



Maryland
Department of
the Environment

APPENDIX I

REVIEW AND ANALYSIS OF
PACKAGING EPR PROGRAMS



FINAL NEEDS ASSESSMENT | MARYLAND STATEWIDE RECYCLING NEEDS ASSESSMENT





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1 Overview

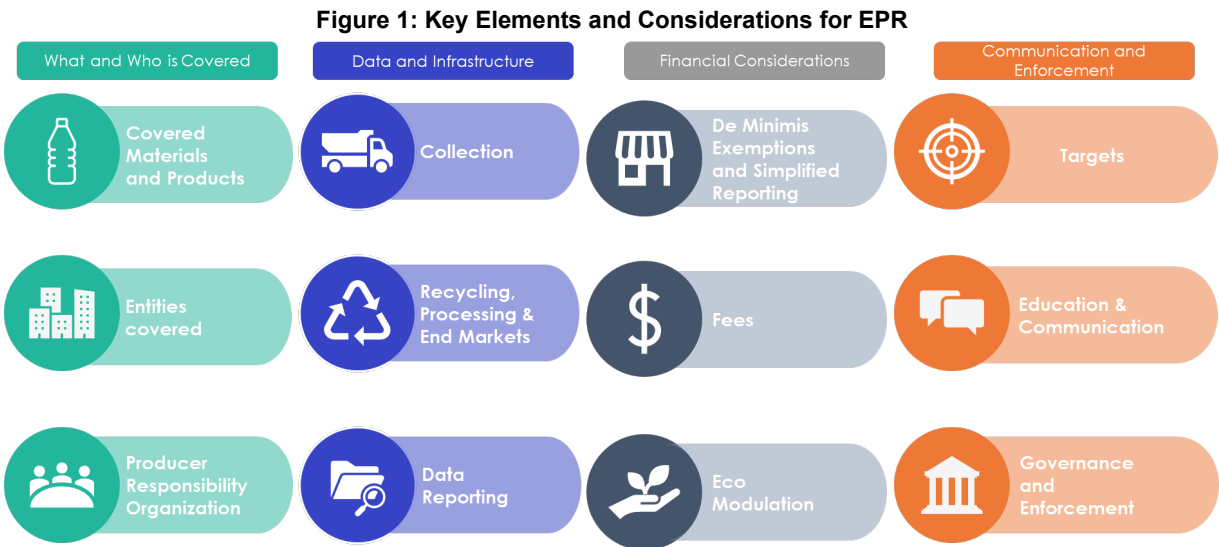
As the Maryland legislature considers adopting Extended Producer Responsibility (EPR), insights from other jurisdictions can inform policymaking and system design. This task analyzes key considerations for EPR policy and examines design and implementation experiences in France, Canada, and the U.S. These jurisdictions were selected for their diverse approaches and valuable lessons in EPR adoption.

France, with over 30 years of EPR implementation, offers robust data on system performance and best practices. British Columbia, which launched North America’s first full EPR system for packaging and paper products in 2014, may serve as a regional reference for other jurisdictions. Quebec, initially focused on reimbursing municipalities for collection costs, is transitioning to a full EPR system with broader cost coverage, illustrating a progressive phased-in approach.

Additionally, this section provides an analysis of EPR laws in California, Colorado, Minnesota, and Maine to identify key program requirements and guide efforts to harmonize EPR within the U.S. While there are other states pursuing EPR program planning, the locations selected are intended to provide context for key considerations most related to the State.

1.1 Key Elements and Considerations for EPR

To analyze EPR programs across different jurisdictions, 12 key elements of EPR were identified (summarized in **Figure 1**). These elements were identified based on this review and the consultant team’s experience working on EPR programs in other jurisdictions. These elements are not an exhaustive list and there may be elements of EPR outside of the 12 identified here, but they provide a framework for reviewing, discussing, and comparing different EPR programs. Within each element, program approaches are nuanced, taking into consideration local policy differences.



2 Summary of EPR Programs

2.1 France

2.1.1 Overview

EPR was first introduced in France in 1992 to address household packaging waste. Since then, France has introduced additional EPR programs. Some of these programs stem from EU directives, and they include EPR for waste electrical and electronic equipment (WEEE), electric vehicles, and batteries. Other EPR schemes were set up in France without an EU directive. There are currently twenty (20) EPR schemes in France that are operated by different PRO organizations.

2.1.2 Producers and PRO

France's EPR program considers all companies that manufacture or import packaged product on the French market as producers. Producers subject to EPR requirements under the French EPR program can register with a state approved PRO (eco-organization) organization. ADEME, the French Agency for Ecological Transition, monitors producer compliance by issuing producers with unique identification numbers once they register with a PRO. Producers must report their sales of products that fall under EPR categories to the PRO annually and pay the relevant eco-contributions.

Citeo/Adelphe and Leko are the two approved PROs in France that represent producers of residential packaging.

2.1.3 Covered entities and covered products

France's EPR for packaging and paper products applies to packaging intended for consumers and that ends up in residential waste streams (primary, secondary, and tertiary). On January 1, 2025, the scope of covered entities expanded to include commercial and industrial entities.

2.1.4 Covered Materials

Materials covered under France's Household Packaging EPR legislation include the following;

- Plastic
- Wood
- Metal
- Steel

- Aluminum
- Steel scrap
- Aluminum scrap
- Glass
- Paper
- Cardboard
- Brick

2.1.5 Fees and Cost coverage

Producers cover the cost of collection, sorting, and recycling of covered materials, as well as efforts to promote reuse. Additionally, producers are responsible for funding education campaigns and initiatives to improve consumer understanding, contributing to litter cleanup efforts, and supporting research and development carried out by PROs.

The table below show the producer rates by material for members of CITEO/Adelphé in 2024.¹

Table 1: Producer Fees in France by Material (2024)

Material	Rates in USD cents/lbs
Steel	2.7
Aluminum	7.1
Paper & Cardboard	
Paper/Cardboard	9.4
Cartons	14.1
Glass	0.7
Plastic	
Clear PET bottles and dispenser bottles	17.7
PE bottles and dispenser bottles	19.5
PP bottles and dispenser bottles	19.5
Dark/colored PET bottles and dispenser bottles	21.8
Rigid PE packaging items (excluding bottles and dispenser bottles)	19.5
Rigid PP packaging items (excluding bottles and dispenser bottles)	19.5
Rigid PET packaging items (excluding bottles and dispenser bottles)	23.6
Flexible PE packaging	25.4

¹ Adelphé. January 2024. 2024 rates for reducing, reusing and recycling household packaging. <https://www.adelphé.fr/sites/default/files/Documents/2024-04/rate-guide-2024-modif-avril-2024.pdf>

Material	Rates in USD cents/lbs
Rigid PS packaging	27.1
Flexible PP packaging	28.9
Composite packaging or other resins except PVC	32.5
Packaging containing PVC	35.5
Other Materials	
Non-Chemically processed materials produced from renewable and sustainably managed resources (wood, cork)	9.4
Materials with no stream but suitable for energy recovery (textiles, other materials, etc.)	26.6
Materials with no stream and unsuitable for energy recovery (earthenware, porcelain, ceramics)	31.0

Since 2012, France has implemented a system of eco-modulated fees for producers, designed to incentivize sustainable packaging practices. Fees are adjusted based on environmental criteria, rewarding efforts in eco-design and good sorting practices (bonuses) while penalizing packaging that hinders recycling (maluses). These criteria are established collaboratively by producers and recyclers.²

2.1.6 De Minimis Exemptions and Simplified Reporting for Low-Volume Producers

EPR obligations vary depending on the number of units (UVCs) placed on the market annually:

- **Flat Declaration:** Companies placing fewer than 10,000 UVCs per year on the market are exempt from providing detailed declarations. They are required to log into their customer portal to confirm their status and pay an annual flat fee of €80.
- **Simplified Declaration:** Applicable to companies placing fewer than 500,000 UVCs per year on the market. This type of declaration does not require technical data. Instead, it is based on flat rates assigned to different product families.
- **Detailed Declaration:** Mandatory for companies placing 500,000 or more UVCs per year on the market. This type of reporting involves a detailed breakdown of each packaging reference by material type and weight. Eco-modulation (bonuses or penalties) may be applied based on the packaging's environmental performance. Customers that place fewer than 500,000 UVCs per year on the market may elect to opt-in to the detailed declaration.

² European Environment Agency. June 2022. Early warning assessment related to the 2025 targets for municipal waste and packaging waste. <https://www.eea.europa.eu/publications/many-eu-member-states/france>

2.1.7 Collection

PROs play a central role in coordinating the EPR system but do not directly handle recycling operations. This contrasts with BC, where the PRO contracts for material processing and may, if requested by the municipality, organize the collection of recycling. In France, the PRO’s primary responsibility is to ensure that producers fulfill their financial obligations under the EPR framework. Municipalities often delegate their waste collection responsibilities to private companies through contractual agreements.

Waste is collected curbside across the country. For recyclable materials, paper, cardboard, ferrous metals, and aluminum are primarily collected as co-mingled materials through curbside systems in urban and suburban areas, as well as through nearby drop off points and depots. Glass collection is carried out curbside in cities and suburbs and via drop off points in rural areas.

Since 2023, the scope of collected materials was expanded to include all plastic packaging, including flexible plastics. This was enacted to simplify sorting and increase the amount of packaging collected, specifically targeting close to 700,000 metric tonnes (772,000 short tons) of plastic packaging that was previously sent to landfill or incineration.³

2.1.8 Processing and Recycling

The table below shows the tons of packaging waste produced, tons of packaging waste recycled, and the recycling rates in France for 2022, by material category.⁴ Note that France includes scrap steel and aluminum, which are recovered from waste incineration treatment facilities.

