

# Discussion paper: Guidance to facilitate consistent extended producer responsibility policies for plastics

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# 1 INTRODUCTION

## 1.1 Purpose

Canadians want their governments to provide accessible and effective recycling programs and to take action on plastic waste. Businesses have expressed the need for consistent rules on how to divert their products from landfills.

Extended producer responsibility (EPR) is a key tool for reaching the diversion rates necessary to achieve the Canadian Council of Ministers of the Environment (CCME) goal of zero plastic waste. It makes companies responsible for the end-of-life management of the products or packaging they create.

CCME is seeking input that will be used to inform the development of guidance materials that will facilitate consistent EPR programs for plastics across Canada. This discussion paper poses strategic questions to gather information that will help inform the development of the materials

## 1.2 Context

In November 2018, federal, provincial and territorial ministers of the environment approved the [Canada-wide Strategy on Zero Plastic Waste](#). The Strategy aims to reduce the harmful environmental impacts of plastic waste through greater prevention, collection and value recovery, and achievement of a more circular plastics economy. Circular economies keep materials and products in use as long as possible by recirculating them back into the economy through recycling, refurbishing or repurposing.

Canadian jurisdictions operate a range of waste diversion programs to address different kinds of products, many of which contain plastics. These include EPR, stewardship programs, deposit-refund programs, and municipal recycling programs. In addition, many institutional, commercial and industrial (ICI) facilities and buildings enter into private contracts with waste management companies to collect their recyclables.

Currently, only 9% of plastic waste in Canada is recycled; 87% of plastic waste ends up in landfills or the environment.<sup>i</sup> Plastic waste from packaging and the automotive, textile, and electronic and electrical equipment sectors are the most prevalent. In order to achieve zero plastic waste, Canada must collect, recover and recycle plastic waste at much higher rates than is currently the case.

The implementation of EPR in Canada has been informed by the adoption of CCME's [Canada-Wide Action Plan on Extended Producer Responsibility \(CAP-EPR\)](#) in 2009. Many Canadian provinces and territories have subsequently adopted EPR enabling legislation. See Annex I for an overview of current EPR policies in Canada.

Following environment ministers' approval in principle of CCME's Strategy on Zero Plastic Waste in 2018, federal, provincial and territorial governments committed to a suite of actions through [Phase 1 of the Canada-Wide Action Plan on Zero Plastic Waste](#) that will bring Canada closer to achieving zero plastic waste.

One action item is to deliver, by December 2020, further guidance on EPR:

- Common material categories and product definitions
- Performance standards for reuse and recycling programs
- Options to encourage innovation and reduce costs
- Standard monitoring and verification approaches

**1.3 Key issues for designing, implementing, evaluating and improving EPR policies**

EPR gives responsibility to producers for the end-of-life management of the products and packaging they introduce to the marketplace and seeks to achieve the following:

- incentivize the efficient collection and management of plastic waste by internalizing the full costs of end-of-life management
- encourage the integration of environmental considerations into decisions about product design and
- contribute to higher collection and recycling rates required to achieve zero plastic waste in Canada.

**G7 Charlevoix Blueprint  
Ocean Plastics  
Charter Targets**

- Working with industry towards 100% reusable, recyclable, or, where viable alternatives do not exist, recoverable, plastics by 2030.
- Working with industry towards increasing recycled content by at least 50% in plastic products where applicable by 2030.
- Working with industry and other orders of government, to recycle and reuse at least 55% of plastic packaging by 2030 and recover 100% of all plastics by 2040.

In developing guidance for jurisdictions, CCME will consider the following key issues that affect the extent to which EPR policies can achieve their objectives:

<b>Effectiveness</b>	how to make EPR policies as effective as possible to maximize their contribution to Canada’s goal of achieving zero plastic waste, including through targets, providing certainty to business, minimizing administrative costs, complementing other waste diversion policies and providing meaningful oversight and enforcement.
<b>Market efficiency</b>	How to ensure markets incentivize producers to minimise the costs associated with production through competition, encouraging them to use resources in a less wasteful way. For example, efficiency can be improved through economies of scale by connecting local areas with regional policies large enough to warrant investment in reuse, recycling and value recovery.
<b>Governance</b>	How to frame the roles and responsibilities within EPR policies as they create relationships between entities where there might otherwise be none (e.g., between producers and governments, or between producers and collectors of plastic waste).
<b>Transparency</b>	How to ensure EPR policies are sufficiently transparent so that everyone can know whether desired outcomes are being met and rules are being followed, and that EPR policies are being accurately measured on performance and can be compared.

A more detailed examination of these key issues can be found in Annex II of this discussion paper.

## 1.4 Gaps and areas of difference of existing EPR policies for plastics in Canada

CCME is considering guidance that will allow jurisdictions to develop new and consistent EPR policies and align existing policies. Based on an overview of existing EPR policies for plastics in Canada,<sup>ii</sup> CCME has identified the following key gaps and areas of difference:

- **Definitions:** EPR policies in different jurisdictions may define plastic product categories differently and include different products within those categories. No policies cover all or even the same plastic products, nor do policies exist in all jurisdictions (see Annex I for a description of geographic coverage of EPR policies).
- **Performance requirements:** some EPR policies set targets for collection of products and packaging, but these differ between jurisdictions and do not address important aspects of a producer's performance within an EPR policy, such as recycling rates<sup>iii</sup> or design for environment.
- **Measurement:** reporting requirements for producers and producer responsibility organizations (PROs)<sup>iv</sup> differ between jurisdictions; important information is not always publicly available and only sometimes comparable.

