

Packaging and Paper Product Extended Producer Responsibility Plan

Revised July 2018

Recycle BC's first 5-year stewardship plan can be found at https://recyclebc.ca/stewards/regulation_and_stewardship_plan/



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Packaging and Paper Product Extended Producer Responsibility Plan

Table of Contents

| | |
|---|-----------|
| 1. Revised Program Plan Context | 4 |
| 2. The Extended Producer Responsibility (EPR) Agency | 5 |
| 3. Packaging and Paper Product | 6 |
| 3.1 Packaging..... | 6 |
| 3.2 Paper Product..... | 7 |
| 3.3 Sources of Packaging and Paper Product..... | 8 |
| 4. Program Design | 8 |
| 4.1 Packaging and Paper Product Program Delivery Principles | 8 |
| 4.2 Packaging and Paper Product Program Delivery Overview | 9 |
| 4.3 Collection of Packaging and Paper Product from Residents and Streetscapes | 9 |
| 4.3.1 Process for establishing financial incentives for collection..... | 9 |
| 4.3.2 Methodology to prepare revised financial incentives | 10 |
| 4.3.3 Local Governments and Curbside Collection | 10 |
| 4.3.4 Existing Curbside Programs..... | 10 |
| 4.3.5 New Curbside Programs..... | 11 |
| 4.3.6 Transition to Provision of Curbside Service by Recycle BC | 11 |
| 4.3.7 Multi-family Collection..... | 12 |
| 4.3.8 Depot Collection..... | 12 |
| 4.3.9 First Nations Recycling Initiative | 13 |
| 4.3.10 Streetscape Collection..... | 13 |
| 4.4 Post-Collection | 14 |
| 4.5 Collector and Processor Qualification Standards..... | 15 |
| 4.6 Dispute Resolution..... | 15 |
| 4.7 Communications..... | 16 |
| 4.8 Administration of the Program Plan | 17 |
| 4.9 Program Financing..... | 17 |
| 5. Program Performance | 18 |
| 5.1 Managing Environmental Impacts..... | 18 |
| 5.2 Pollution Prevention Hierarchy | 20 |
| 5.3 Performance Metrics | 21 |
| 5.3.1. Program Performance Target..... | 21 |
| 5.3.2. Material Category Performance Targets..... | 22 |
| 5.4 Reporting..... | 24 |
| 5.4.1 Third Party Assurance | 25 |
| 6. Consultation | 25 |

Packaging and Paper Product Extended Producer Responsibility Plan

| | |
|---|-----------|
| Appendix A – Glossary | 26 |
| Appendix B – Summary of Performance Measures | 27 |
| Appendix C – Producer Members of Recycle BC | 30 |
| Appendix D – Definition of Producer for the Purposes of Producer Obligation and Reporting..... | 31 |

Packaging and Paper Product Extended Producer Responsibility Plan

1. Revised Program Plan¹ Context

The Recycle BC stewardship program for residential packaging and paper product (PPP)² is unique in Canada. It is the first implementation of extended producer responsibility³ whereby producers are operationally responsible for establishing a reverse supply chain for the collection, transportation, consolidation, processing and marketing of residential PPP.

Operated on behalf of producers by Recycle BC since May 2014, this reverse supply chain has transformed the collection and recycling of residential PPP from a municipally-based activity into an integrated provincial recycling system. In 2017, Recycle BC recovered approximately 175,000 tonnes of its members' PPP from 3.475 million residents, the majority of which was efficiently sold to end-markets for use in the manufacturing of new products and packaging.

This nascent circular economy for PPP has delivered markedly improved environmental outcomes. Larger quantities of PPP are collected with lower rates of contamination. The material is subsequently managed in an operationally efficient post collection management system that employs state-of-the-art container handling practices and downstream processing technologies for plastics.

The program's focus on working with municipalities and post-collection service providers to build an integrated provincial PPP reverse supply chain has also allowed for effective management of risk. While not immune to global market forces, overall Recycle BC has been able to weather the January 1st 2018 closure of China's secondary plastics and fiber commodity markets⁴ while many other Canadian recycling programs continue to struggle to find markets for their collected fiber and mixed plastics.

The closure of Chinese commodity markets (especially those for secondary plastics), also known as the China Ban, has served to highlight a plastics crisis that has now come to the forefront of the global consciousness on the environment. It is a crisis that has arisen from: the increasing use of plastics for packaging and single-use products; low global plastics collection and recycling rates; high rates of discharge of those plastics to the environment^{5,6} (especially the marine environment); and the reliance on developing nation export markets for mixed plastics collected by recycling programs in developed nations.