Table 2: Amount of Packaging Waste Produced and Recycled (short tons, 2022)

Material	Packaging Waste 2022 (Tons)	Packaging Recycled 2022 (Tons)	Recycling Rates (%) 2022
Plastic	2,682,106	674,837	25.2%
Wood	1,644,598	235,768	14.3%
Metal	591,766	379,704	64.2%
Steel	468,279	330,184	70.5%
Aluminum	123,486	49,520	40.1%

³ ADEME. August 2023. Déchets chiffres-clés L’essentiel en 2022. https://librairie.ademe.fr/ged/8159/SyntheseDechetsChiffresCles_2023.pdf

⁴ ADEME. June 2024. Valorisation des emballages en France - Données 2022. https://librairie.ademe.fr/economie-circulaire-et-dechets/7689-valorisation-des-emballages-en-france-donnees-2022.html#/44-type_de_produit-format_electronique

Material	Packaging Waste 2022 (Tons)	Packaging Recycled 2022 (Tons)	Recycling Rates (%) 2022
Glass	3,203,411	2,601,841	81.2%
Paper and Cardboard	6,018,442	5,379,028	89.4%

2.1.9 End Markets

End markets for packaging have been affected by fluctuations in European and international markets. The combination of the closure of borders to waste exports in some countries and the pandemic led to market instability may have led to increases in the quantity of waste sent to landfilling, waste-to-energy, and incineration, as well as a reduction of the quality of materials directed to recycling.⁵ France has a high rate of incineration and waste-to-energy compared to other EU countries and has been working to reduce incineration.⁶

The table below provides details on the quantity of material recycled in France, in other EU countries, and outside of the EU, as well as the quantity of collected materials sent to energy recovery.

Table 3: Packaging of French Origin Produced, Recycled, and Recovered (short tons, 2021)⁷

Materials	Packaging Waste Produced	Recycling in France	Recycling Exported to Other Member States	Recycling Outside the EU	Recycling (total)	Energy Recovery
Plastics	2,748,055.5	349,580.4	277,376.8	7,836.3	634,794.6	1,348,790.3
Wood	2,243,361.1	142,316.1	-	-	142,316.1	617,790.4
Metal (total)	606,356.1	273,439.3	91,705.7	33.1	365,178.1	-
Steel	483,585.1	246,529.7	79,413.8	27.6	325,971.1	-
Aluminium	122,771.0	26,909.6	12,293.0	5.5	39,207.0	-
Steel By-products of scrap removal	87,354.9	87,354.9	18,402.0	-	105,755.7	-

⁵ ADEME. March 2024. Bilan national du recyclage 2012-2021 <https://www.ademe.fr/wp-content/uploads/2024/12/Bilan-national-du-recyclage-2012-2021.pdf>

⁶ French Ministry of the Environment. September 2022. La production et le recyclage des déchets en 2019 et 2020 en France. <https://www.statistiques.developpement-durable.gouv.fr/la-production-et-le-recyclage-des-dechets-en-2019-et-2020-en-france-synthese-des-connaissances>

⁷ ADEME. June 2023. Packaging recovery in France. https://librairie.ademe.fr/economie-circulaire-et-dechets/6585-packaging-recovery-in-france-2021-data.html#/44-type_de_produit-format_electronique

Materials	Packaging Waste Produced	Recycling in France	Recycling Exported to Other Member States	Recycling Outside the EU	Recycling (total)	Energy Recovery
Aluminium By-products of scrap removal	12,653.4	12,653.4	1,840.9	-	14,494.3	-
Glass	3,264,131.2	2,402,392.7	124,492.8	16,258.0	2,543,143.5	-
Paper and cardboard	5,901,570.8	3,010,208.3	1,785,020.1	255,187.3	5,050,416.7	255,729.6
Other	5,905.1	-	-	-	-	-
Total	14,769,379.8	6,177,936.8	2,278,596.5	279,314.7	8,735,849.1	2,222,310.3

2.1.10 Reporting Requirements

Producers must annually report data on the products placed on market, the rate of incorporation of recycled content, the management of packaging waste, and data for monitoring and verifying progress on recycling and reuse targets. Producers with fewer than 500,000 units or 10,000 units are eligible for simplified reporting.

2.1.11 Governance and Enforcement

The Ministry for Ecological Transition and Solidarity is responsible for developing a National Waste Management Plan, which establishes targets and strategic objectives for waste management across the country. Implementation is delegated to the regional level, with each of France’s eighteen (18) regions creating its own Regional Waste Management Plan.

State agencies, namely the French Environment and Energy Management Agency (ADEME) and the Regional Directorate for the Environment, Planning, and Housing (DREAL) provide technical support to local authorities. DREAL plays a crucial role in ensuring compliance with environmental regulations at classified facilities, including waste sorting centers, incineration plants, and landfills, through regular inspections. Furthermore, DREAL influences recycling rates by monitoring and enforcing these regulations. Regions contribute by establishing overarching waste management visions and goals to guide local efforts.⁸

Producers' activities are monitored through the submission of annual and activity reports to the PRO, which include information on collection and recycling rates, as well as the tonnages of materials placed on the market. Producers' declarations are cross-checked against data provided by local authorities to state agencies.

⁸ European Environment Agency. June 2022. Early warning assessment related to the 2025 targets for municipal waste and packaging waste. <https://www.eea.europa.eu/publications/many-eu-member-states/france>

2.1.12 Education and Communication

All covered packaging placed on the market must display the Triman logo, either printed directly on the item or affixed with a sticker, except for glass packaging.⁹ This logo has recycling instructions for consumers on how to dispose or recycle of various components of packaging.

2.1.13 Targets and Performance

The 2020 Circular Economy Law set reduction, reuse and recycling targets for a set list of single-use plastic items for the 2021-2025 period, including setting a target of ending all SUP use by December 2040.¹⁰ The table below outlines France's recycling performance compared to the targets set by the European Union (EU) Packaging and Packaging Waste Directive that France is required to achieve.

Table 4: France's 2022 recycling performance compared to 2030 targets

Material	2022 Performance	2030 Target
Plastic	25.2%	55%
Steel	70.5%	80%
Aluminum	40.1%	60%
Paper and cardboard	89.4%	85%
Glass	81.2%	75%
All packaging	65.5%	70%

France also has reuse targets which are broken down by year and by revenue level.¹¹ Producers must achieve these targets individually, although enforcement is at the PRO level. The Packaging and Packaging Waste Regulation will introduce new reuse targets for packaging that will be mandatory for producers to achieve across the EU.¹²

⁹ Citeo (2021) 2020 Declaration Guide Packaging. Available at: https://bo.citeo.com/sites/default/files/2021-11/20201015_CITEO_2020_GUIDE%20EMBALLAGE_UK.pdf.

¹⁰ CMS. 2021. Plastics and Packaging Laws in France. Available at: <https://cms.law/en/int/expert-guides/plastics-and-packaging-laws/france> (Accessed 27 November 2021).

¹¹ JEMET Elisa, GUIOT Marianne, ADEME. 2024. Réemploi des emballages : données 2023. <https://librairie.ademe.fr/ged/9347/Reemploi-Emballages-Donnees2023-Bilan.pdf>

¹² Regulation of the European Parliament and of the Council on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC. eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52022PC0677

Table 5: France’s Reuse Targets According by Producer Revenue Level

Annual producer revenue	Date	Target
Producer with revenue below 20 million euros	2026	5%
	2027	10%
Producer with revenue between 20 and 50 million euros	2025	5%
	2026	7%
	2027	10%
Producer with revenue above 50 million euros	2023	5%
	2024	6%
	2025	7%
	2026	8%
	2027	10%

In 2023, 2.4 billion reusable packaging items of various types were placed on the market in France, representing a reuse rate of 2.22%.¹³

2.2 British Columbia

2.2.1 Overview

British Columbia's EPR system for packaging and paper products launched in 2014. Under the Recycling Regulation of the Environmental Management Act, the program sets out requirements for producers of packaging and products (PPP), including collection, consolidation, transport, processing, and delivery to end markets, while also providing chain-of-custody reporting and validation.

2.2.2 Producers and PRO

Recycle BC is the PRO administering the program on behalf of its producer members, supported by a Board of Directors and an Advisory Committee, which provide oversight and stakeholder engagement. The program is financed through producer fees.

Producers in a PRO develop and submit an EPR plan, outlining the recovery and management of products at end-of-life. Producer plans are evaluated based on recovery rate targets, environmental impact reduction strategies, and stakeholder engagement measures, among other criteria.¹⁴ These must be approved by the Director of the Ministry of the Environment. Every five years, producers must review their plan, proposing amendments or confirming the plan’s continued relevance.

¹³ JEMET Elisa, GUIOT Marianne, ADEME. 2024. Réemploi des emballages : données 2023. <https://librairie.ademe.fr/ged/9347/Reemploi-Emballages-Donnees2023-Bilan.pdf>

¹⁴ British Columbia Environmental Management Act: Recycling Regulation Schedule 5. https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/449_2004#Schedule5

2.2.3 Covered Entities

The program applies to packaging and paper products from residential homes and public spaces:¹⁵

- **Single-Family Dwellings:** Homes inhabited year-round or seasonally, including houses, apartments, townhomes, and other types of standalone residential units.
- **Multi-Family Dwellings:** Buildings with multiple units, such as condominiums, rental apartments, cooperative housing, fractional ownership residences, and senior residences (excludes nursing homes and long-term care facilities that provide medical care). Time-share and condominium properties associated with seasonal or leisure facilities are treated as commercial operations and are excluded.
- **Sidewalks:** Municipal sidewalks located next to buildings in urban commercial areas, and primarily used for pedestrian traffic.
- **Public Plazas and own Squares:** Municipal property designated for public gatherings and activities.
- **Municipal Parks:** Recreational and leisure spaces that are municipal property and accessible to the public.

The program does not cover packaging and paper products from industrial, commercial, or institutional sources.