## 2 PRIORITY AREAS FOR CONSISTENT EPR POLICIES

CCME will develop guidance on the following priority areas for consistent EPR policies for plastics to address the key gaps and areas of difference, aligning with the areas identified in Action Item 1 of Phase 1 of the Canada-Wide Action Plan on Zero Plastic Waste:

1. **Accessibility and covering all sources of plastic waste:** guidance on how to ensure EPR policies provide adequate levels of accessibility to different geographic regions and cover different sources of waste (e.g., residential versus industrial, commercial and institutional waste).
2. **Definitions:** common material categories and product definitions to allow EPR policies to cover a broad range of products.
3. **Performance requirements:** consistent and increasingly ambitious targets that producers and PROs must achieve.
4. **Roles and responsibilities:** common obligations for producers and PROs that promote certainty, allow flexibility for producers in organizing themselves efficiently, and foster innovative business practices and product design.
5. **Reporting and transparency:** common reporting requirements and transparency rules to allow the right information to be collected consistently and then released to the public.
6. **Transition:** identifying the role of municipalities, employees, assets and time requirements for transition.

Consistency in the priority areas would seek to provide the most benefit to the key issues identified in section 1.3, while still recognizing that jurisdictions may need to adapt other aspects of EPR to local circumstances. Guidance in these priority areas would allow jurisdictions to fill the gaps identified and create consistency in both existing and future EPR policies by incorporating CCME's guidance, such as model definitions, into laws, regulations and other instruments.

**Questions for discussion: priority areas for consistent EPR policies**

1. Are there additional topics that CCME should consider priority areas for greater consistency between new and existing EPR policies?
2. What challenges do the current differences in EPR policies across Canada pose organizations? What changes could be made to address these challenges?

To respond to these questions, click here: <https://form.simplesurvey.com/f//EPRsurvey-sondageREP>

**2.1 Accessibility and covering all sources of plastic waste**

In order to maximize EPR’s ability to contribute to achieving zero plastic waste, EPR should seek to:

- provide adequate levels of accessibility to residents, businesses and other organizations throughout Canada, including:
  - providing adequate accessibility within and between jurisdictions, including in rural, remote and Northern areas where distances can be larger and markets smaller, and
  - collecting products and packaging not only from residential areas but also industrial, commercial and institutional (ICI) sectors which generate the majority of plastic waste in many provinces and territories and
- provide a consistent, larger supply of recyclable plastics to end markets.

While some of these categories may already be covered by other kinds of waste diversion programs (e.g., private recycling collection contracts with ICI organizations), there are benefits to applying EPR consistently to all plastic waste diversion across jurisdictions, including in relation to key issues raised in section 1.3 of this discussion paper, such as:

<b>Effectiveness</b>	EPR policies with greater product, source and geographic coverage can recover and divert a greater proportion of plastic products introduced to the market
<b>Market efficiency</b>	Greater coverage can increase the amount of plastics recovered, helping lower costs and drive investments to better design more efficient processes and appropriate infrastructure
<b>Transparency</b>	Greater product, source and geographic coverage allows a greater proportion of the plastics economy to be monitored through the same program

CCME is developing guidance which may include common rules so that EPR policies consistently cover major sectors of the plastics economy and all regions of Canada.

**Questions for discussion: Accessibility and covering all sources of plastic waste**

3. How can EPR policies be designed to ensure consistent coverage including ICI sectors?
4. How can EPR policies be designed to ensure consistent geographic coverage, including rural and remote areas?
5. Please provide any other comments or feedback regarding accessibility and covering all sources of plastic waste.

To respond to these questions, click here: <https://form.simplesurvey.com/f//EPRsurvey-sondageREP>

## 2.2 Definitions

EPR policies typically apply to products and packaging rather than specific materials like plastics. For example, existing EPR policies in Canada cover product categories that often contain plastics, such as packaging and electronics and electrical equipment. However, definitions of these products and product categories can vary between jurisdictions. This can lead to issues including uncertainty for businesses and difficulty in assessing the effectiveness of EPR policies.

Common definitions across jurisdictions for priority products and product categories that contain plastics could support key issues described in section 1.3, including:

<b>Effectiveness</b>	Provide clarity for producers and PROs on whether a product is included in an EPR policy, including predictability for producers introducing new products to the market Reduce the potential for free riding through inconsistent or ambiguous definitions.
<b>Market efficiency</b>	Foster economies of scale by applying EPR consistently across jurisdictions
<b>Transparency</b>	Allow for consistent tracking between EPR policies in different jurisdictions, so that measures such as collection or recycling rates can be accurately compared
<b>Governance</b>	Help consumers and businesses remain aware of what is covered by EPR policies when moving or operating across jurisdictions

CCME is considering common definitions for products and product categories in sectors that cover the large shares of the plastics end-use market in Canada. The following table highlights some of these major sectors and provides estimates of diversion and recycling rates:<sup>v</sup>

**Table 1: Major sectors of the plastics end-use market**

Sector generating plastic waste	Share of the plastics end-use market	Diversion rate <sup>vi</sup>	Recycling rate <sup>vii</sup>	Description
Packaging	33%	23%	15%	Includes commonly-recycled PET bottles, as well as bags and films, HDPE bottles, toiletries and pharmaceutical products
Construction	26%	11%	1%	Includes vinyl, paints and coatings, reconstituted wood products and PVC pipes
Automotive	10%	100%	0%	Includes interior trims, seats, seat parts and body panels
Electronic and electrical equipment	6%	16%	13%	Includes computers, computer peripherals and parts, telephones, and wiring
Textiles	6%	5%	0%	Includes fabrics except cotton, linen, wool, hemp, silk, etc.
White goods	3%	64%	0%	Includes major and small appliances, such as fridges, stoves, food processors and electric kettles
Agriculture	1%	9%	5%	Includes plastic used for transportation of grain and seeds, fertilizer and pesticide packaging, and agricultural films
<b>Totals</b>	85% <sup>viii</sup>	25%	8% <sup>ix</sup>	

CCME will develop guidance that could help jurisdictions design EPR policies that cover all major sources of plastic waste, and provide common definitions for products included in or excluded from EPR policies, depending on the approach taken.

**Questions for discussion: definitions**

6. What kind of approach should jurisdictions take with regards to product coverage (e.g., broad coverage with exceptions versus listing specific product categories)?
7. What criteria could be considered in prioritizing product categories that contain plastics for application under EPR policies?
8. Which products and product categories would benefit most from common definitions in terms of increasing overall plastic waste diversion and how should they be defined?
9. Does the overview of major sectors in table 1 appropriately capture sectors of the plastics end-use market that could be covered by EPR? Are there any categories that should be added or removed?
10. Please provide any other comments or feedback regarding definitions.

To respond to these questions, click here: <https://form.simplesurvey.com/f/l/EPRsurvey-sondageREP>

## 2.3 Performance requirements

To achieve large increases in diversion rates that are needed to achieve zero plastic waste, EPR policies should set targets for the collection and value recovery of plastics that must be achieved each year. This could include:

- necessary investment and innovation in waste diversion infrastructure, technologies and practices
- focusing on performance metrics such as collection and recycling rates and/or design for environment and
- a schedule of increasingly ambitious targets, published in advance to allow producers and PROs to plan and meet the targets in the most efficient manner.

Targets can help support key issues outlined in section 1.3:

<b>Effectiveness</b>	Allow governments to set measures of effectiveness, improve the design of an EPR policies when targets are not met, and engage producers and PROs to promote compliance
<b>Market efficiency</b>	Help drive the development of a secondary market for plastics by ensuring a consistent and growing supply of collected and recycled plastic material.
<b>Governance</b>	Drive cooperation between producers, PROs and waste management companies to meet targets in a given year
<b>Transparency</b>	Provide producers and PROs with a consistent, reliable objective they must meet in a given year  Provide governments, stakeholders and the public an easily understood measure of whether an EPR policy is working

CCME will develop guidance that helps jurisdictions to adopt consistent targets for the performance of EPR policies.

### Questions for discussion: performance requirements

11. What considerations should be taken into account in setting targets on poor-performing plastics to drive better outcomes?
12. How often should targets increase in ambition, and at what rate?
13. What actions should be taken if a target is not reached?
14. Please provide any other comments or feedback regarding performance requirements.

To respond to these questions, click here: <https://form.simplesurvey.com/f/1/EPRsurvey-sondageREP>

## 2.4 Roles and responsibilities

EPR policies give responsibility to producers for every stage of the lifecycle of products and packaging, in particular the post-consumer stages where waste diversion is most important.

Depending on the rules put in place, producers could potentially fulfill the requirements of an EPR policy in multiple ways, including:

- establishing their own individual producer responsibility program or
- work with a PRO or multiple PROs to take charge of the post-consumer stage of a product’s lifecycle.

PROs are typically for-profit or non-profit corporations that a producer appoints as an agent to act on the producer’s behalf. A PRO can collect fees from multiple producers and manage processes such as collection, sorting and treatment of plastic waste. PROs can also play an important role in educating the public on how to better recycle.

While PROs can provide benefits to producers by pooling resource and risk and leveraging economies of scale, they can also create a disconnect between producers and the post-consumer phases of a product’s lifecycle, reducing the incentive to innovate.

EPR policy should be clear on who is responsible for which element of EPR. This could include, for example:

- **Who is considered a producer:** including whether there should be thresholds or criteria for determining who is included as a producer (e.g., establishing a minimum threshold of revenue or amount of products introduced into a jurisdiction).
- **Who is considered a PRO:** whether an organization should be structured a certain way to be considered a PRO (e.g., for-profit versus not-for-profit corporations).
- **Who is responsible:** who should be ultimately accountable for achieving outcomes set out in laws and regulations (e.g., producers individually or collectively through PROs).
- **Role for government:** whether government should play a role in determining, for example, whether an organization can operate as a PRO.
- **Compliance:** who should undertake inspection and enforcement activities, and who should pay for these activities.

Consistent EPR policies that create the same responsibilities for the same entities could provide benefits relating to key issues raised in section 1.3 of this discussion paper:

<b>Effectiveness</b>	Clarity on who is a producer would provide certainty to businesses on their responsibilities and could discourage free riding.
<b>Market efficiency</b>	Appropriate allocation of responsibilities (e.g., meeting targets) would allow the best-placed entities to most efficiently achieve desired outcomes.
<b>Governance</b>	Where roles and responsibilities are clear and understood by everyone, there can be better cooperation and dispute resolution between those involved in the EPR policy (e.g., producers, PROs, and government)
<b>Transparency</b>	Clear and consistent roles and responsibilities allow stakeholders and the public to more easily understand how EPR policies function and contribute to greater public accountability and public confidence in waste diversion programs.

CCME is developing guidance which could create consistent roles and responsibilities for EPR policy.

### Questions for discussion: roles and responsibilities

15. Should all producers be required to participate in an EPR program, or should there be exceptions or alternatives for certain small and medium-sized enterprises?
16. To what extent should EPR policies stipulate how a PRO works? For example, should there be rules governing who can own a PRO?
17. Should PROs be allowed to operate as franchises or subsidiaries of national PROs or PROs from other jurisdictions?
18. How can compliance with the rules of an EPR policy be verified and enforced?
19. What actions should governments take to ensure that new producers and products are not faced with barriers that limit their access to the market?
20. Please provide any other comments or feedback regarding roles and responsibilities.

To respond to these questions, click here: <https://form.simplesurvey.com/f/1/EPRsurvey-sondageREP>

## 2.5 Measurement and transparency

In an EPR policy, the private sector is given the responsibility for achieving desired policy outcomes. As a result, governments and the public need the right information to make sure an EPR policy is functioning correctly and that everyone is following the rules. Consistency in information across EPR policies and jurisdictions can help producers harmonize their programs across jurisdictions, and helps governments and the public better track and compare the performance of EPR policies in reducing plastic waste.

In the 2009 Canada-Wide Action Plan on Extended Producer Responsibility, CCME identified these key performance indicators for EPR policies:

- Kilograms per capita “captured or recovered”
- Dollars per kilogram “captured or recovered”
- Per cent “captured, recovered, collected, and diverted”
- Avoided GHG emissions

EPR policies in Canada have since adopted some of these performance indicators and typically require producers or PROs to submit reports on an annual basis. Annual reports may be accessible on government websites or the websites of producers or PROs, or both. EPR policies sometimes also require independent financial audits as part of the annual report.