In the context of this growing consciousness, a number of producers subscribing to the Recycle BC PPP program have made global commitments to undertake measures to increase and improve plastics

¹ Section 6 of the Recycling Regulation requires that every five years a producer must review its approved plan and submit proposed amendments to the Province of BC for review and approval, or in the case where no amendments to the plan are necessary, the Province of BC should be so advised. In 2017, having been in operation for three full years, Recycle BC conducted a thorough review of its performance to inform the design of a revised plan that would govern its future operations. This plan will replace the original Packaging and Printed Paper Stewardship Plan submitted by Multi-Material BC (now Recycle BC) and approved in April 2013.

² For a full definition of packaging and paper product see section 3.1 and 3.2 in this document.

³ The British Columbia (BC) Recycling Regulation (B.C. Reg. 449/2004 – the "Regulation") under the *Environmental Management Act* requires that, effective May 2014, every producer of PPP that wishes to sell, offer for sale or distribute their products to residents in British Columbia must operate, or be a member of, an approved plan concerning the end-of-life management of their products.

⁴ See: [Plastics Pile Up as China Refuses to Take the West's Recycling](#)

⁵ Approximately 8.3 billion tonnes of virgin plastics have been produced to date. As of 2015, approximately 6.3 billion tonnes of plastic waste had been generated, around 9% of which had been recycled, 12% incinerated, and 79% disposed of in landfills or the environment. Roland Geyer, R., Jambeck, J.R., and Law, K.L. (2017) Production, Use, and Fate of All Plastics Ever Made, *Science Advances* 19 Jul 2017: Vol. 3, no. 7

⁶ If current production and waste management trends continue, roughly 12 billion tonnes of plastic waste will be landfilled or discharged to the environment by 2050. Ibid. Ref.5

Packaging and Paper Product Extended Producer Responsibility Plan

recycling⁷.

Concurrently, in its role as president of the G7, Canada has championed the development of a G7 “Plastics Charter”⁸. Ratified in June 2018, the Charter sets forth a number of objectives and aspirations for improving the collection and management of plastics and the development of plastics secondary materials markets.

In preparing this revised Program Plan, Recycle BC recognizes that its extended producer responsibility (EPR) program for PPP (along with the Schedule 1 EPR program for beverage containers) is both a mechanism for furthering its member producers’ plastics recycling objectives as well as a key policy approach for meeting Canada’s commitments on plastics.

Guided by the fundamental requirements of the BC Recycling Regulation, these emerging corporate and public policy agendas regarding plastics have been given careful consideration in developing this plan, which will define the next five years of Recycle BC’s operations.

In this context, this plan lays out Recycle BC’s renewed vision that will use its logistical and operational base established in the last four years to focus on the following:

- Expand the scope of PPP under EPR;
- Expand collection of PPP;
- Ensure continued reduction in contamination rates;
- Drive innovation for recycling difficult-to-recycle materials; and critically,
- Develop consistent measurement protocols to report performance against material specific collection and recycling performance targets (i.e. Paper, Plastic, Metal and Glass) as well as for reporting the recycling performance of material sub-categories (with a focus on plastics).

2. The Extended Producer Responsibility (EPR) Agency

As discussed above Recycle BC operates a residential PPP reverse supply chain throughout British Columbia on behalf of businesses that supply packaging and paper product to BC residents.

Recycle BC is a not-for-profit organization that aims to be a trusted environmental advocate and community partner offering equitable, effective and efficient residential recycling services. Its supply chain is comprised of partnerships with local governments, First Nations, private companies and other non-profit organizations.

Based in North Vancouver and staffed with local employees, Recycle BC manages its program operations and is supported in its work by Canadian Stewardship Services Alliance (CSSA), a national, non-profit organization dedicated to providing support services to stewardship programs across Canada. Recycle BC is governed by a Board of Directors representing brand owners and retailers. The current composition of the Board of Directors can be found on Recycle BC’s website, [here](#). Recycle BC also consults with an Advisory Committee on core elements of its program. The Advisory Committee includes representatives from stakeholders interested in the success of the program, including local governments, waste management

⁷ As an example on April 26th 2018 [42 companies in collaboration with the UK WRAP](#) announced the voluntary [UK Plastics Pact](#) which makes a number of pledges to reducing plastic waste between now and 2025:

- Ensuring all plastic packaging is re-useable, recyclable or biodegradable;
- Eliminating unnecessary single-use plastic through better design;
- Including recycled plastic in at least 30% of all packaging; and
- Guaranteeing that 70% of plastic is effectively recycled or composted.