2.2.4 Covered Products

The Environmental Management Act defines packaging as any material used to protect, contain, or transport goods or attached to products for marketing or information purposes, including:

- **Primary packaging:** Directly contains the product for sale to consumers.
- **Secondary packaging:** Grouped or bundled packaging that consumers bring home, such as multiple products sold together in plastic wrap.
- **Tertiary packaging:** Packaging used to ship products that end up with the consumer, like cardboard boxes for household goods.
- **Service packaging:** Packaging provided at the point of sale to carry items, including bags, boxes, and wraps, whether branded or unbranded.
- **Packaging components and ancillary elements:** Items attached to or integrated into packaging, like labels, lids, zippers, and dosage tools, that perform a packaging function but are not part of the product itself.

¹⁵ British Columbia Environmental Management Act: Recycling Regulation Schedule 5.
https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/449_2004#Schedule5

- **Paper products:** Paper packaging such as paper used for informational or general purposes, covering items such as flyers, brochures, newspapers, magazines, and writing paper. Paper products made from diverse cellulosic sources (e.g., wood, cotton, rice) are included, except for paper products that might be unsafe or unsanitary to recycle, as well as certain bound books.

Since January 1, 2023, the definition of covered products has been expanded to include:

- **Single-use products:** Items like straws, stir sticks, utensils, plates, bowls, cups, and certain paper party supplies intended for one-time use.
- **Packaging-like products:** Items typically sold for household use to contain or protect products, such as food storage bags, aluminum foil, disposable containers, and non-durable plastic food containers. Other examples include cardboard moving boxes, recycling bags, and plant pots.

2.2.5 Covered Materials

Materials covered include rigid and flexible plastic, non-deposit glass containers, steel and aluminum containers, fiber packaging and cardboard, paper, and foam packaging. A comprehensive list of accepted materials is kept up to date by Recycle BC.¹⁶ The table below provides an overview of common packaging materials, whether they are covered by EPR, and whether they are accepted in curbside collection or can only be dropped off at depots.

Table 6: Packaging Materials covered by EPR in British Columbia

Material	Is this a Covered Material?	Is this material only collectable at a depot?
Mixed Paper	Y	N
Old Corrugated Cardboard (OCC)	Y	N
Polycoated Paper	Y	N
PET Bottles	Y	N
PET Thermoforms	Y	N
HDPE	Y	N
PP	Y	N

¹⁶ Recycle BC. What Can I Recycle? <https://recyclebc.ca/what-can-i-recycle/>

Material	Is this a Covered Material?	Is this material only collectable at a depot?
Other #3-7	Y	N
EPS	Y	Y
Monomaterial Film	Y	Y
Multimaterial Film	Y	Y
Aluminum Cans	Y	N
Aluminum Foil	Y	N
Tin/Steel Cans	Y	N
Aerosol Cans	N	N
Glass Bottles	Y	N

The program excludes certain products including beverage containers that are subject to a deposit under the province’s deposit return system (DRS) as well as packaging and paper products that could be unsafe or unsanitary to recycle.

Recycle BC’s program does not collect a small subset of disruptive packaging types that lack viable end markets. However, producers of these materials are still required to pay fees to support the recycling system. The PRO regularly conducts analyses and pilot programs to evaluate the potential inclusion of these materials in the collection system in the future. Materials and products that are excluded from collection but for which producers still pay a fee are fiber-based packaging with a foil layer; paper bags with a plastic layer; and compostable, biodegradable, oxo-degradable plastics.¹⁷

2.2.6 Fees and Cost Coverage

Fees are calculated by material category and are determined to cover the costs of collection, transportation, and processing, expressed in cents per kilogram. Fees are also used for education and program administration. Fees are issued to producers annually in January for the previous year. Producers are required to file their reports by May 31 each year and fees are paid quarterly. For instance, invoices for 2024 will

¹⁷ Recycle BC. Materials List. <https://recyclebc.ca/wp-content/uploads/2023/01/Recycle-BC-Material-List-2023-English.pdf>

be based on reports from 2023 reflecting 2022 supply data.¹⁸ The table below provides the 2024 and 2025 fee rates and the variance of these rates.¹⁹

Table 7: British Columbia's Fee Rates in 2024 and 2025

Category	Material	2025 Fee Rates (USD cents/lbs)	2024 Fee Rates (USD cents/lbs)	Variance %
Printed Paper	Newsprint	23	17	31
	Magazines and Catalogues	9	8	16
	Telephone Books	9	8	16
	Other Printed Paper	23	19	23
Paper Packaging	Corrugated Cardboard	18	15	17
	Boxboard	10	9	14
	Gable Top Cartons	23	22	1.4
	Paper Laminates	20	17	23
	Aseptic Containers	27	24	13
Plastics	PET Bottles	32	31	4.1
	HDPE Bottles	13	14	-9
	Plastic Film	48	44	9.3
	Plastic Laminates	48	45	7
	Expanded Polystyrene	101	88	15
	Rigid Polystyrene	41	33	24
	Other Plastics	28	24	17
Steel	Other Steel Packaging	20	17	18
	Steel Aerosols	14	11	22
	Steel Paint Cans	21	15	40
Aluminum	Aluminum Food & Other Containers	19	21	-9
	Other Aluminum Packaging	22	20	11
Glass	Clear Glass	16	13	19
	Colored Glass	16	13	21

Recycle BC conducts regular waste composition and cost impact analyses to inform the fee-setting methodology.

¹⁸ Circular Materials. Fees and Invoices. https://knowledge.werecycle.ca/Producers/03_Fees

¹⁹ Recycle BC. Fee Schedule. <https://recyclebc.ca/producers/reporting-fees/fee-schedule/>

2.2.7 De Minimis Exemptions and Simplified Reporting for Low-Volume Producers

Recycle BC provides exemptions and simplified reporting options to small businesses and low-volume producers to reduce the administrative burden of compliance with EPR requirements.²⁰

Small producers can be completely exempt from EPR requirements based on:

- **Revenue:** Businesses with less than CAD\$1 million (around USD \$693,000) in annual revenue in BC.
- **Low volume:** Businesses supplying less than 1,000 kg (around 2,200 pounds) of PPP to BC residents.
- **Single retail location:** Businesses operating a single point of retail sale that is not part of a franchise, chain, or banner.
- **Charity status:** Registered charities.

For small producers that are not exempt from requirements, Recycle BC provides simplified reporting and flat fees to facilitate compliance. Businesses supplying between 1,000 and 15,000 kg (2,200 to 33,000 lbs) of PPP per year qualify for simplified reporting options.²¹ They may choose either to file a simplified report with a flat fee or to submit a detailed report of the exact amount of PPP supplied, with fees calculated according to Recycle BC’s annual fee schedule. The simplified report enables producers to pay a flat fee based on the estimated annual quantity of packaging and paper product they supply to BC residents.²² The flat fees for low-volume producers opting for simplified reporting in 2024 and 2025 are shown in the figure below.

Table 8: Flat Fees for Low-Volume Producers

Total supplied (lbs)	2025 fees (USD)	2024 fees (USD)
2200-5509	897	828
5510-11020	2,139	1,932
11201-22045	5,037	4,554
22046-33000	8,556	7,728

2.2.8 Collection

Recycle BC provides recycling services to 99.4% of households in British Columbia, encompassing urban, rural, remote, and First Nation communities throughout the

²⁰ Recycle BC. Small Business, Low Volume & Flat Fee Stewards. <https://recyclebc.ca/producers/registration/small-business-low-volume/>

²¹ Recycle BC. Small Business, Low Volume & Flat Fee Stewards. <https://recyclebc.ca/producers/registration/small-business-low-volume/>

²² Recycle BC. Fee Schedule. <https://recyclebc.ca/producers/reporting-fees/fee-schedule/>

province.²³ Moreover, 74.9% of BC’s population is serviced curbside, with the remaining 14.5% having access through depots.

Collection is carried out through various methods, primarily categorized into curbside collection, multi-family collection, and depot collection. There are also specialized programs to collect packaging from First Nation communities and streetscapes.

Table 9: Covered Entities and Building Type in BC

Collection Type	Covered entity and building type
Curbside Single-Family	Single-family homes, buildings with up to four households, and row house complexes where materials are set out separately by each household.
Curbside Multi-Family	Residential complexes with five or more units where materials are deposited in centralized locations.
Depots	All residents
First nation communities	First nation communities, whether they be served by local government, a depot, or who organize their own collection services.
Streetscape	Municipal properties such as sidewalks, plazas, and parks.

Recycle BC incentivizes local governments, First Nations, private firms, and non-profits to collect residential packaging and printed paper.²⁴ Recycle BC has contractual agreements with collectors and pays curbside collection and top up fees based on the type of service provided. Top up fees are paid by Recycle BC to their contractors for the purposes of promotion, education, and outreach programs and administrative expenses associated with the program.²⁵ Annually, it reviews system performance against recovery and accessibility goals in its Stewardship Plan and may expand the collector network to meet targets.²⁶ Criteria for expansion include the ability to enhance service in underserved areas and contribute to greater collection efficiency.

Service frequency requirements vary by collection type. For example, curbside collection must be provided no less than bi-weekly to all eligible households, while depots are expected to operate at hours convenient to the public.²⁷ Multi-family building collectors must provide recycling containers for residents, with signage indicating accepted materials.

²³ Recycle BC. 2023. Annual Report. https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC_Annual-Report_2023_F.pdf

²⁴ Recycle BC. Prospective Collectors. <https://recyclebc.ca/collectors/prospective-collectors/>

²⁵ Recycle BC. Example Statement of Work for Curbside Collection Services Provided by Local Government. <https://recyclebc.ca/wp-content/uploads/2024/11/Recycle-BC-LG-Curb-SOW-2024.09.17-SAMPLE.pdf>

²⁶ Recycle BC. Prospective Collectors. <https://recyclebc.ca/collectors/prospective-collectors/>

²⁷ Recycle BC. 2023. Collector Qualification Standards. <https://recyclebc.ca/wp-content/uploads/2023/01/2023-Recycle-BC-Collector-Qualification-Standards.pdf>

Recycle BC additionally sets minimum environmental, safety, and operational requirements that all collectors must meet. For instance, collectors must submit regular reports on collection metrics to support Recycle BC's tracking and assessment of program performance.