While producers and PROs submit the information required of them, information gaps sometimes remain that make it difficult for government or the public to arrive at an accurate picture of an EPR policy’s performance. Examples of these information gaps include:

- whether different material components of a product are diverted from landfills (e.g., plastic components of a larger product, such as appliances)
- where materials are sorted, cleaned and processed (e.g., in which province or country)
- how materials are processed (e.g., mechanical versus chemical recycling) and
- how diverted materials are re-introduced into the market.

EPR policy could include consistent rules and recommendations for:

- financial reporting requirements
- performance metrics
- reporting periods
- data formats
- making data and other information open and easily accessible, including where information should be posted and
- encouraging new and innovative information practices, such as blockchain and the use of mobile devices.

The following are examples of how consistent rules for gathering and reporting information would help EPR policies, according to the key issues described in section 1.3 of this discussion paper:

<b>Effectiveness</b>	Identifying the right information that producers and/or PROs should report to government would allow for the effectiveness of EPR policies to be properly measured and improvements to be made, where appropriate.
<b>Market efficiency</b>	Costs for producers and PROs would be reduced through the use of a single policy or set of reporting rules (e.g., formats, standards, content) More and more useful data can help in making optimal resource allocation and pricing decisions
<b>Governance</b>	Having access to the right kinds of information (e.g., audits, outcomes, costs) can allow governments provide effective oversight of an EPR policy and can help those participating in an EPR policy to be accountable to each other (e.g., producers can understand how PROs are performing).
<b>Transparency</b>	Public awareness and confidence in an EPR policy can be supported by making the right information available for anyone to access.

CCME is developing guidance that could provide consistency in recording, transmitting, storing and publishing data and other information reported to government. This would facilitate meaningful oversight, monitoring, compliance activities and evaluation of EPR policies.

**Questions for discussion: measurement and transparency**

21. What kinds of information relevant to plastics could be provided by producers or PROs to ensure meaningful oversight, monitoring, compliance and evaluation of EPR policies?
22. Are there any alternative formats in which EPR information or data could be submitted to government or presented to the public?
23. What rules and principles should be adopted to make data and information open and easily accessible to the public?
24. How can innovative information technology and information management techniques be adopted in EPR policies?
25. Please provide any other comments or feedback regarding measurement and transparency.

To respond to these questions, click here: <https://form.simplesurvey.com/f//EPRsurvey-sondageREP>

## 2.6 Transitioning to EPR

Jurisdictions developing new EPR policies must ensure that the transition from other models of waste diversion to EPR is fair, efficient and orderly. Some important considerations for developing a transition plan to EPR include:

- retaining and using existing infrastructure and equipment, where appropriate
- preserving jobs and
- ensuring uninterrupted service delivery to the public.

In developing guidance, CCME is seeking input on:

- how to transition from specific waste diversion models to EPR, such as shared stewardship or municipally-funded programs
- how to engage stakeholders, including unionized employees, management, and local communities
- considerations for assets that should continue to be used under EPR and those that could be stranded and
- considerations for phasing in a new EPR policies, including determining timelines and key milestones, such as contractual obligations of ICI facilities included under an EPR policy.

Guidance on how to transition to an EPR policy from another waste diversion model for plastics would help in the following ways related to the key issues identified in section 1.3:

<b>Governance</b>	Increased clarity on how transitions to EPR could be structured and phased in would reassure and help stakeholders, including businesses, municipalities and labour unions, in their interactions between themselves and government.
<b>Transparency</b>	Municipalities, businesses and the public would be aware of how their government might plan the transition to EPR, reducing uncertainty.

CCME is developing guidance that may help jurisdictions decide how to transition to EPR policies from other waste diversion models.

**Questions for discussion: transitioning to EPR**

26. Are there any special considerations related to transitioning to EPR from specific waste diversion models, such as shared stewardship?

27. How can governments address legacy issues such as collective agreements, ICI contractual obligations, and existing infrastructure?

28. How should stakeholders be engaged in developing a transition plan to EPR?

29. Please provide any other comments or feedback regarding transitioning to EPR.

To respond to these questions, click here: <https://form.simplesurvey.com/f//EPRsurvey-sondageREP>

### 3 NEXT STEPS

CCME is seeking your views and feedback on the priority areas and questions described in this discussion paper, as well as any other comments or feedback you wish to provide. To provide comments, you can visit <https://form.simplesurvey.com/f/1/EPRsurvey-sondageREP>.

CCME will consider the comments and feedback received when developing EPR guidance materials for jurisdictions.

Please contact Natalie James at [njames@ccme.ca](mailto:njames@ccme.ca) or (204) 948-3025 if you require information.

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<sup>i</sup> Deloitte, *Economic Study of the Canadian Plastic Industry, Markets and Waste* (2019). Available at: <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/publications/plastic-waste-report.html>

<sup>ii</sup> See Annex I of this discussion paper for more details.

<sup>iii</sup> This can include products or packaging recycled as a percentage of what is put on the market.

<sup>iv</sup> PROs, financed by producers, help producers fulfill their obligations under EPR by negotiating contracts with independent collection and recycling companies, among other things.

<sup>v</sup> Deloitte, *Economic Study of the Canadian Plastic Industry, Markets and Waste* (2019). Available at: <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/publications/plastic-waste-report.html>.

<sup>vi</sup> Diversion rate is the share of plastic diverted from direct disposal and sent to a sorting facility, divided by the amount of plastic waste available for collection.

<sup>vii</sup> Output recycling rate is the share of plastic that is ultimately reprocessed, whether through chemical or mechanical recycling, from diverted waste, divided by the amount of plastic waste available for collection.

<sup>viii</sup> The remaining 15% includes plastics in medical, dental and personal care, toys, household furniture, mattresses and industrial machinery.

<sup>ix</sup> This does not include chemical recycling from disposed waste, which adds an additional 1% to the recycling rate.

## ANNEX I: STATE OF PLAY OF EPR POLICIES FOR PLASTICS IN CANADA

In 2016, it is estimated that only 9% of plastic material was recycled, with 86% of plastic waste ending up in landfills. Increasing the diversion rate, including recycling, will therefore be key to achieving zero plastic waste in Canada.

