 A subset of relevant CPP Signatories will pilot S CL CL CL CL S S monitoring of circular innovations in digital traceability and report on packaging have implementation realities and results. achieved meaningful scale. s 3.5.3 Catalogue emerging opportunities in Enterprise L S S S S Resource Planning (ERP) systems, benchmarking 1 2 3 4 and related supply chain management systems for enabling circular plastics packaging.

Definitions

While there is considerable work to arrive at a set of nationally agreed definitions and standards (as outlined as part of Outcome 3.2), below is an explanation of some key terms used in this document.⁷ As a member of the Ellen MacArthur Foundation's Global Plastics Pact network, these are generally consistent with the extensive work that EMF has undertaken on definitions.

Collected and collection:

Plastic packaging received from a consumer, whether residential, business or institutional, following the consumer's use. Collection rate refers to the materials collected as a percentage of materials generated.

Composted and compostable:

The breakdown of an organic chemical compound by microorganisms in the presence of oxygen to carbon dioxide, water and mineral salts of any other elements present (mineralization) and new biomass. A packaging or packaging component is compostable if it is in compliance with relevant international compostability standards and if its successful post-consumer collection, (sorting), and composting is proven to work in practice and at scale.⁸

Generated: Plastic packaging supplied to consumers and available for collection from consumers.

MRF: Material recovery facility.

PCR: Post-consumer resin, plastic that has already been recycled and is ready to use again in new products or packaging.

Plastic Packaging: All products made of plastic used for the containment, protection, handling, delivery and presentation of goods, from raw materials to processed goods, from the producer to the user or the consumer.⁹

Recycled and recyclable: Plastic packaging that is reprocessed into products, packaging, materials or substances whether for the original or other purposes, excluding energy recovery. The recycling rate is materials recycled as a percentage of materials generated. A package or packaging component is recyclable if its successful post-consumer collection, sorting, and recycling is proven to work in practice and at scale.¹⁰

Reuse and reusable: Plastic packaging that is refilled or used for the same purpose for which it was conceived. Packaging is reusable if it has been designed to accomplish or proves its ability to accomplish a minimum number of trips or rotations in a system for reuse.¹¹

Sorted: Plastic packaging that is sorted and prepared for shipment to an end-market. Note that shipments typically include a proportion of contamination. The sorting rate is materials sorted as a percentage of materials collected.

⁹ Adapted from https://wrap.org.uk/sites/default/files/2020-12/European-Plastics-Pact-Roadmap.pdf

⁷ These are consistent with the terms used in the CPP Foundation Research and Study of Canadian Plastics Packaging Flows.

⁸ See section 4.3 of the EMF New Plastics Economy Commitments, Vision and Definitions

¹⁰ See section 4.2 of the EMF New Plastics Economy Commitments, Vision and Definitions

¹¹ See section 4.1 of the EMF New Plastics Economy Commitments, Vision and Definitions

CPP Partners

Thank you to all of the CPP's Partners for their contributions to the development of the Roadmap. This list reflects the CPP's Partners as of October 2021. For a full, updated list please visit **plasticspact.ca/partners**.

Alberta Beverage Container Recycling Corporation (ABCRC) Bimbo Canada Bioform BOSK Bioproducts Canadian Beverage Association Canadian Beverage Container Recycling Association

Canadian Bottled Water Association

Canadian Produce Marketing Association (CPMA)

Canadian Stewardship Services Alliance Inc. (CSSA) Canadian Tire Corporation Circular Economy Leadership Canada

Circular Innovation Council Circular Plastics Taskforce City of Edmonton City of Toronto Cleanfarms Club Coffee Coca-Cola Canada Colgate-Palmolive Company Communauté métropolitaine de Montréal (CMM) Council of the Great Lakes Region CSA Group Dairy Processors Association of Canada (DPAC) Danone Canada David Suzuki Foundation Divert NS Éco Entreprises Québec

EFS-Plastics Emterra Group Enerkem **Environment and Climate** Change Canada (ECCC) Food, Health & Consumer Products of Canada Fraser Plastics **GDI** Packaging Solutions General Mills Government of British Columbia GS1 Canada HypoIndustries Ltd. Ice River Sustainable Solutions International Institute for Sustainable Development (IISD) Keurig Dr. Pepper Canada

Kimberly-Clark Kraft Heinz Canada Kruger Products L.P. Loblaw Companies Ltd. Maple Leaf Foods Mars Canada Merlin Plastics Metro Vancouver Mondelēz Multi-Material Stewardship Manitoba (MMSM) National Zero Waste Council Nature's Touch Nestlé Canada **NOVA** Chemicals Corporation Ocean Wise PAC Packaging Consortium Pollution Probe

Polytainers Primo Water North America Pyrowave Reckitt Benckiser Canada Recycling Council of Alberta **Recycling Council of British** Columbia Retail Council of Canada Return-It **Ryse Solutions** Save-On-Foods Smart Prosperity Institute SPUD **Tempo Plastics** Terracycle The Natural Step Canada Unilever Canada Walmart Canada Wentworth Technologies

Take Action

Everyone has a vital role to play in realizing a circular economy for plastics. People from every part of society – from business to non-profits to investors to government to citizens – are encouraged to be inspired by the Roadmap and find their unique place in this shared action plan.

Six ways to take action:

- 1 Share the CPP Roadmap today with your internal and external stakeholders, including leadership, governance bodies, and employees.
- 2 **Find connections** between your mandate and other organizations, and collaborate within and across sectors.
- 3 Align organizational priorities and work plans with the 2025 Strategic Priorities.
- 4 Become a Partner. To learn more, contact info@plasticspact.ca.
- 5 **Engage your entire network** from suppliers and vendors to collaborators and competitors in the Roadmap, and decide together how you are going to contribute to its success.
- 6 **Tell your personal and organizational story** about why you believe in realizing a circular economy for plastics, and share that story widely.

Plastic waste is no longer viable. The future of plastics is circular. Together, let's make that future a reality.

Interested in joining the conversation, learning more or becoming a CPP Partner? Get in touch:

