



Supporting the Elimination of Unnecessary & Problematic Plastics



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Acknowledgements

We would like to acknowledge the hard work and dedication of the members of CPP's Source Reduction Working Group.

A special recognition is extended to Rita Farkas and her dedicated team at The National Zero Waste Council and Metro Vancouver for their invaluable contributions in the research, development, and facilitation of this project.

It is important to note that the Canada Plastics Pact consists of voluntary Partners who have made voluntary commitments. Participation in the CPP does not signify an individual Partner's endorsement of this list. This guidance document aims to foster innovation and facilitate tangible progress towards plastic circularity. Therefore, CPP does not endorse actions that impede the flexibility of a business who may need time to transition their packaging portfolio towards circular plastic solutions, as each company's circumstances are unique.

Statement of Intent

We must take urgent action to address the issues plastic waste presents. To do that, we must first eliminate unnecessary and problematic plastics, and then innovate to ensure that the plastics we do need are reusable, recyclable, or compostable.

The purpose of this document is to provide Canada Plastics Pact (CPP) Partners and the whole plastics value chain with guidance on how to determine whether various plastic packaging is necessary, and if it is, what packaging is likely to have a place in the circular economy*. The unnecessary & problematic plastics list, which can be found on page 8, was developed over the course of 12 months by a cross-section of CPP Partners in CPP's Source Reduction Working Group, which is focused on advancing CPP's Target 1. Materials on the list were evaluated based on criteria and definitions aligned with those of the Ellen MacArthur Foundation; best available data from federal and provincial agencies, municipalities and non-profit organizations; and through third-party expert evaluation.

The list will be reviewed and updated regularly as part of the CPP's ongoing efforts to deliver on Target 1 and to advance a circular plastics economy in Canada.



* An economy that is restorative and regenerative by design. It is focused on economic activity that builds and rebuilds overall system health. The concept recognizes the importance of the economy needing to work effectively at all scales — for big and small businesses, for organizations and individuals, globally and locally. It is based on three principles: design out waste and pollution; keep products and materials in use; and, regenerate natural systems. (Ellen MacArthur Foundation)

About this Guide

The linear take-make-waste economy disconnects early decisions in a product's lifecycle from the cost and challenges of managing those materials at end-of-life. The circular economy reconnects those decisions and offers the opportunity for businesses and communities to thrive in a resource-constrained and net-zero carbon world. Preventing waste means proactively eliminating it at the outset of a product's life, wherever possible.

Context

Reliance on recycling systems will not eliminate our packaging waste problems. Meeting all recycling targets <u>would not be sufficient</u> to eliminate plastic waste entirely. Today's reality is that many products that are technically recyclable are not collected or processed and may <u>contaminate other recycling streams</u>.

Circular design prioritizes upstream innovation: eliminating unnecessary packaging or reusing it whenever possible, and when packaging is needed, designing it for long-term use rather than single use.

Objective & Outcomes

To eliminate the plastic we do not need.

- CPP Partners have assessed their full packaging portfolios for all plastic packaging — both B2C and B2B — for unnecessary plastics and taken steps to eliminate or replace these to meet CPP's Target 1. We acknowledge the business realities and time required to change packaging in a portfolio and anticipate that some materials, for example B2B, may take longer to remove from a portfolio and go beyond the proposed timeline of Target 1. For these reasons, we have also identified materials in transition.
- Efforts are currently underway to address materials in transition by the end of 2024 with an aim to align with the <u>CPP's 5-Year</u> Roadmap for Advancing Flexible Plastic Packaging in Canada.



TARGET 1

Define a list of plastic packaging that is designated as unnecessary or problematic and take measures to eliminate them.

Defining Unnecessary & Problematic Plastics

Recognizing the clear source reduction target within the CPP Roadmap, focused effort has been taken to develop a framework to achieve Target 1.

The CPP Source Reduction
RAG reviewed the definitions of
"unnecessary" and "problematic"
plastics from the various Plastics
Pacts to develop its own definition.
While the definitions varied slightly,
they were driven by the criteria
provided by the EMF.

The following list is a compilation of the criteria provided by the EMF for identifying unnecessary and problematic packaging for elimination:

- 1. The item or material can be avoided or replaced.
- 2. The item or material contains hazardous chemicals.
- 3. The item or material hinders or disrupts recycling or composting systems.
- **4.** The item or material has a high likelihood of being littered.
- 5. The item or material is non-recyclable, compostable or reusable and is not likely to be so by 2025.