Currently, Canadian jurisdictions operate a range of waste diversion programs to address different kinds of products, many of which contain plastics. These include EPR, stewardship programs, deposit-refund policies, and municipal recycling programs. In addition, many institutional, commercial and industrial facilities and buildings enter into private contracts with waste management companies to collect their recyclables. EPR policies can include “full EPR”, where industry is responsible for operating waste diversion policies, and “partial EPR”, where industry funds waste diversion policies in whole or in part operated by other entities, such as municipalities. EPR policies are currently in place in various jurisdictions for the following product categories that contain plastics, including:

- Electronics and electrical equipment
- Packaging, of which there also exist EPR policies for targeted sub-categories:
  - Beverage containers
  - Used oil, glycol and diesel exhaust fluid
  - Paint containers
  - Pesticide containers
- Agricultural products

Existing EPR policies relate to plastics in Canada in the following ways:

Product Category	Share of the plastics end-use market and plastic waste <sup>x</sup>	Amount of plastics as part of the product category	National collection and recycling rates for plastics <sup>xi</sup>
Packaging and subsets with EPR policies: <ul style="list-style-type: none"> <li>• Beverage containers</li> <li>• Used oil, glycol and diesel exhaust fluid containers</li> <li>• Paint containers</li> </ul>	<ul style="list-style-type: none"> <li>• 33% of the plastics economy (1553kt)               <ul style="list-style-type: none"> <li>○ Films: 11%</li> <li>○ Bottles: 9%</li> <li>○ Non-bottle rigid: 9%</li> <li>○ Other: 4%</li> </ul> </li> <li>• 47% of the total amount of plastic waste (1542kt)</li> </ul>	<ul style="list-style-type: none"> <li>• 25% of all beverage containers are made of PET, while other kinds of plastics (e.g., HDPE) are found in containers such as milk jugs.<sup>xii</sup></li> </ul>	<ul style="list-style-type: none"> <li>• 23% diversion rate<sup>xiii</sup></li> <li>• 15% recycling rate<sup>xiv</sup></li> </ul>
Pesticide containers and other agricultural plastics	<ul style="list-style-type: none"> <li>• 1% of the plastics end-use market (46kt)</li> <li>• 1% of the total amount of plastic waste (45kt)</li> </ul>	<ul style="list-style-type: none"> <li>• Uses PE and PP</li> </ul>	<ul style="list-style-type: none"> <li>• 9% diversion rate</li> <li>• 5% recycling rate</li> </ul>

<b>Product Category</b>	<b>Share of the plastics end-use market and plastic waste<sup>x</sup></b>	<b>Amount of plastics as part of the product category</b>	<b>National collection and recycling rates for plastics<sup>xi</sup></b>
Electronics and electrical equipment <sup>xv</sup>	<ul style="list-style-type: none"> <li>• 6% of the plastics economy (291kt)</li> <li>• 7% of the total amount of plastic waste (214kt)</li> </ul>	<ul style="list-style-type: none"> <li>• 20-30% of electronics and electrical equipment is plastic</li> </ul>	<ul style="list-style-type: none"> <li>• 16% diversion rate</li> <li>• 13% recycling rate</li> </ul>

Some product categories that make up large portions of the plastics economy currently are not covered by EPR policies in Canada, including:

<b>Category</b>	<b>Share of the end-use market for plastics (%)</b>	<b>Diversion rate (%)</b>	<b>Recycling rate (%)</b>
Automotive	10	100	0
Construction	26	11	1
Textiles	6	5	0

The following tables show the geographic coverage of EPR policies for different product categories that include plastics.

<sup>x</sup> Deloitte, *Economic Study of the Canadian Plastic Industry, Markets and Waste* (2019). Available at: <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/publications/plastic-waste-report.html>

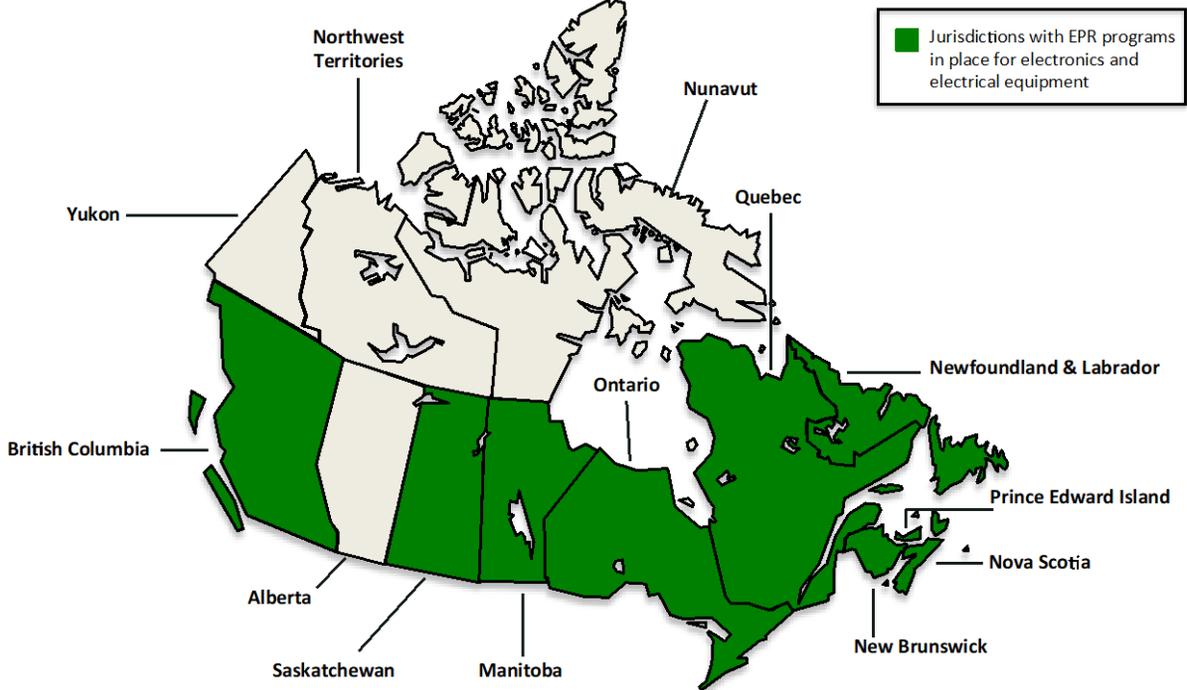
<sup>xi</sup> Ibid.