⁸ <https://g7.gc.ca/en/official-documents/charlevoix-blueprint-healthy-oceans-seas-resilient-coastal-communities/>

Packaging and Paper Product Extended Producer Responsibility Plan

industry associations, steward industry associations, and the Recycling Council of BC. The Advisory Committee's membership can be found on Recycle BC's website, [here](#).

Recycle BC acts on behalf of its member businesses who are producers of PPP. For the purposes of the Program Plan, the producer for a specific unit of packaging or paper product is the supplier of service packaging or the first of the following: brand owner, the franchisor or the first seller (also known as the first importer)⁹.

3. Packaging and Paper Product

3.1 Packaging

British Columbia's *Environmental Management Act* defines packaging as "a material, substance or object that is used to protect, contain or transport a commodity or product, or attached to a commodity or product or its container for the purpose of marketing or communicating information about the commodity or product".

Schedule 5 does not further refine the definition of packaging beyond that provided in the *Environmental Management Act* as described above.

Packaging for purposes of producer obligation and reporting under the Program Plan includes:

- (a) Primary packaging, i.e., packaging that contains the product at the point of sale to the residential consumer;
- (b) Grouped packaging or secondary packaging that goes to the household¹⁰;
- (c) Transportation, distribution or tertiary packaging that goes to the household¹¹;
- (d) Service packaging designed and intended to be filled at the point of sale and "disposable" items sold, filled or designed and intended to be filled at the point of sale such as:
 - Paper or plastic carry-out bags provided at checkout;
 - Bags filled at the shelves with bulk goods, produce, baked goods, etc.;
 - Disposable plates and cups;
 - Take-out and home delivery food service packaging such as pizza boxes, cups, bags, folded cartons, wraps, trays, etc.;
 - Flower box/wrap;
 - Food wraps provided by the grocer for meats, fish, cheese, etc.;
 - Prescription bottles filled and provided by pharmacists;
 - Gift wrapping/tissue paper added by the retailer; and
- (e) Packaging components and ancillary elements integrated into packaging, including ancillary elements directly hung or attached to a product and which perform a packaging function unless they are an integral part of the product and all elements are intended to be consumed or disposed of together¹².

⁹For a full definition of "producer" for the purposes of obligation and reporting, see Appendix D.

¹⁰ Multiple packages of product sold in a unit, often wrapped in film plastic.

¹¹ May be both the primary packaging for the product and the packaged used to ship the product but is referred to as transportation packaging that goes home with the consumer. For example, household products packaged in corrugated boxes intended for final use or management by the consumer or end user.

¹² Examples of this kind of packaging include, but are not limited to: labels and lids hung directly on or attached to the packaging; mascara brush which forms part of the container lid; staples, pins, clips; toy on the top of a candy product which forms part of the

Packaging and Paper Product Extended Producer Responsibility Plan

For the purposes of the Program Plan, paper packaging means all paper materials regardless of the cellulosic fibre source of the material including but not limited to wood, wheat, rice, cotton, bananas, eucalyptus, bamboo, hemp, and sugar cane (bagasse) fibre sources.

In accordance with the objectives of this plan and under the guidance provided by the Ministry of Environment and Climate Change Strategy (MoECCS) in preparing this plan, the scope of obligated packaging is expanded to include packaging-like products and associated single-use plastic items.

Packaging-like products are products that are indistinguishable from packaging when discarded by residential consumers, and include but are not limited to aluminum pie plates, aluminum foil, plastic or paper-based beverage cups, kraft paper bags, re-sealable plastic bags. Also included are associated single-use plastic items including such items as plastic cutlery, plates, cups, straws and stirrers.

Of note, the reference to “packaging-like product” and “single-use plastic items” above provides examples of obligated products and is meant to be illustrative. Upon plan approval Recycle BC will provide stewards and service providers with guidance on the scope of this category.

The plan does not apply to items obligated under other EPR programs, non-PPP items or PPP items supplied to industrial, commercial and institutional facilities.