Important Criteria for Decisions

- The CPP considers recyclability to mean that a system for recycling exists in practice and at scale, specifically for a minimum 30% post-consumer recycling rate to support CPP Targets 3 and 4. We are currently working with the CSA Group to establish a common language and develop a standard list of definitions around plastics recycling.
- Only one of the five criteria must be met for an item to be considered problematic.
- The term "hazardous" in the context of plastic packaging refers to packaging or additives that pose a risk to either the natural environment, human health, or both.

Based on this criteria, the CPP Source Reduction RAG elected to split the definition of unnecessary and problematic plastics into two separate categories.

Unnecessary Plastic

Packaging items that can be removed without compromising supply/operational efficiencies.



Problematic Plastic

Packaging items that are currently not recyclable and are not likely to have a <u>sustainable</u> and efficient system in practice and at scale in place to be recyclable, reusable, or refillable to meet CPP's Target 1.



Developing a List to Reduce Plastic Waste

The CPP Unnecessary & Problematic Plastics List is a research-based list, compiled from several sources including:

- items cited in CPP's <u>2020 Baseline Report</u> found to be problematic or unnecessary based on recyclability research;
- elimination lists from other Plastics Pacts around the world:
- technical documents;
- government documentation;
- beach litter clean up data;
- consultation with municipalities and waste managers; and
- products and materials suggested by CPP Partners for inclusion.

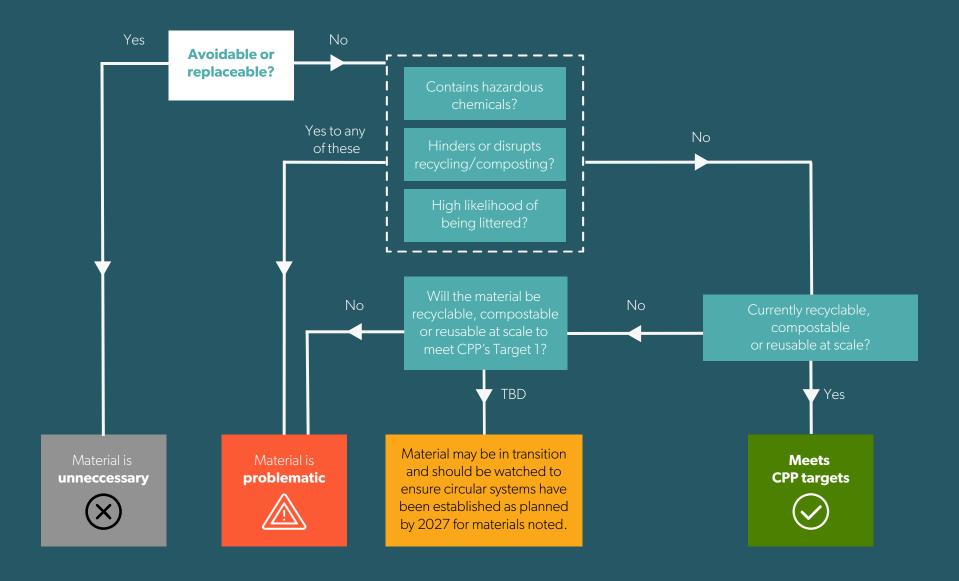
A compilation of the list of materials included in other Plastics Pacts can be found in the Appendix.

Given the broad range of materials provided, the Source Reduction RAG developed a decision tree to evaluate each material based on:

- the EMF criteria, and
- the extent to which it met the definition developed by the team for unnecessary and problematic plastics.



Decision Tree: A Guide to Identifying Unnecessary & Problematic Plastics



A List of Materials Identified as Unnecessary or Problematic

Materials identified as unnecessary or problematic are to be eliminated to meet CPP's Target 1. Applications reliant on materials listed below for which there are no current viable alternatives or where solutions have not yet reached scale are recognized to be innovation opportunities. If items on the list can be proven to be recyclable or compostable at scale in practice, the item may be removed from the Unnecessary and Problematic Plastics List. Please note that this list is not exhaustive and should be considered as a starting point. It is strongly recommended that producers of all plastic packaging assess their product portfolio beyond what is included in the list below. A priority for CPP is to provide guidance on potential solutions to support Partners with eliminating this list from their portfolios.