<sup>xii</sup> CM Consulting, *Who Pays What? An Analysis of Beverage Container Collection and Costs in Canada*, (2018) pages 108 and 109.

<sup>xiii</sup> Diversion rate is the share of plastic diverted from direct disposal and sent to a sorting facility divided by plastics waste available for collection.

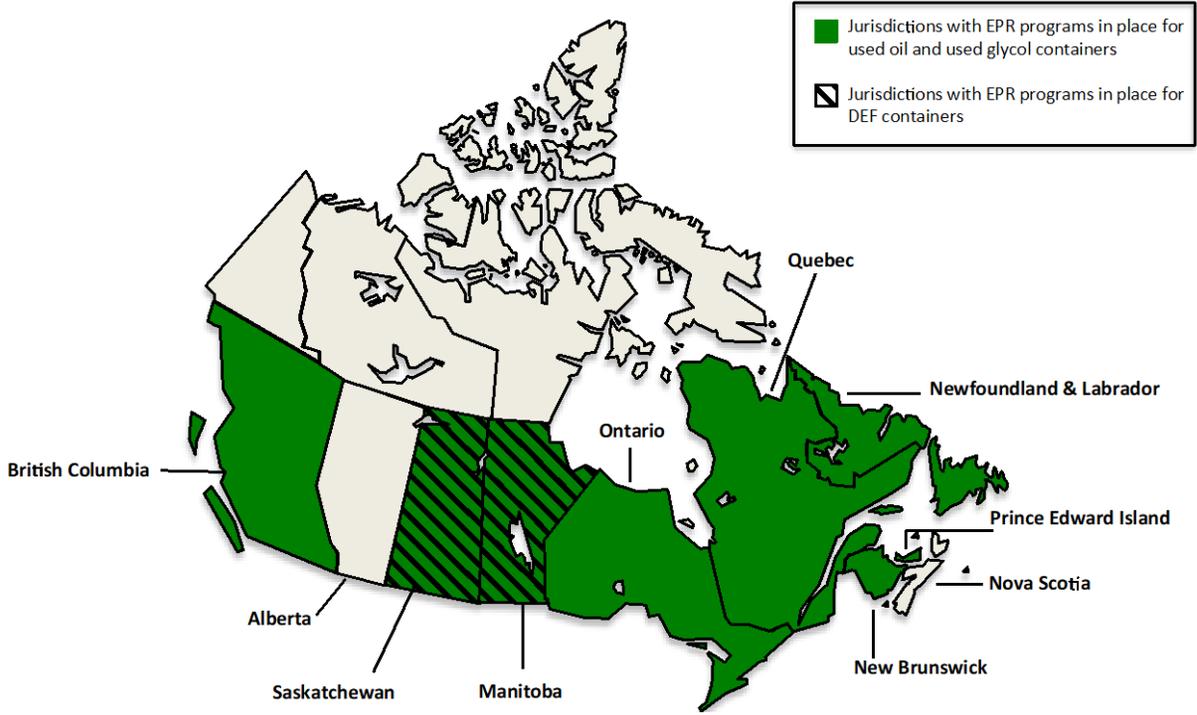
<sup>xiv</sup> Output recycling rate is the share of plastic that is ultimately reprocessed whether through chemical or mechanical recycling from diverted waste, divided by plastics waste available for collection.

<sup>xv</sup> British Columbia includes white goods in its electronics and electrical equipment product category, which nationally makes up 3% of the end-use market for plastics and 4% of plastic waste, with a 64% diversion rate and 0% recycling rate.

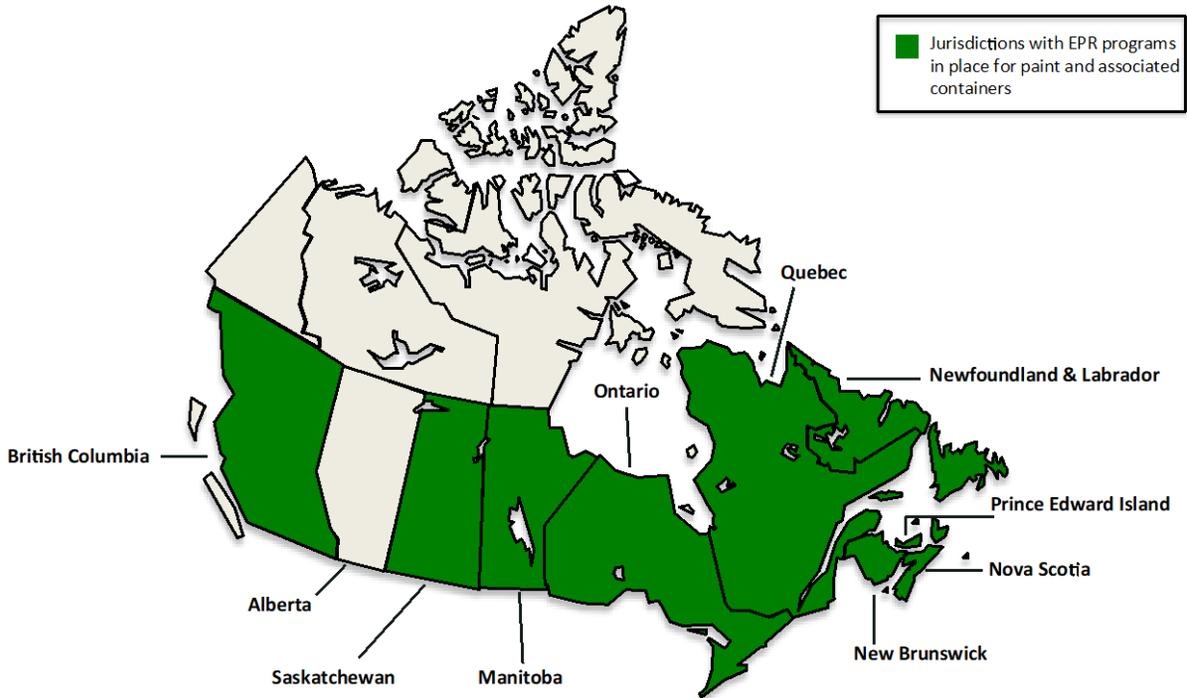
Product category	Jurisdictions
<p>Electronics and electrical equipment</p>	 <p><b>Notes:</b>          Alberta's electronics recycling program is operated by the Alberta Recycling Management Authority (ARMA).          End-of-life electronic products stewardship programs are not regulated in Nunavut.          Northwest Territories' end-of-life electronics recycling program is operated by the Government of the Northwest Territories. Yukon's is operated by the Yukon Government.</p>