3.2 Paper Product

In November, 2017 the government amended Schedule 5 of the BC Recycling Regulation to expand the Paper Product Category from printed paper to paper products¹³. Paper product is now defined as paper of any description, including:

- (a) flyers,
- (b) brochures,
- (c) booklets,
- (d) catalogues,
- (e) telephone directories,
- (f) newspapers,
- (g) magazines,
- (h) paper fibre, and
- (i) paper used for copying, writing or any other general use.

This definition of paper does not include paper products that, by virtue of their anticipated use, could become unsafe or unsanitary to recycle, or any type of bound book not mentioned above.

For the purposes of the Program Plan, paper product comprises any type of cellulosic fibre source including, but not limited to wood, wheat, rice, cotton, bananas, eucalyptus, bamboo, hemp, and sugar cane (bagasse) fibre sources.

lid; devices for measuring dosage that form part of the detergent container lid; plastic make-up case; brush contained in the lid of corrective liquid paper; zipper on a plastic film bag containing a product.

¹³ The term packaging and printed paper has been amended to packaging and paper product based on changes to the regulation.

Packaging and Paper Product Extended Producer Responsibility Plan

3.3 Sources of Packaging and Paper Product

Under Schedule 5 of the Recycling Regulation, the packaging and paper product program addresses residential premises and municipal property that is not industrial, commercial or institutional property.

Residential premises¹⁴ are:

- Single-family dwellings inhabited year-round or seasonally¹⁵; and
- Multi-family dwellings including rental, co-operative, fractional ownership, time-share, condominium¹⁶ and seniors residences¹⁷.

Municipal property that is not industrial, commercial or institutional property comprises the following which are collectively referred to as 'streetscape' in this Program Plan:

- Sidewalks which are municipal property, which adjoin buildings in an urban commercial area and which are used for pedestrian traffic;
- Plazas or town squares which are municipal property and which are available to the public; and
- Parks which are municipal property.

4. Program Design

4.1 Packaging and Paper Product Program Delivery Principles

Recycle BC's program design was driven by one overarching objective – continuous improvement in recovery effectiveness and efficiency in British Columbia.

Upon review, it is clear that the market engagement principles that guided the development and operation of the first iteration of the Recycle BC's program have served it well. As such, they will continue to guide the program's future operation:

- **Focus on outcomes, not process** – maximize recovery, maximize efficiency, enhance resident service levels while minimizing complexity;
- **Provide economic incentives and set simple rules** – effective economic incentives will drive behaviour that increases recovery activity throughout the PPP reverse supply-chain; simple rules will provide clarity and certainty to those collecting and recycling PPP;
- **Foster interaction, collaboration and competition to drive innovation** – innovation is the result of complex interactions of ideas and efforts among producers and private, public and not-for-profit entities with parties bringing together complimentary skills to collaborate and deliver more value; and

¹⁴ Section 1 of the Recycling Regulation defines "residential premises" to include houses, apartments, condominiums, town homes and other premises in which persons reside but does not include institutional accommodations or visitor accommodations.

¹⁵ Vacation facilities, such as hotels, motels, cottages and cabins, are considered commercial operations.

¹⁶ Vacation facilities, such as rental, co-operative, fractional ownership, time-share or condominium accommodation associated with sports and leisure facilities (e.g., ski resorts), are considered commercial operations.

¹⁷ Residences at which medical care is provided, such as nursing homes, long-term care facilities and hospices, are considered institutions.

Packaging and Paper Product Extended Producer Responsibility Plan

- **Set the stage for evolution** – harness existing activities and build on success through continuous improvement and use of economic incentives to increase collection of PPP and improve system efficiency.

4.2 Packaging and Paper Product Program Delivery Overview

Under the Recycling Regulation, Recycle BC assumed responsibility for establishing a province-wide reverse supply chain for PPP in BC, effectively supplanting the role that local governments historically played. This supply chain is comprised of a collection system and a post-collection system that involves the receipt of collected PPP and its consolidation, transfer and transport, processing and delivery to end markets.

With respect to collection services to BC residents, Recycle BC provides a financial incentive to local governments, First Nations and private collectors that have chosen to deliver recycling collection services and resident education under contract. In other cases, communities have elected to have Recycle BC directly manage their curbside recycling service, which means that these local governments are no longer responsible for oversight or management of recycling services or resident communication regarding curbside recycling. In all cases, Recycle BC assumes financial responsibility for all collection and post-collection activities.