2.2.9 Processing and Recycling

Recycle BC plays a central role in managing the recycling system by establishing the necessary infrastructure and contracting for the processing and recycling of materials. They also provide compensation to municipalities to cover their collection costs, ensuring that local governments are supported in delivering effective recycling services.

Collected material is transported to one of forty-one (41) receiving facilities in British Columbia. Recycle BC contracts with various public and private sector stakeholders to carry out the following post-collection services:

- Receiving PPP from collection vehicles
- Picking up PPP from depots
- Consolidating and transferring PPP as needed
- Handling and sorting PPP
- Preparing PPP for shipment to end markets
- Marketing PPP to maximize revenue from commodities
- Effectively managing residual materials
- Reporting metrics to Recycle BC, including quantities of materials received from collectors, sent to end markets, and received at those markets

Once materials are sorted and baled, they are sold to end markets as commodities.

2.2.10 End Markets

Recycle BC selects acceptable end markets for materials, conducting due diligence to ensure responsible recycling and management practices. Priority is given to local markets, followed by regional markets and those in the Organization for Economic Cooperation and Development (OECD) member countries. Marketing to non-OECD countries is permitted only if these markets meet environmental, health, and safety standards equivalent to OECD guidelines.

In 2023, 73% of all materials from the Recycle BC program were directed to domestic North American recycling end markets, with the majority remaining within the Pacific Northwest.^{28,29}

²⁸ Recycle BC. End Markets. <https://recyclebc.ca/learn/the-recycling-process/end-markets/>

²⁹ Recycle BC. 2023. Annual Report. <https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC-Annual-Report-2023-F.pdf>

2.2.11 Reporting Requirements

Under British Columbia’s Recycling Regulation, producers are required to submit an annual report to the director by April 30 each year. This report must cover key details about the producer’s activities and efforts from the preceding calendar year, as well as quarterly updates on collection totals. Producers must report the following information in their Annual Report:

- **Production and Collection Totals:** The total quantity of the producer’s products produced and collected.
- **Collection Facility Locations:** The locations of all collection facilities managed by or on behalf of the producer.
- **Waste Management Levels:** The amount of collected product managed at each processing level as specified in Section 13 of the regulation.
- **Waste Reduction Efforts:** Details on efforts made by or on behalf of the producer to reduce waste through redesign or repackaging initiatives.
- **Process Verification:** An independent auditor’s description and rationale for the methods used to store, transport, and manage products at each level outlined in Section 13.
- **Monitoring System:** A description of the management system in place to monitor the effectiveness of the producer’s waste reduction and recycling efforts.
- **Educational Materials:** A description of educational materials and strategies used to raise awareness about recycling and waste reduction efforts.

2.2.12 Education and Communication

The regulation requires producers to carry out education programs with two objectives: first, to enhance resident awareness of program features and benefits through various communication initiatives, and second, to encourage informed resident actions regarding the preparation and management of packaging and paper products for collection and recycling.

2.2.13 Targets

British Columbia’s stewardship plan targets are outlined below:³⁰

- **Recovery Rate:** Achieve a recovery rate of 78% by the end of 2022.

³⁰ Recycle BC. 2023. Annual Report. <https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC-Annual-Report-2023-F.pdf>

- **Material Category Performance:** The material category program targets are outlined in the table below.^{31,32}
- **Accessibility:** Maintain a minimum accessibility performance of 98%.
- **Reporting:** Report annually on single-family and multi-family households receiving household collection services, number and locations of depots accepting PPP, and First Nations access to collection services.
- **Consumer Awareness:** Maintain a resident awareness target of 90% or higher for a PPP recycling program.

Table 10: Recovery Rates and Targets for Packaging in BC

Material Category	2023 Recovery Rate	Target Recovery Rate	Year to Achieve Target
Paper	88%	90%	2022
Plastic	43%	58%	2025
Rigid Plastic	56%	73%	2023
Flexible Plastic	20%	27%	2023
Metal	70%	81%	2022
Glass	98%	98%	2022

2.2.14 Performance and Impacts

The 2023 program performance metrics are detailed in Appendix I Appendix I Table 11. The program had a 79.6% recovery rate and accessibility increased to 99.4%.³³

Table 11: BC Performance Metrics Report³⁴

	2023	2022	Variance
Recycling Performance			
Gross Tons Collected	233,137	238,974	-2.40%
Net Tons Collected*	221,601	221,751	-0.10%
Supplied Tons	278,341	257,278	8.20%
Recovery Rate	79.60%	86.20%	-6.60%

³¹ Recycle BC. 2023. Annual Report. https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC_Annual-Report_2023_F.pdf

³² Recycle BC. September 2022. Packaging and Paper Product Extended Producer Responsibility Plan Consultation Draft. <https://recyclebc.ca/wp-content/uploads/2022/09/Recycle-BC-Program-Plan-Consultation-Draft.pdf>

³³ Recycle BC. 2023. Annual Report. https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC_Annual-Report_2023_F.pdf

³⁴ Circular Materials. October 2024. Report to Producers: Annual Producer Meeting. <https://recyclebc.ca/wp-content/uploads/2024/10/Circular-Materials-Report-to-Producers-2024.pdf>

	2023	2022	Variance
Total Population Served by PPP Program***	4,974,000	4,969,000	0.10%
Recovered lbs per Capita	89.1	89.28721611	-0.10%
Accessibility Performance			
Total Households Served	2,030,001	2,028,000	0.10%
Percent of Households with Access to Depots	199.40%	99.30%	0.10%
Promotion & Education Cost per Capita (USD)	\$0.403	\$0.396	1.40%
% of residents aware and using recycling services	95%	95%	0%
Cost Performance			
Net Tons Collected	221,601	221,751	-0.10%
Net Cost (USD)	\$100,001,571	\$93,106,845	7.40%
Net Cost per Tons (USD/ton)	\$451	\$420	7.50%
Net Cost per Capita (USD)	\$20	\$19	7.30%

Source: Adapted from Recycle BC's 2024 Report to Producers³⁵

Recycle BC has been reporting GHG emissions associated with their residential recycling program since 2019. The reported data includes emissions from the point of receiving recycling materials to the point when the materials are shipped to end markets. In 2023, the program reported a total of 29,626 tons of tCO₂e emissions, which is a reduction of 26,438 tons of tCO₂e from 2019's reported emissions of 56,064 tons.³⁶ Over 99% of Recycle BC's GHG emissions are Scope 3 emissions with the most significant categories being road and marine transport of goods.³⁷ The reported reduction in GHG emissions comes from the introduction of new electric trucks in February of 2023, which results in GHG reductions of 21.7 short tons, a 7,356 liter fuel savings and a USD \$10,130 cost savings.³⁸

³⁵ Circular Materials. October 2024. Report to Producers: Annual Producer Meeting. <https://recyclebc.ca/wp-content/uploads/2024/10/Circular-Materials-Report-to-Producers-2024.pdf>

³⁶ Recycle BC. 2023. Annual Report. <https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC-Annual-Report-2023-F.pdf>

³⁷ Recycle BC. 2023. Annual Report. <https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC-Annual-Report-2023-F.pdf>

³⁸ Recycle BC. 2023. Annual Report. <https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC-Annual-Report-2023-F.pdf>

Recycle BC reported that a total of five (5) new depots (drop-off facilities) were added in 2023, as part of their target to achieve province-wide depot accessibility.³⁹ The new drop-off locations also provide an economic benefit, as they create new jobs for individuals staffing and operating them.

2.3 Québec

2.3.1 Overview

In 2021, Québec updated its EPR law for packaging to transition from a stewardship system—where producers reimbursed municipalities for collection costs—to a modernized EPR framework. This updated system covers the costs of collection, transportation, sorting, processing, recycling, traceability, and end-use development for covered materials. It also includes investments in infrastructure, the implementation of a harmonized list of recyclable materials across the province, and eco-design guidelines aimed at improving recyclability.⁴⁰

2.3.2 Producers and PRO

Producers are required to be a member of the PRO and report containers, packaging and printed products placed on the market. Éco Entreprises Québec (ÉEQ) is the designated PRO responsible for developing, implementing and financially supporting a modernized recycling system. The PRO has the following responsibilities:

- **Determining Costs and Allocating them to Producers:** The PRO determines the costs of recovering and reclaiming materials generated by containers, packaging, and printed materials, subtracting any income derived from the materials. The PRO allocates costs to producers based on the characteristics of packaging placed on the market, such as recyclability, material use, and the percentage of post-consumer recycled content.
- **Engaging with Municipalities and Indigenous Communities:** The PRO negotiates contracts with municipal organizations and Indigenous communities to provide local services, including collection, transportation, and citizen services, for residential buildings with fewer than nine units.
- **Operational responsibilities:** The PRO engages with service providers, including by contracting for collection, sorting, and recovery of covered materials. The PRO develops guidelines, rules, and requirements to manage recovered residual materials.
- **Meeting and Reporting Performance Targets:** Responsible for achieving and annually reporting recovery, reclamation, and local recycling rates. If the

³⁹ Recycle BC. 2023. Annual Report. <https://recyclebc.ca/wp-content/uploads/2024/06/Recycle-BC-Annual-Report-2023-F.pdf>

⁴⁰ Recy- Québec. Modernized curbside collection system in Quebec. <https://www.recyc-quebec.gouv.qc.ca/sites/default/files/documents/modernisation-coll-sel-differences-systeme-actuel-en.pdf>

rates are not met, the PRO is obligated to submit, fund, and implement a recovery plan aimed at reaching these targets within two years of the plan’s submission.

The PRO submits a plan outlining the EPR system’s operational and financial responsibilities for its first five years. It must include contracts for collection, transportation, sorting, and conditioning services, along with measures to promote design for reuse and recycling, develop end markets for materials, particularly in Quebec. The plan must also outline education initiatives to support the system's launch, a timeline outlining key implementation stages, and proposed harmonization efforts with the province’s existing deposit refund systems.