Item/ Material	Min. number of other elimination lists within the Plastics Pact Network and domestic ban lists that include the item	Could be avoided or replaced	Contains hazardous chemicals	Hinders/disrupts recycling or composting	High likelihood of being littered	Non-recyclable, compostable, or reusable; Not likely to be by 2025
Materials containing intentionally added Per- and Polyfluoroalkyl Substances (PFAS) in either the package or manufac- turing of that package	1		•			•
Checkout bags	10			•	•	
Stir Sticks	6	•		•	•	
Beverage six-pack rings	1	•		•	•	•
Cutlery	7	•		•	•	
Straws	6	•			•	•
Undetectable Carbon Black	3	•	•	•		•
PVC (Polyvinyl Chloride) PVDC (Polyvinylidene Chloride)*	15	•	•	•		•
PETG (Polyethylene Terephthalate Glycol)	3			•		•
EPS (Expanded Polystyrene)**	8	•	•	•	•	•
PS (Polystyrene)**	9	•	•	•	•	•
Oxo-degradables	10			•		•
Multi-Material Flexibles*	2			•		•

 $^{{}^{\}star}\text{Exception: Medical applications where there is no alternative. See GDR~2~"} \underline{\text{Remove Problematic Elements from Packaging}"}.$

Please note that areas where no alternative exists presents an innovation opportunity, with progress expected by 2030.

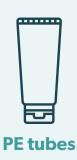
^{**}It is important to note that in Quebec significant investment is being made to recycle PS at scale by the end of 2024; however, the average across Canada remains below the recycled at scale threshold.

A List of Materials Identified as Unnecessary or Problematic (cont'd)

Materials in Transition

Materials in transition are defined as materials that are necessary (required for safety or health reasons and/or for which no viable alternative currently exists) and which may not be recycled in practice and at scale to meet CPP's Target 1, but significant efforts are being made to invest and enhance infrastructure to ensure they will be by 2027. Specifically, mono-material flexible PE, mono-material flexible PP, rigid PP, and PE tubes. For more, read <u>CPP's 5-Year Roadmap for Advancing Flexible Plastic Packaging in Canada</u>.









In this first draft list, each material was evaluated against the decision tree to determine if it met the definition of unnecessary or problematic plastics. While most of the materials met multiple criteria under the decision tree; four key materials (Rigid PP, PE Tubes, and Mono-Material Flexible PE and PP) have been identified as materials in transition. These materials meet the <u>Golden Design Rules for Plastics Packaging</u>, but are currently not recycled at scale for a minimum of 30% post-consumer recycling rate in Canada. CPP acknowledges that these materials currently serve crucial functions in many cases. For instance, they may

be required for safety or health reasons, and viable alternatives at scale may not yet be available. Significant efforts to secure investment are underway to ensure the collection and recycling of these materials by the end of 2027 (as noted in the <u>CPP's 5-Year Roadmap for Advancing Flexible Plastic Packaging in Canada</u>). As a result, these materials are classified as "Materials in Transition" and are not included in the list on <u>page 8</u>. CPP will continue to assess the progress and outcomes of these materials and update this document as required.

Calling all CPP Partners to Take the Lead

The CPP's first iteration of the Unnecessary and Problematic Plastics List is one of many tools and pathways being undertaken by CPP Partners to advance a circular plastic packaging economy in Canada.

CPP Partners have shown incredible dedication in working together across traditional boundaries. This collaboration aims to usher in a new era of plastic packaging that meets essential needs within **planetary boundaries**, while also ensuring profitability. Partners are leading the way in prioritizing upstream approaches, focusing on elimination and reuse in combination with downstream approaches of novel and effective recycling systems. With these continued efforts, we can confidently hand down a better future to our children and grandchildren.

The CPP's development of this list recognizes that business as usual will not result in achievement of our collective targets, nor the realization of a circular plastics economy for Canada.

This list is intended to highlight the need for further discussion, investments, and actions to address plastic waste and pollution.

The CPP brings together a wide-range of stakeholders involved in plastics production and recycling, and will utilize this list to facilitate discussions on how the Partners can leverage their expertise to address the issues. It is expected that this work — and the list — will continue to evolve as our knowledge, practices and systems do. It is an important tool to help us eliminate the plastic packaging we do not need; innovate so the plastic packaging we do need can be safely reused, recycled, or composted; and circulate all the plastic items we use to keep them in the economy and out of people, animals and nature.