Concerning the post-collection management of PPP, Recycle BC procured a post-collection system through a competitive process, resulting in an efficient, province-wide, PPP transfer and sorting system aimed at maximizing the value and re-use of the recyclables and minimizing redundancy.

Recycle BC regularly reviews both its collection and post-collection operations to identify opportunities to increase efficiency.

4.3 Collection of Packaging and Paper Product from Residents and Streetscapes

Recycle BC's approach to delivery of PPP collection services is to contract with collection service providers that meet Recycle BC's collection qualification standards. These standards are designed to assist Recycle BC in achieving its program targets and commitments. Recycle BC has established a set of collector qualification standards that include basic qualifications historically common to all PPP collectors, with additional requirements that enable tracking and reporting of sources and quantities of PPP. Local governments, First Nations, private companies and not-for-profit organizations that meet collector qualification standards are eligible to serve as Recycle BC collectors, subject to the approach described below.

Consistent with an outcomes-based approach to program operations, Recycle BC offers financial incentives to qualified collectors. These incentives are designed to provide collectors with sufficient incentive to collect the amount of PPP required by Recycle BC to meet its targets.

4.3.1 Process for establishing financial incentives for collection

Towards the end of each contract term Recycle BC develops a set of revised financial incentives that are proposed to collectors in conjunction with new services agreements. The steps to prepare the revised financial incentives are:

- Undertake an analysis to assess existing incentives in the current market context and any necessary adjustments in order to propose revised financial offers for consultation with collectors;
- Hold consultation sessions with collectors to review the proposed financial offers, discuss, answer questions and request feedback; and

Packaging and Paper Product Extended Producer Responsibility Plan

- Review all feedback provided to finalize the financial incentives that will comprise part of the published collection services agreements.

4.3.2 Methodology to prepare revised financial incentives

To determine whether any fundamental changes are needed to the existing incentives Recycle BC:

- Reviews the past 3 - 5 years of program data, including collection performance by collection channel;
- Reviews contamination levels and their impact on total supply chain costs;
- Analyzes channel-specific collection costs. Specifically, Recycle BC undertakes a cost study to determine current collection costs and compare current costs to historical costs over a five year period. Data for curbside, multi-family and depot collection costs are provided by collectors to an independent third-party accountant. Promotion and education (P&E) and service administration are also included in the study. [A summary report of the cost study is published.](#)
- Assesses inflationary factors including a review of the BC Consumer Price Index;
- Reviews service performance requirement changes since the prior services agreements were established that may have had a financial impact on the collector.

The proposed financial incentive rate derived from the above process is presented for consultation to collectors. Specific feedback by the collector is essential to this process. Once new contract templates have been published inclusive of the revised financial incentives each collector must then decide whether or not to renew its collection contract with Recycle BC.

4.3.3 Local Governments and Curbside Collection

Recycle BC may deliver curbside collection to residents itself or, as is often the case, in partnership with local governments. Local governments choose whether to act as collection agents on behalf of Recycle BC but are not required to do so.

Should a local government decide not to accept Recycle BC's financial incentive, the local government can direct that Recycle BC deliver PPP curbside collection service to residents. Should the local government choose to transition service delivery to Recycle BC, the latter becomes responsible for directly delivering all aspects of the management of curbside collection services to residents. The criteria for Recycle BC to transition an existing curbside program to direct service are outlined in section 4.3.6 below.

Local governments can also elect to decline Recycle BC's offer to provide curbside service and can operate curbside collection service outside of the Recycle BC program.

Recycle BC's approach to contracting with collection service providers and providing them with financial incentive offers for PPP collection is explained in the following sections.

4.3.4 Existing Curbside Programs

Curbside collection is defined as the collection of PPP from single-family dwellings, buildings with up to four households and row house complexes with any number of households where each household sets out material separately for collection by collection vehicles.

All local governments that were operating PPP curbside collection programs as of May 2014 are eligible to join the Recycle BC program as contracted collectors. Recycle BC will continue to offer financial incentives to all eligible curbside programs to join the Recycle BC program if they have not already done so.