2.3.3 Covered Entities

Covered entities include residential, institutional, commercial, and industrial (IC&I), as well as public places and streetscapes.

2.3.4 Covered Materials and Products

Covered products include food containers, packaging, and printed papers. The Government of Quebec and the PRO produced a list of materials covered by the program and provided guidance to municipalities on whether these are currently accepted by Material Recovery Facilities (MRFs).

Table 12: List of Materials Covered by Quebec's EPR program

Material	Is this a Covered Material	Is this accepted by MRFs across Quebec?
Mixed Paper	Y	Y
OCC	Y	Y
Polycoated Paper	Y	Y
PET	Y	Y
HDPE	Y	Y
LDPE	Y	Y
PP	Y	Y
Aluminum Cans, plates, and foil	Y	Y
Metal Cans	Y	Y
Aerosol Cans	N	Y
Glass bottles and jars	Y	Y
Coffee capsules (PP, PS)	Y	N
Flexible film	Y	N
Thermoform PET	Y	N

Material	Is this a Covered Material	Is this accepted by MRFs across Quebec?
PVC	Y	N
EPS	Y	N
Degradable plastics (oxodegradable, biodegradable, compostable, PLA)	Y	N
Aerosol containers	Y	N
#7 plastics	Y	N
Waxed cardboard	Y	N
Laminated paper	Y	N

2.3.5 Fees and Cost coverage

Producers are required to establish, implement, and finance a system that covers⁴¹:

- **Recycling Services:** Support municipal curbside recycling systems.
- **Administrative Costs:** Include the management responsibilities of ÉEQ as the designated management organization.
- **Eco-Modulation Incentives:** Promote sustainable packaging practices.
- **Investments:** investment in end markets and infrastructure
- **Education and Outreach:** Run public information campaigns.

Quebec’s modernized EPR program is accompanied by an expansion of their Deposit Return System (DRS) for beverage containers.⁴² Certain beverage containers, which will be included in DRS starting March 1, 2025, are excluded from the curbside system fees for the majority of 2025. For these newly returnable beverage containers, producers will only be billed for the time they remain in the curbside system, which is January and February of 2025. The rate applied to these materials will reflect just two months of their presence in the system.

The table below shows the fees for 2025, which are based on the quantities of materials producers reported as being placed on the market in 2023. These quantities were submitted under the 2024 Schedule of Contributions (SoC). The SoC is a schedule that outlines the financial contributions that producers must make to compensate municipalities for the costs of the previous year’s recycling activities under the old system before EPR was fully implemented. Producer fees refer to the

⁴¹ Éco Entreprises Québec. Fee structure and terms. <https://www.eeq.ca/en/for-companies/fee-structure/understanding-the-schedule-of-contributions/>

⁴² Éco Entreprises Québec. Summary 2025 Producers Financial Participation Adopted Fees and Updated Policies. https://www.eeq.ca/wp-content/uploads/Summary_PFP-2025_Fees-and-Policies_VFA.pdf

financial contributions that producers must pay to cover the costs of managing the curbside recycling system in Quebec under the EPR framework, which reimburse municipalities and cover the cost of the program (administration, investments, education etc.).

Table 13: Cost of Modernization of EPR in Quebec

	2024 Cost of Recycling System to Municipalities (from 2023 data)	2025 Cost of Recycling System to Municipalities (from estimated 2024 data)	2025 cost of EPR (includes cost to municipalities and EPR program costs)
Total amount to be financed	USD \$174.7M	USD \$230.5M	USD \$277.4M
Anticipated reports from low-volume producers	(USD \$3.2M)	(USD \$3M)	(USD \$5.9M)
Deduction form newspapers	(USD \$1.7M)	(USD \$2.1M)	(USD \$2.3M)
PRO total share	USD \$170.9M	USD \$225.5 (+31.9%)	USD \$269.2M (+19.4%)
Estimated reported quantities	668.6 tons	662.2 tons (-1%)	554.8 tons (-16.2%)
Average fee for producers	USD \$255.6/ton	USD \$340.5/ton (+33.2%)	USD \$485.3/ton (+42.5%)

Source: Adapted from 2025 Producers Financial Participation Adopted Fees and Updated Policies⁴³

Eco modulation is available only to producers who provide detailed reporting of the packaging they place on the market. Producers operating under a flat-rate contribution system are not eligible unless they opt to submit a comprehensive materials report.

The following eco-modulation of fees has been outlined for producers⁴⁴:

- **Bonus for Post-Consumer Recycled Content:** A 20% fee reduction is available for materials containing post-consumer recycled content that meets thresholds outlined in Appendix A. These credits are issued via a separate invoice within one year of the materials report submission deadline.
- **Eco-design Incentive Bonus:** Producers can receive up to a 50% reduction in contributions for containers or packaging that meet eco-design criteria established by ÉEQ.⁴⁵ The maximum credit per producer is \$60,000, with individual bonuses capped at \$25,000 per application. A minimum bonus of \$5,000 is guaranteed, depending on the producer’s total contribution.

⁴³ Éco Entreprises Québec. Summary 2025 Producers Financial Participation Adopted Fees and Updated Policies. https://www.eeq.ca/wp-content/uploads/Summary_PFP-2025_Fees-and-Policies_VFA.pdf

⁴⁴ Ministère de l’Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs. June 2024. Tarif 2024 pour les catégories « contenants et emballages », « imprimés » et « journaux ». https://www.eeq.ca/wp-content/uploads/Arrete_ministeriel_2024-1001_Tarif-2024.pdf

⁴⁵ Éco Entreprises Québec. Packaging Ecodesign. <https://ecoconception.eeq.ca/en-ca>

- **Malus for certain materials:** Producers will be subject to a 20% malus for placing PVC, PLA, and other biodegradable plastics on the market.

To be eligible for bonuses, producers must submit a request to the PRO. When applying for the bonus, companies must outline the actions implemented and indicate whether they wish their initiatives to be published as a case study on the Ecodesign Portal of the PRO. Producers can earn bonuses totaling up to a maximum of 50%.

2.3.6 De Minimis Exemptions and Simplified Reporting for Low-Volume Producers

Small producers are eligible for exemption or payment through flat fees and simplified reporting. The policy is not in the legislation but was adopted by the ÉEQ board.⁴⁶

2.3.7 Eligibility Criteria for Small Producers:

- **Exemption from Payment:** Small producers may be exempt from financial participation if they meet one of the following criteria:
 - Market less than 1 metric tonne (1.1 short tons) of materials during the reference year.
 - Have total gross sales of less than CAD \$1 million (USD \$693,000)
 - Retailers with a single point of sale and a store size under 929 m² (10,000 sq. ft.) that are not affiliated with a franchise.
 - Newspaper producers with less than 15 metric tonnes (16.5 short tons) of materials marketed or whose financial participation is covered by a voluntary producer.
- **Simplified Reporting:** Producers who meet specific thresholds for materials marketed or sales volume can opt for simplified reporting, which leads to a fixed financial participation. This option is available for producers who:
 - Market between 1 and 15 metric tonnes of materials (1.1 short tons and 16.5 short tons)
 - Have sales between CAD\$1 million and CAD\$2 million (USD \$693,000 and USD \$1.4 million)

These producers can select a simplified reporting process through the ÉEQ Portal. They are required to confirm their eligibility annually.

Small producers who qualify for the simplified report will select the fixed financial participation corresponding to their threshold. This system simplifies the reporting process and provides a predictable cost for producers. The exact rates will be

⁴⁶ Éco Entreprises Québec. Small Producers' Policy. <https://declaration.eeq.ca/en-US/info/?id=cf937eb8-aae3-ed11-8847-000d3ae937b3>

determined based on average weights and annual rates. The table below provides the flat fees for producers based on the amount of packaging they placed on the market.

Table 14: Flat fees for Low-volume Producers in Quebec

Producer size (short tons)	2025 Producer fees (USD)
> 1.1 and < 2.7	\$1,325
> 2.7 and < 5.5	\$2,670
> 5.5 and < 11	\$5,334
> 11 and < 16.5	\$8,018

2.3.8 Collection, Recycling, and Processing

The modernization of Quebec's selective collection system introduces several changes aimed at optimizing municipal collection services and improving recycling efficiency. Starting in 2024 and over a nine-year period, the system will progressively expand to accept all targeted residual materials, while the recovery obligation will be phased in over eight years for all residential sectors, including multi-unit, institutional, commercial, and industrial buildings, as well as outdoor public places in municipalities with more than 25,000 inhabitants.⁴⁷ This applies even to isolated and remote territories.

To ease the transition, compensation for municipal services has been amended to cover additional costs arising from collection contracts that took effect after December 31, 2022. This amendment is designed to address the potential for higher costs due to shorter contract terms imposed by the expiration dates of existing municipal contracts. For contracts extending beyond December 31, 2024, the PRO is required to sign new agreements with municipal bodies, providing compensation or canceling existing contracts, and potentially assuming related expenses, penalties, or damages. This ensures continuity in the collection and transport of residual materials, especially for smaller residential buildings with fewer than nine dwellings.

Starting in 2025, municipalities will need to agree on terms and conditions for reimbursement with the PRO for municipal collection and transportation services related to materials covered by EPR.

A key component of the modernized EPR is the separation of collection and sorting responsibilities. Municipalities will continue to manage curbside collection and transportation through separate tenders, while the PRO will handle sorting and processing operations with sorting centers.⁴⁸

⁴⁷ Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs. Modernized Selective Collection. <https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/collecte-selective-modernisee-en.htm#changes>

⁴⁸ Recy- Québec. Modernized curbside collection system in Quebec. <https://www.recy-quebec.gouv.qc.ca/sites/default/files/documents/modernisation-coll-sel-differences-systeme-actuel-en.pdf>

2.3.9 End Markets

Producers are responsible for establishing, managing, and funding a selective collection system that ensures residual materials are traceable throughout their lifecycle. This means maintaining a clear and documented record of the materials from the point of collection to their final destination. To ensure traceability, tracking the quantities of residual materials at every stage of the process, including collection, transportation, sorting, and preparation for recycling or disposal.