Together, we can create the plastics economy of the future by taking action today to eliminate unnecessary and problematic plastics.

Appendix: Elimination Frameworks in a Global Context

The CPP Unnecessary & Problematic Plastics List is part of a global movement towards source reduction, evidenced by various elimination lists around the world. This summary table not only highlights items and resins listed in Plastics Pacts across different regions but also underscores the collaborative effort towards eliminating certain materials that have become increasingly problematic.

Please note that given the rapid change in this space, keeping this information current poses a challenge. In addition, this snapshot, as of April 2024, provides a glimpse into ongoing initiatives but does not capture all the nuances, including material categorization and definition processes. For further insights, visit the elimination lists of Plastics Pacts specific to the region of interest.

E = Eliminate **W** = Watch

Item/ Material	<u>ANZPAC</u> (2024)	<u>India</u> (2023)	<u>UK</u> (2022)	<u>US</u> (2022)	<u>Kenya</u> (2021)	<u>Poland</u> (2021)	<u>Portugal</u> (2021)	South Africa (2021)	<u>Chile</u> (2020)	<u>France</u> (2020)
PVC	Е	E (wrap sleeves & labels)	E	E	E (rigids & sleeves)	E	E	E (bottles, pallet wrap, labels, shrink sleeves)	E	E
EPS	E	E	E	Е	E (fast food)	Е	E		Е	E
Carbon black	E	E (undetectable)	E	E		E (undetectable)				E – not as barrier
PET opaque	Е			Е						E – without barrier W – with barrier
Plastic blisters										Е
PS	E	E	Е	Е			Е		Е	W
Flexible PP										W

Appendix: Elimination Frameworks in a Global Context (cont'd)

E = Eliminate **W** = Watch

Item/ Material	<u>ANZPAC</u> (2024)	<u>India</u> (2023)	<u>UK</u> (2022)	<u>US</u> (2022)	<u>Kenya</u> (2021)	<u>Poland</u> (2021)	Portugal (2021)	South Africa (2021)	<u>Chile</u> (2020)	<u>France</u> (2020)
PETg		E (label sleeves on PET bottles W (labels/ sleeves on other		E	E (sleeves on PET bottles)					W
		packaging)								
Multi layer flexibles						E	E		E (small flexible formats)	W
Multi layer rigid						E				W
Oxo-degradable		Е	Е	E	Е		Е	E		Е
Plastic stickers on fruit	E (non-com- postable)		E (non-com- postable)				E	E		
Thin barrier bags used at tills	E							E		
Plastic stirrers			E	Е				E		
Single use cutlery			Е	E	Е		Е	E		
Plastic straws			Е	E	Е			E		
Cotton buds with plastic stems			E		E			E		
Plastic Iollipop sticks							E	E		
Plastic microbeads in cosmetics			E				Е	E		E
Plastic plates and bowls			E		E		E			
Household PS packaging		Е	E		Е					
PFAS				E						

Appendix: Elimination Frameworks in a Global Context (cont'd)

E = Eliminate **W** = Watch

Item/ Material	<u>ANZPAC</u> (2024)	<u>India</u> (2023)	<u>UK</u> (2022)	<u>US</u> (2022)	<u>Kenya</u> (2021)	<u>Poland</u> (2021)	<u>Portugal</u> (2021)	South Africa (2021)	<u>Chile</u> (2020)	<u>France</u> (2020)
Problematic label constructions				E					E	
PVC cling film			E				E			
Non-compostable tea and coffee bags			E							
Single service plastic sachets and jiggers in restaurants			Е							
Plastic packaging for uncut fruit and veg			E							
Plastic bags	Е						E			



Taking Action

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

Get in touch



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Canada Plastics Pact



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About the Canada Plastics Pact

The Canada Plastics Pact is leading Canada's response to the escalating plastic crisis.

We exist to eliminate plastic waste by accelerating and scaling the solutions that will keep plastics in the economy and out of people, animals, and nature.

Through fostering innovation and collaboration, our 100+ Partners from across the plastics value chain are taking meaningful steps to eliminate unnecessary and problematic plastics, redesign packaging and increase their use of recycled plastic.

CPP is a member of the Ellen MacArthur Foundation's Plastics Pact Network and is a solution space of The Natural Step Canada in partnership with the Smart Prosperity Institute, whose shared vision is a strong and inclusive economy that thrives within nature's limits.



A full list of CPP Partners is available here.