Product category	Jurisdictions																								
Packaging	<p>The map displays the following data for residential packaging EPR programs:</p> <table border="1"> <thead> <tr> <th>Jurisdiction</th> <th>Program Type</th> <th>Percentage of Costs Paid by Producers</th> </tr> </thead> <tbody> <tr> <td>British Columbia</td> <td>Full EPR (producer-funded &amp; operated)</td> <td>100%</td> </tr> <tr> <td>Alberta</td> <td>Shared stewardship (producer-funded but operated by municipalities)</td> <td>75%</td> </tr> <tr> <td>Saskatchewan</td> <td>Shared stewardship (producer-funded but operated by municipalities)</td> <td>80%</td> </tr> <tr> <td>Manitoba</td> <td>Shared stewardship (producer-funded but operated by municipalities)</td> <td>50%</td> </tr> <tr> <td>Ontario</td> <td>Shared stewardship (producer-funded but operated by municipalities)</td> <td>100%</td> </tr> <tr> <td>Prince Edward Island</td> <td>Shared stewardship (producer-funded but operated by municipalities)</td> <td>100%</td> </tr> <tr> <td>Other Jurisdictions (Yukon, Northwest Territories, Nunavut, Quebec, Newfoundland &amp; Labrador, Nova Scotia, New Brunswick)</td> <td>None or limited municipal programs</td> <td>Not specified</td> </tr> </tbody> </table> <p>1: In PEI, a provincial agency, Island Waste Management Corporation, operates an integrated province-wide recycling program  2: YT, NWT, NU: some municipal programs in major centres</p>	Jurisdiction	Program Type	Percentage of Costs Paid by Producers	British Columbia	Full EPR (producer-funded & operated)	100%	Alberta	Shared stewardship (producer-funded but operated by municipalities)	75%	Saskatchewan	Shared stewardship (producer-funded but operated by municipalities)	80%	Manitoba	Shared stewardship (producer-funded but operated by municipalities)	50%	Ontario	Shared stewardship (producer-funded but operated by municipalities)	100%	Prince Edward Island	Shared stewardship (producer-funded but operated by municipalities)	100%	Other Jurisdictions (Yukon, Northwest Territories, Nunavut, Quebec, Newfoundland & Labrador, Nova Scotia, New Brunswick)	None or limited municipal programs	Not specified
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Product category	Jurisdictions
Beverage containers	<p>The map displays the following program details by jurisdiction:</p> <ul style="list-style-type: none"> <li><b>Green (All plastic bottles):</b> Yukon, Northwest Territories, Nunavut, British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Newfoundland &amp; Labrador, Prince Edward Island, Nova Scotia, and New Brunswick.</li> <li><b>Light Blue (Beer Only):</b> Manitoba.</li> <li><b>Light Purple (Alcoholic beverages only):</b> Ontario.</li> <li><b>Light Green (Soft Drinks + Beer):</b> Ontario.</li> <li><b>Grey (Excl. milk):</b> British Columbia, Quebec, Newfoundland &amp; Labrador, Prince Edward Island, Nova Scotia, and New Brunswick.</li> </ul> <p><b>Notes:</b> In Manitoba, Ontario, and Quebec, a deposit-return program is in place for certain plastic bottles only.</p>

Product category	Jurisdictions
<p>Used oil, glycol and diesel exhaust fluid containers</p>	 <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>Used oil and glycol containers: All provinces except for BC collect containers &lt; 50 l. In BC, the size threshold is 30 l.</li> <li>YK, NWT, NU have some municipal programs in major centres</li> </ol>

Product category	Jurisdictions																																	
Pesticide containers and other agricultural plastics	<p>The map displays the following jurisdictional data:</p> <table border="1"> <thead> <tr> <th>Jurisdiction</th> <th>Core Products</th> <th>Other Products</th> </tr> </thead> <tbody> <tr> <td>British Columbia</td> <td>Pesticide Containers Only</td> <td></td> </tr> <tr> <td>Alberta</td> <td>Pesticide Containers + Totes and Drums</td> <td>Bags and Large Totes</td> </tr> <tr> <td>Saskatchewan</td> <td>Pesticide Containers + Totes and Drums</td> <td>Bags and Large Totes</td> </tr> <tr> <td>Manitoba</td> <td>Pesticide Containers + Totes and Drums</td> <td>Grain Bags, Twine, bale &amp; silage wrap</td> </tr> <tr> <td>Ontario</td> <td>Pesticide Containers + Totes and Drums</td> <td>Bags and Large Totes</td> </tr> <tr> <td>Quebec</td> <td>Pesticide Containers + Totes and Drums</td> <td></td> </tr> <tr> <td>Newfoundland &amp; Labrador</td> <td>Pesticide Containers + Totes and Drums</td> <td></td> </tr> <tr> <td>Prince Edward Island</td> <td></td> <td>Bags and Large Totes</td> </tr> <tr> <td>Nova Scotia</td> <td></td> <td>Bags and Large Totes</td> </tr> <tr> <td>New Brunswick</td> <td></td> <td>Bags and Large Totes</td> </tr> </tbody> </table>	Jurisdiction	Core Products	Other Products	British Columbia	Pesticide Containers Only		Alberta	Pesticide Containers + Totes and Drums	Bags and Large Totes	Saskatchewan	Pesticide Containers + Totes and Drums	Bags and Large Totes	Manitoba	Pesticide Containers + Totes and Drums	Grain Bags, Twine, bale & silage wrap	Ontario	Pesticide Containers + Totes and Drums	Bags and Large Totes	Quebec	Pesticide Containers + Totes and Drums		Newfoundland & Labrador	Pesticide Containers + Totes and Drums		Prince Edward Island		Bags and Large Totes	Nova Scotia		Bags and Large Totes	New Brunswick		Bags and Large Totes
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Product category	Jurisdictions
Paint containers	 <p data-bbox="1434 293 1740 386"> <span style="color: green;">■</span> Jurisdictions with EPR programs in place for paint and associated containers         </p> <p data-bbox="537 982 1711 1039"> <b>Notes:</b>            Alberta's paint program is run by the provincial Delegated Authority Organization, Alberta Recycling Management Authority, as a stewardship program. There are no EPR or stewardship programs for paint in the territories.         </p>