Currently, end markets for common packaging and paper products are as follows⁴⁹:

- **Multilayer cardboard:** The fiber layer is converted and used in the production of fiber-based products. However, the plastic and aluminum layers are not yet valorized, though research is ongoing to identify new uses for them.
- **Glass:** There are numerous end markets for recycled glass, including the production of glass containers, fiberglass, filtration glass, cellular glass, sandblasting abrasives, and glass powder. The glass powder can be added to cement, improving concrete's durability and lifespan, which may lead to significant reductions in greenhouse gas emissions.
- **Recycled plastic:** Recycled plastic can be reintegrated into various products. For example, polyethylene terephthalate (PET) containers can be transformed back into bottles or repurposed into textiles such as carpets and fleece jackets.
- **Aluminum:** Currently, there are no facilities in Quebec to process aluminum due to insufficient volumes of recovered material to make building a processing plant financially viable. As a result, aluminum is exported to the United States.

With the expansion of covered materials and anticipated increases in materials sent for recycling, the regulations require investments into local processing capacity and set a requirement for local recovery and reclamation. Recovery and reclamation are considered local if they occur in Québec, Ontario, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, as well as in the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania.⁵⁰

⁴⁹ Ministère de l'Environnement et de la Lutte contre les changements climatiques. 2022. Analyse d'impact réglementaire des Règlements concernant la modernisation des systèmes de consigne et de collecte sélective. <https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/analyse-impact-reglementaire-modernisation-consigne-collecte-selective.pdf>

⁵⁰ Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs. Modernized Selective Collection. <https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/collecte-selective-modernisee-en.htm#changes>

2.3.10 Reporting Requirements

Producers are required to report the weights of the containers, packaging, and printed materials they distribute in Québec annually, categorizing them into 30 specified material classes, which are outlined in the table below.⁵¹

Table 15: Specified Material Classes for Reporting Packaging in Quebec

Materials Category		Materials Sub-category
Printed Products		Newsprint inserts and circulars
		Catalogues and publications
		Magazines
		Telephone books
		Paper for general use
		Other printed matter
Containers and Packaging	Paperboard	Corrugated cardboard
		Kraft paper shopping bags
		Kraft paper packaging
		Boxboard and other paper packaging
		Gable-top containers
		Paper laminates
		Aseptic containers
		Cork and wood
		Alternative fibers
	Plastics	PET bottles
		HDPE bottles, any formats and HDPE containers <5 L
		Plastic laminates
		Plastic HDPE and LDPE plastic films
		HDPE, LDPE plastic shopping bags
		Expanded polystyrene – food packaging
		Expanded polystyrene – cushioning packaging
		Non-expanded polystyrene
		PET containers
		Polyvinyl chloride (PVC)
		Polylactic acid (PLA) and other degradable plastics
Polypropylene (PP)		
Other plastics, polymers and polyurethane		

⁵¹ Éco Entreprises Québec. 2024. Schedule of Contributions. https://www.eeq.ca/wp-content/uploads/EEQ_MAJ_GuideDesMateries_EN_VF_compressed.pdf

Materials Category		Materials Sub-category
	Aluminum	Food and beverages aluminum containers
		Other aluminum packaging
		Aluminum aerosol containers
	Steel	Steel aerosol containers
		Other steel containers
	Glass	Clear glass
		Colored glass
		Ceramic and porcelain

Producers must report sales figures, quantities of products, and the weight and material composition of containers, packaging, and paper products in the PRO portal.⁵²

2.3.11 Governance and Enforcement

The PRO must submit an annual report each year starting in 2024. This report includes the PRO's activities for the previous year, its financial statements, and audit reports on various data, including quantities diverted for recycling. The financial statements and related information must be audited by a chartered professional accountant or another authorized auditor. The auditor cannot be employed by the PRO or a producer. Beginning in 2026, the PRO must arrange audits every three years of data provided by sorting centers and conditioners under contract with the PRO. Audits must cover at least 10% of the total material quantities. Producers, sorting centers, and conditioners must provide access to necessary documents for audits. There various administrative penalties for non-compliance with EPR requirements, ranging from \$500 for individuals to \$1.5 million for other entities.⁵³

2.3.12 Education and Communication

Education and communication efforts will be carried out by municipalities and are being progressively rolled out as the scope of covered materials is incorporated into recycling collection. The PRO provides guidance to municipalities through templates and visual materials to assist in educating the public about collection. Municipalities must regularly share key information with residents, such as the list of accepted and rejected materials, collection schedules, and contact details for customer service. Additionally, they are responsible for notifying the public of any changes to the service, including modifications to the materials collected, collection days, or the introduction of special seasonal collections. To ensure consistent communication, the PRO has established standardized vocabulary, icons, and visuals that must be used in all public communications.

⁵² Éco Entreprises Québec. Reporting Portal. <https://declaration.eeq.ca/en-US/>

⁵³ Environmental Quality Act Chapter 2. <https://www.legisquebec.gouv.qc.ca/en/document/cs/Q-2?&target=>

2.3.13 Targets

The legislation sets targets for "recovery" and "reclamation," which correspond to collection and recycling objectives.

Recovery refers to the amount of paper and packaging materials collected, and recovery targets are measured by dividing the weight of materials recovered by the total weight of materials collected (including non-paper and packaging materials). To calculate the amount of material recovered, the PRO must sample residual materials in sorting centers and with conditioners (e.g., secondary processors that manage a single material type to prepare it to be sent to end markets such as glass beneficiation facility or plastic flake facility) in the following ways:

- **Sorting Center Sampling:** Samples are taken both before and after the sorting of materials. This helps measure how much of the material is successfully sorted and prepared for recycling.
- **Conditioner Sampling:** Sampling is done when materials are sent by the conditioner to the reclamation site (where the materials are further processed or recycled). If the conditioner is also the entity responsible for reclamation, the sampling is done after conditioning is completed.

At least one-third of sorting centers and conditioners are subject to characterization each year. This ensures that all sorting centers and conditioners undergo characterization at least once every three years.

Reclamation refers to “re-use, recycling or biological treatment, including composting and biomethanation, land farming, regeneration or any other process that does not constitute elimination”.⁵⁴ Elimination is defined as “any operation for the final deposit or discharge of residual materials in or into the environment, in particular by dumping, storage or incineration”.⁵⁵

The targets below apply to covered material. Note that Quebec has a deposit return system (DRS) and containers subject to a deposit have their own collection and reclamation targets in Quebec’s Environmental Management Act.

Table 16: Performance Target for Quebec's EPR program

Material Category	2027 Recovery Target	2027 Reclamation Target	2030 Reclamation Target
Cardboard	85% + 5% after five years Until reaching 90%	75%	75% + 5% every five years Until reaching 85%
Fiber-based packaging other than cardboard	80% + 5% after five years Until reaching 85%	70%	70% + 5% aux five years Until reaching 85%

⁵⁴ Environmental Quality Act Chapter 2. <https://www.legisquebec.gouv.qc.ca/en/document/cs/Q-2?&target=>

⁵⁵ Environmental Quality Act Chapter 2. <https://www.legisquebec.gouv.qc.ca/en/document/cs/Q-2?&target=>

Material Category	2027 Recovery Target	2027 Reclamation Target	2030 Reclamation Target
Rigid HDPE	80% + 5% every five years Until reaching 90%	65%	65% + 10% every five years Until reaching 85%
Rigid PET	80% + 5% every five years Until reaching 90%	70%	70% + 5% every five years Until reaching 85%
Other rigid plastics	75% + 5% every five years Until reaching 85%	65%	65% + 10% every five years Until reaching 75%
Flexible plastics	50% + 5% every five years Until reaching 85%	40%	40% + 10% every five years Until reaching 80%
Glass	70% + 5% after five years Until reaching 75%	65%	65% + 10% every five years Until reaching 85%
Aluminum	55% + 5% every five years Until reaching 80%	45%	45% + 10% every five years Until reaching 85%
Metals other than aluminum	75% + 5% every five years	70%	70% + 10% every five years Until reaching 80%

2.3.14 Performance and Impacts

Since the transition to the modernized EPR is still ongoing, a full analysis of its performance and impact is not yet possible as of the date of writing. However, the Government of Quebec has published an analysis of the anticipated impacts.⁵⁶ The modernization of the deposit system is expected to divert approximately 55,500 short tons of material from landfills, preventing approximately 29,000 tons of CO₂ equivalent in greenhouse gas (GHG) emissions. These figures account for both the materials diverted through separate collection and those diverted from landfill. Additionally, the curbside recycling system will avoid nearly 77,800 tons of CO₂ equivalent by diverting approximately 59,000 tons of material from landfills. In total, the new regulations will prevent approximately 107,000 tons of CO₂ equivalent in GHG emissions. However, the analysis does not assess the impact of the regulations on GHG emissions from transporting materials, and any increase in transportation could lead to higher emissions.

Within five years, the Regulations are expected to promote the diversion of approximately 115,000 tons of material from disposal to recycling annually. According to data from the 2006 report *Employment and Training in the Waste Management Sector in Quebec*, three jobs are created for every 1,100 tons of waste

⁵⁶ Ministère de l'Environnement et de la Lutte contre les changements climatiques. 2022. Analyse d'impact réglementaire des Règlements concernant la modernisation des systèmes de consigne et de collecte sélective. <https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/analyse-impact-reglementaire-modernisation-consigne-collecte-selective.pdf>

diverted.⁵⁷ Therefore, by reducing the amount of waste sent to disposal, a potential 100 to 499 jobs are expected to be created. These jobs are likely to be generated primarily in businesses that process plastic and glass, as well as in transport companies. Additionally, some jobs are expected to be created for the management of the modernized deposit and curbside recycling systems.

2.4 USA

2.4.1 Colorado

Overview

Colorado’s EPR Bill for packaging materials and paper products was passed in June 2022. The Bill (HB 22-1355) sets up a producer responsibility program that require companies that sell products in packaging, paper products to fund a statewide recycling system to recycle those materials.⁵⁸ A needs assessment for this bill was conducted by Circular Action Alliance (CAA). The study evaluated the recycling infrastructure, services, and costs throughout all geographic areas of the State of Colorado.

Producers and PRO

The Colorado EPR program is operated and funded by producers who are members of a non-profit PRO, overseen by the Colorado Department of Public Health and Environment with input from a producer responsibility for statewide recycling advisory board whose members include various recycling stakeholders.⁵⁹ CAA is the PRO for Colorado’s EPR program.⁶⁰

Covered Entities

The program applies to covered materials from residential locations and non-residential locations;

- Single-family residences or multi-family residences in the state
- Nonresidential locations including public places, small businesses, schools
- Hospitality locations
- State and Local Government Buildings

⁵⁷ Ministère de l’Environnement et de la Lutte contre les changements climatiques. 2022. Analyse d’impact réglementaire des Règlements concernant la modernisation des systèmes de consigne et de collecte sélective. <https://www.environnement.gouv.qc.ca/matieres/consigne-collecte/analyse-impact-reglementaire-modernisation-consigne-collecte-selective.pdf>

⁵⁸ Colorado Department of Public Health and Environment. Producer Responsibility Program. <https://cdphe.colorado.gov/hm/epr-program>

⁵⁹ Colorado Department of Public Health and Environment. Producer Responsibility Advisory Board. <https://cdphe.colorado.gov/hm/epr-advisory-board>

⁶⁰ Circular Action Alliance. Colorado. <https://circularaction.org/circular-action-alliance-colorado>

Covered Materials and Products:

Colorado's EPR programs covered materials includes packaging materials and paper products. Exemptions for these include:

- Packaging materials intended to be used for the long-term storage or protection of durable products and that are intended to transport, protect, or store the product for at least five years.
- Paper products that throughout their use, could become unsafe or unsanitary to handle.
- Printed paper used the distribute financial statements, billing statements, medical documents, or other vital documents required to be provided in paper form by applicable consumer protection laws or other state/federal laws.
- Bounded books.
- Beverage containers subject to returnable container deposit.
- Packaging material used exclusively in industrial or manufacturing processes.
- Packaging material used to contain products that are regulated under federal or state law.
- Packaging material used to contain a product that is regulated as animal biologics.
- Packaging material containing products that are used to contain portable electronic devices.
- Paper products used for a print publication with that primarily includes content derived from primary sources related to news and current events.

Cost Coverage

The PRO will determine a fee structure using an objective formula that incorporates:

- Cost information from the needs assessment
- Regional recycling costs
- Population density
- Number and types of households served
- Collection method
- Revenue generated from collected materials
- Contamination rates

Eco-Modulation

The legislation in Colorado requires producer fees to be eco modulated.

- The eco modulation criteria should lower rates to incentivize:

- “Reductions in the amount of packaging materials used for products.”
- “Innovations and practices to enhance the recyclability or commodity value of covered materials.”
- “High levels of postconsumer recycled material use.”
- “Designs for the reuse and refill of covered materials.”
- “High recycling and refill rates of covered materials.”
- The eco modulation criteria should increase rates to discourage:
 - “Design and practices that increase costs of recycling, reusing, or composting covered materials.”
 - “Design and practice that disrupt the recycling of other materials.”
 - “Use of covered materials that are not on the minimum recyclable list.”

Program Goals and Targets

The PRO (CAA) must set minimum targets to be reached by January 1, 2030, and January 1, 2035, for collection rates, recycling rates, and PCR content rates for covered materials. Minimum rates will increase thereafter January 1, 2035.

2.4.2 Maine

Overview

In July 2021, Maine legislation passed a law establishing a stewardship program for packaging material, with the goal of reducing the volume and toxicity of packaging material and increasing recyclability.⁶¹

Producers and PRO

The State will procure and select a packaging stewardship organization through a competitive bid process and will enter a contract with that organization to coordinate the program in April 2026. Producers may choose to comply with the requirements individually. The stewardship organization in Maine is different than other state’s PROs as producers are individually responsible for compliance with the regulation instead of the PRO.

Covered Entities

Maine’s EPR program only covers residential entities.

Covered Materials and Products

⁶¹ Maine Department of Environmental Protection. Stewardship Program for Packaging. <https://www.maine.gov/dep/waste/recycle/epr.html>

Maine's EPR programs covered materials includes consumer packaging materials and paper products. Exemptions for these include;⁶²

- Packaging for long-term storage.
- Beverage containers subject to a deposit system.
- Paint cans.
- Federally regulated perishable foods.
- Small local producers or low volume packaging producers.

Cost Coverage

Under Maine's EPR program, producers will pay a fee into a program fund that will reimburse local governments for operational costs including collection, transportation, and sorting. Producer fees will also cover;⁶³

- Administration and enforcement.
- Investments in infrastructure.
- Improvement in recycling education.

Eco-Modulation

Maine's State department will adopt rules establishing payment calculations designed to incentivize the use of materials that are readily recyclable.

Program Goals and Targets

Maine's EPR has no defined targets as of now, but when rules are developed, the program intends to focus on improving the following:

- Access to recycling.
- Collection rates.
- Material-specific recycling rates.
- Litter reduction.
- Reuse and reduction rates.
- Recycled content usage.

2.4.3 Minnesota

Overview

⁶² Maine 130th Legislature. House Bill 1541. <https://legiscan.com/ME/text/LD1541/id/2424320>

⁶³ Maine 130th Legislature. House Bill 1541. <https://legiscan.com/ME/text/LD1541/id/2424320>

In 2024, Minnesota passed an EPR law for packaging, food packaging, and paper products.⁶⁴ The law requires producers to join a PRO to coordinate and fund the statewide program. By January 1, 2032, all covered materials must be refillable, reusable, recyclable, or compostable and managed through appropriate systems such as curbside collection, alternative drop-off programs, or reuse networks.

The law creates an Advisory Board made up of experts and community representatives to provide oversight. The Minnesota Pollution Control Agency (MPCA) is tasked with conducting needs assessments, establishing program requirements to reduce material use and expand reuse and recycling systems, determining materials for collection, approving stewardship plans and progress reports, and ensuring compliance with program goals. Meanwhile, the PRO coordinates producers to develop and implement stewardship plans, provides technical assistance, and reports on progress.

Producers and PRO

Producers must register with a PRO to comply with the requirements. More than one PRO may be established after the initial approval and stewardship plan, but they must establish a coordinating body.

Producers that introduced less than one ton of covered material into the state or earned global gross revenues of less than \$2,000,000 are exempt from the requirements.

Covered Entities

Minnesota’s EPR program covers residential entities, government buildings, academic entities (schools, universities, childcare centers), as well as public areas. The program also covers nonprofits with an annual revenue of less than \$35 million.

Covered Materials and Products

Covered products includes packaging, food packaging, and paper products sold, distributed, or shipped within or into Minnesota, including online purchases. There is a business-to-business exemption for packaging or paper products used solely in the production of another product and not sent to another entity or consumer.

The MPCA is responsible for determining what materials are considered recyclable or compostable.

Cost Coverage

Producer fees cover operational, educational, and administrative costs. Fees will also go towards development of recycling, reuse, and composting infrastructure as well as towards a study identifying covered products that end up as litter in the state.

Municipalities that choose to retain control of operations will be reimbursed, while the PRO will manage operations where municipal services are not provided.

⁶⁴ Minnesota Legislature. Chapter 116.
<https://www.revisor.mn.gov/laws/2024/0/Session+Law/Chapter/116/2024-08-09%2008:04:25+00:00/pdf>

Reimbursement rates must be established based on the net costs, as determined by a methodology in an approved plan, as follows:

- No less than 50% of the net cost by February 1, 2029,
- No less than 75% of the net cost by February 1, 2030, and
- No less than 90% of the net cost by February 1, 2031, and each year thereafter.

Eco-Modulation

The fees will be eco-modulated to encourage:

- Minimization of environmental and human health impacts,
- Elimination of toxic substances,
- Reduction in packaging,
- Greater adoption of reuse and refill systems, and
- Improved recyclability and compostability.

Program Goals and Targets

The MPCA is responsible for establishing statewide requirements and corresponding deadlines for:

- waste reduction,
- recycling rates,
- composting rates,
- reuse and return rates, and
- post-consumer recycled content rates.

These statewide requirements must be reviewed every five years.

2.4.4 California

Overview

California's EPR Bill for single-use packaging and single-use food service ware packaging was passed in June 2020, Senate Bill 54. The Bill requires a PRO to be formed to establish a form of EPR for single-use packaging and plastic single-use food service ware, promoting reuse or refill systems, and implementing eco-modulated fees designed to incentivize producers to use sustainable, recyclable, or reusable materials.

Producers and PRO

Circular Action Alliance (CAA) has been designated by CalRecycle as the sole PRO for California for the initial eight-year period. Starting January 1, 2031, CalRecycle may approve additional PROs.

Covered Entities

California’s EPR program covers primary, secondary, and tertiary packaging used to contain and transport covered products.

Covered Materials and Products

California’s EPR programs covered materials includes single-use packaging and food service ware packaging. Exemptions for these include:⁶⁵

- Medical products and foods.
- Packaging for products regulated by the Federal Insecticide, Fungicide, Rodenticide Act.
- Packaging containers for hazardous materials and flammable products.
- Beverage containers subject to bottle deposit.
- Packaging for long-term storage of a product.