## ANNEX II: KEY ISSUES FOR DESIGN, IMPLEMENTATION, EVALUATION AND IMPROVEMENT OF EPR POLICIES FOR PLASTICS

### Effectiveness

EPR policies have a proven track record of increasing recycling rates for plastics, making EPR an important policy instrument for fostering a circular economy. A key issue for governments is how to make EPR policies as effective as possible to maximize their contribution to Canada's goal of achieving zero plastic waste. Considerations include:

- **Results:** EPR policies must be able to meet targets and be tailored for different levels of ambition, depending on factors such as the maturity of existing EPR policies.
- **Predictability:** Clear and consistent rules for EPR policies across the country can mitigate the regulatory burden on businesses, giving them the certainty they need regarding the rules they must follow in order to plan ahead.
- **Measurement:** in order for governments, producers, PROs and the public to evaluate and compare EPR policies, effectiveness must be measurable, with the same metrics employed across jurisdictions.
- **Complementarity:** it is generally accepted that EPR policies cannot achieve broader policy goals in isolation. Rather, EPR policies function best when they operate consistently and in alignment with other instruments that have the same objectives, including:
  - **Other EPR policies:** EPR policies may need to differ based on where they apply and what products they cover, but common rules and objectives should be used wherever possible.
    - For example, British Columbia's *Recycling Regulation* creates common rules for EPR policies covering different product categories, such as what an EPR plan must contain and requirements to periodically review EPR plans.
  - **Other policy instruments:** governments should seek consistency and alignment between EPR policies and other instruments aimed at achieving the same or similar goals so that they are mutually supporting. Alignment with other instruments can also help avoid unintended consequences such as loopholes or perverse incentives.
    - For example, Nova Scotia's *Solid Waste-Resource Management Regulations* ban many electronic and electrical equipment products from landfills while also creating an EPR policy for the same products.
- **Enforcement:** compliance promotion, enforcement practices and penalties can make it easier for producers and PROs to understand their obligations and reduces opportunities for "free riding".

### Market efficiency

In an EPR policy, governments set desired outcomes, such as collection or recycling targets, but give producers flexibility to decide how those outcomes should be met. The goal is for producers to internalize the costs of the end-of-life collection, sorting and processing of the products and packaging they introduce into the market. This creates incentives to innovate business practices, technologies, and product design to advance Canada's transition to a circular economy for plastics, while giving producers and PROs the freedom to achieve outcomes in the most cost-efficient way.

In an efficient market, producers are incentivised to minimise the costs associated with production, including direct costs and negative externalities arising from the use and disposal of their product. This encourages them to use resources in a less wasteful way, and produce at an optimal point where the long run economic benefits from waste reduction or diversion exceeds the economic cost of achieving it.

EPR policies can help improve market efficiency through design and implementation choices, as well as consistency across jurisdictions and programs. For example, efficiency can be improved through economies of scale by connecting local areas with regional policies large enough to warrant investment in reuse, recycling and value recovery, as well as through activating “reverse” supply chains that create a circular material flow.

Efficient markets can be encouraged by giving producers:

- flexibility to find the most low-cost ways of achieving results, including innovating new options
- encouragement to use best available technologies and best environmental practices
- the ability to adapt to new materials, market conditions or unforeseen challenges and
- incentive to minimize environmental impacts of a product from design to end-of-life management.

## **Governance**

Governance structures in EPR policies create relationships between entities where there might otherwise be none (e.g., between producers and governments, or between producers and collectors of plastic waste). In addition, governments can play an accountability, oversight and compliance role in making sure the policy functions properly and that all regulated entities follow the rules.

Well-designed governance structures across and within jurisdictions could help achieve the goals of EPR policies by:

- reducing administrative burden by allowing producers and PROs to interact with different governments in the same way
- allowing entities (including producers, PROs, collectors and processors of waste) to communicate easily and resolve disputes efficiently; and
- providing effective oversight of the EPR policy to ensure the policy runs well and rules are followed.

## **Transparency**

EPR policies for plastics rely on producers to achieve public policy outcomes, such as reducing plastic waste and increasing recycling rates. Transparency is therefore important to ensure that desired outcomes are being met and rules are being followed.

Consistent transparency requirements across and within jurisdictions for EPR policies for plastics help by:

- showing the public how the issue of plastic waste is being addressed by governments and industry; and
- facilitating evidence-based policy through information that is comparable across jurisdictions and programs.

In addition, many existing EPR policies include public education and outreach. This reflects the importance of public awareness of waste diversion programs such as recycling in increasing diversion rates, ensuring recyclables are properly sorted, reducing contamination of recovered materials, and so forth. British Columbia's *Recycling Regulation*, for example, requires producers with approved EPR plans to include in their annual reports a description of educational materials and educational strategies the producer.