California’s Covered Material Categories (CMC) list provides a detailed breakdown of materials based on their type and form. The CMC covers the most common material types used in packaging as well as organic materials and ceramics:

- **Glass**
- **Metals:** Aluminum, tin steel, bimetal, other ferrous
- **Paper and fiber:** OCC, laminate, paperboard, kraft, molded
- **Plastics:** All resins and multi resin composites.
- **Wood and other organic materials**
- **Ceramics**

The CMC also breaks down packaging materials by whether they contain additional components. An example of this would be a fiber box on which there is a plastic label. The finalized CMC list has 94 categories.⁶⁶

Cost Coverage

The PRO will determine the fee structure and schedule for producers based on the cost of implementing the plan, operating costs, mitigation requirements, and the California circular economy fee. The fee structure for covered materials will be based on the following factors;

- Costs to develop and sustain end markets.
- Costs to collect, sort, avoid or remove contamination, aggregate and transport materials into defined streams to support end markets for recycling.

⁶⁵ California Legislature. Senate Bill 54.
https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB54

⁶⁶ CalRecycle. July 2024. Update to Covered Material Categories (CMC). [CMC List July 1, 2024](#)

- Costs incurred by local jurisdictions or recycling service providers.

Eco-Modulation

Fee modulation will apply for covered materials that have adverse environmental or public health impacts based on:

- Design for recyclability and compostability
- Use of post-consumer recycled (PCR) content
- Source reduction methods such as right-sizing, optimization, and packaging in bulk
- Standardization of packaging that simplifies processing, sorting, recycling, marketing, and composting
- Presence of hazardous materials and toxic additives
- Clear and accurate labeling that improves consumer behavior for sorting and disposal
- Efforts to accelerate source reduction and investment in reuse/refill systems
- Use of plastic materials derived from renewable sources such as wood, mycelium, algae, and plants like cotton, corn, sugar cane, and wheat

Program Goals and Targets

California has targets for plastic packaging and no other materials.

Covered plastic materials distributed in the State of California must be recyclable or compostable from January 1, 2032. Program targets include;

- 30% recycling rate by January 1, 2028
- 40% recycling rate by January 1, 2030
- 65% recycling rate by January 1, 2032.

The law also requires producers to achieve source reduction targets:

- 10% source reduction by 2027, with 2% achieved through reusable or refillable packaging or through eliminating a plastic component
- 20% source reduction by 2030, with 4% achieved through reusable or refillable packaging or through eliminating a plastic component
- 25% source reduction by 2032, with 10% achieved through reusable or refillable packaging or through eliminating a plastic component

Source reduction is defined as reducing the weight and number of components of covered materials relative to a baseline. Acceptable source reduction methods include:

- Bulk or large format packaging
- Concentrates

- Elimination of unnecessary packaging
- Lightweighting
- Right-sizing
- Reuse/Refill systems

Source reduction does not include replacing recyclable or compostable materials with non-recyclable or non-compostable alternatives, or with materials that are less likely to be recycled or composted. Producers cannot claim the use of post-consumer recycled content as source reduction, except under the 2032 target, which permits producers to attribute up to 8% of source reduction to incorporating post-consumer recycled content, as calculated by a formula determined by CAA.

3 Key Findings

For each of the 12 elements some key takeaways relevant for developing EPR policy in Maryland are summarized in this section.

3.1 Covered Materials and Products

When designing EPR programs, it is important to clearly define the products and materials covered. These are the packaging types which a fee will be placed on.

- **Covered products:** Determine the packaging covered by the legislation. Some programs are broad, including all packaging with exceptions for certain categories of products like medicine or hazardous products. Other programs specify the types of packaging covered such as food packaging, e-commerce packaging, etc.
- **Covered packaging:** Determine whether the legislation applies to primary, secondary, or tertiary packaging. Primary packaging directly contains the product, secondary packaging bundles multiple products, and tertiary packaging is used for shipping and protecting products and primary or secondary packaging. This impacts which entities are covered, as including secondary and tertiary packaging would include packaging from commercial entities.
- **Collected materials:** Determine the covered products and materials which will be collected as part of curbside and drop off programs. Some programs, such as Colorado's, require the creation of a recyclable materials list, identifying materials deemed recyclable or compostable. Service providers must collect these materials to qualify for reimbursements under the EPR framework. This approach seeks to standardize collection and recycling systems across the jurisdiction.
- **Reusable packaging:** Consider whether reusable packaging is a covered product. In some jurisdictions such as California, reusable packaging is specifically excluded from being a covered product, meaning it is not subject

to base fees. However, producers may need to report the quantity of reusable packaging placed on the market to comply with specific reuse targets. In France, reusable packaging is covered but is subject to an eco-modulation bonus of 100%, thereby canceling out the base fees.

3.2 Covered Entities

Covered entities determine which entities covered materials are collected from. This includes whether the focus is solely on residential sources or extends to other locations where consumers dispose of packaging, such as schools, universities, streetscapes, and parks. Broader EPR programs may also include commercial entities, targeting packaging used for transport and product protection (known as secondary and tertiary packaging), as well as packaging in business-to-business transactions. Collection services for covered entities are paid for by the program.

Colorado adopts a middle-ground approach, covering residential sources as well as small businesses, schools, and public places. France, on the other hand, currently operates an EPR program focused exclusively on residential packaging and is in the process of developing a separate program for commercial packaging. In contrast, California's EPR program encompasses both residential and commercial packaging within a single program.

3.3 Producer Responsibility Organization

Producers usually comply with EPR requirements by forming and joining a Producer Responsibility Organization (PRO). Some EPR programs allow multiple PROs to operate within the same jurisdiction, fostering competition between them, or even creating separate PROs for different packaging types, such as commercial and residential packaging. Additionally, certain programs allow producers to comply individually, submitting individual producer plans for EPR compliance.

3.4 Collection

EPR shifts the financial responsibility for collecting covered products to producers and can also transfer operational responsibility. EPR programs may include specific requirements, such as:

- **Collection Frequency:** Establishing minimum standards for how often materials must be collected.
- **Access to Collection Services:** Ensuring a certain level of service, such as providing coverage across regions and providing curbside recycling collection to entities that have trash collection.
- **Accessibility Standards:** Setting criteria for covered entities, such as minimum collection points or maximum distances to depots, to make collection convenient and equitable.

3.5 Recycling, Processing, and End Markets

EPR aims to enhance the recycling and processing of covered materials to maximize material recovery. Key aspects include:

- **Infrastructure Investments:** Supporting the development and improvement of facilities to process materials efficiently. This includes consideration for local infrastructure such as providing incentives or establishing requirements to process materials locally. Investments may also include reuse infrastructure development.
- **End Market Assurance:** Assuring that materials are genuinely recycled or reused through due diligence, verification, and auditing processes while meeting environmental, health, and safety standards.

3.6 Reporting

EPR mandates producers to report on the covered packaging they place on the market, including details such as material type and weight. The level of granularity required in these reports may vary by program. The level of detail for reporting may be specified in legislation, or the PRO may define reporting requirements.

3.7 De Minimis Exemptions and Simplified Reporting

De minimis exemptions aim to exclude small businesses that contribute minimal amounts of packaging or have limited revenue from complying with some or all EPR requirements. Exemptions can be based on criteria such as revenue, low packaging volume placed on the market, or a limited number of retail locations. Exemptions can vary in scope: some producers may be fully exempt from paying fees or reporting packaging, while others may only need to submit simplified reporting requirements or pay a flat fee. This approach allows small producers to contribute to the program while minimizing costs and reducing administrative burdens.

3.8 Fees

Producers pay fees on covered packaging, reflecting the different costs to collect, process, and recycle materials. Historically, producer fees solely reflected the cost of collection and end-of-life management. EPR functioned as a cost recovery mechanism. Recently, funds collected through EPR programs have been used to cover a broader range of costs, including investments and the expansion of collection and recycling systems. These costs, specified within legislation, vary in scope and may include:

- Operational Costs
- Education and Outreach
- Administration
- Litter Prevention

- Infrastructure Improvements
- Development of end markets

3.9 Eco-Modulation

Eco-modulation aims to incentivize sustainable product design and material choices that reduce environmental impact. Fees are determined based on environmental criteria. They reward eco-design and practices that improve recyclability or reuse through bonuses while penalizing packaging that hinders recycling with maluses. Criteria typically used as part of eco-modulation include recycled content, life cycle emissions, lightweighting, design for recyclability or reuse, and the use of renewable materials. These criteria can be established by producers, government agencies, or collaboratively by producers and recyclers. Implementing eco-modulation effectively requires robust data collection and reporting to assess its impact on incentivizing producers to design for recycling and reuse. It is a best practice to regularly review and update eco-modulation criteria to reflect advancements in technology and materials.

3.10 Targets

Targets in EPR programs can be set in legislation, by the PRO, or by the overseeing government body. Common targets in EPR include collection, recycling, reuse, and source reduction targets.

Target setting can involve setting multiple, progressively increasing targets to drive system improvements over time. This is the case in Quebec, where targets increase between 5 to 10% every five (5) years until achieving a certain rate.

These targets can be informed by a needs assessment or baseline study to promote realistic and achievable goals. Colorado integrated this into its legislation: the PRO was required to set recycling targets based on the results of the needs assessment.

Regular reviews of the targets are essential to foster continuous improvement and adapt to evolving system needs and capabilities.

3.11 Education and Communication

EPR programs often require education and outreach initiatives to inform covered entities and improve separation of materials at source. This may include requirements for EPR program funding to be allocated toward education, communication, and outreach. The PRO may be required to report these efforts.

3.12 Governance and Enforcement

The government may play a critical role in the development, administration, and oversight of EPR programs. This includes collaborating with or delegating responsibilities to other entities, such as advisory boards, which may assist in specific oversight functions. Key responsibilities include:

- **Plan Review and Approval:** Evaluating and approving EPR program plans submitted by individual producers or PROs.
- **Monitoring and Oversight:** Ensuring compliance with program requirements and tracking program performance.
- **Enforcement and Penalties:** Addressing non-compliance through financial or administrative penalties.