Recycle BC assesses the need to expand its collection system on an annual basis and takes commercially reasonable steps to meet recovery targets and accessibility performance objectives in the subsequent year,

Packaging and Paper Product Extended Producer Responsibility Plan

taking into consideration, without limitation:

- Collectors that have expressed an interest in joining Recycle BC's collection system and that are able to:
 - Deliver collection services in areas identified as having insufficient collection service to meet accessibility performance objectives, in accordance with Recycle BC's Collector Qualification Standards, and the terms of the Master Services Agreement and Statement of Work;
 - Contribute to Recycle BC's recovery target; and
 - Contribute to the efficiency and effectiveness of Recycle BC's collection system;
- The ability of Recycle BC to modify post-collection service provider agreements to add new collectors and more tonnes of PPP; and
- The timeline to execute agreements with collectors prior to finalizing Recycle BC's operating budget for the upcoming program year.

4.3.5 New Curbside Programs

Local governments in communities that did not have PPP curbside collection programs as of May 2014 when the program was first launched, are eligible to join the Recycle BC program as contracted collectors if they implement a PPP curbside collection program, provided each of the following criteria is met:

- A curbside garbage collection program was in place as of May 2014;
- The community represents an incorporated municipality; and
- The community has a minimum population of 5,000 residents.

The timeline for the provision of formal offers to these communities is determined based on the same assessment as noted above.

4.3.6 Transition to Provision of Curbside Service by Recycle BC

Recycle BC operates curbside service directly in communities where the local government has transitioned service to Recycle BC. In these communities, Recycle BC is responsible for all aspects of the management of curbside collection services to residents.

Local governments with existing collection agreements with Recycle BC may, at their discretion, request that Recycle BC directly operate PPP curbside services in their communities, provided each of the following criteria are met:

- The request is made in writing and is accompanied by a formal resolution from the applicable Council or Board;
- A formal commitment is made, in writing, to provide Recycle BC with all reasonable assistance and cooperation during the transition period (e.g. provision of a complete address list, household data etc.);
- The request pertains to the entire service area and not a portion thereof;
- If applicable, the existing inventory of collection containers is provided to Recycle BC (or left in the possession of residents) at no cost, at the discretion of Recycle BC;
- The PPP curbside program had achieved a minimum capture rate of 90 kilograms of PPP per curbside household in the previous calendar year;
- A minimum of 18 months' notice is provided prior to the proposed transition date for provision of curbside services directly by Recycle BC; and
- The transition date falls on or after the original termination date of the applicable local government's curbside collection agreement.

Packaging and Paper Product Extended Producer Responsibility Plan

Such requests will only be considered by Recycle BC during defined windows of time as communicated by Recycle BC to eligible collectors. For example, October 1, 2018 is the deadline for local governments with existing curbside collection agreements that expire at the end of 2018 to request that Recycle BC assume direct operation of their curbside services. Pending such request, the 18-month transition period would begin effective Jan 1, 2019 with the actual transition of service to Recycle BC set to take place on July 1, 2020.

Recycle BC will be under no obligation to operate PPP curbside services directly in communities that do not meet the above criteria, including in locations where the applicable local government has requested to terminate their collection agreements prior to the original termination date.

4.3.7 Multi-family Collection

Multi-family collection is defined as the collection of PPP from residential complexes with 5 or more units where all households deposit their recycling at a centralized location in shared containers.

Recycle BC delivers PPP multi-family building collection services by contracting with local governments and private companies that accept an established financial incentive to deliver multi-family building collection services.

Recycle BC will review multi-family household participation levels annually in relation to its annual recovery target and accessibility performance objectives and expand multi-family service to BC residents by extending financial incentive offers to qualified multi-family collectors each year.

In 2017, Recycle BC serviced 422,000 multi-family households in BC out of a total of 793,000 multi-family households in the province. The majority of those not currently serviced by Recycle BC are serviced by private waste management companies that typically offer a bundled service to the multi-family building that includes PPP, garbage, and often organics collection. As part of its program of continuous improvement, Recycle BC will identify communities without significant Recycle BC presence in multi-family recycling and offer an established financial incentive to deliver multi-family building collection services. However, it is the prerogative of private waste management companies to decline Recycle BC's offer to provide multi-family service and to continue to operate a multi-family collection service outside of the Recycle BC program.

Please note that as Recycle BC on-boards communities with curbside PPP collection service, it will offer multi-family collection to buildings located within those service areas. Additionally, each year existing service contracts are expanded to include new multi-family households that appear in a service area as a result of natural population growth.

4.3.8 Depot Collection

Depot collection is defined as the collection of PPP at a location operated by a local government or private company under agreement with Recycle BC at which PPP is received from residents.

Under the Recycle BC program depot accessibility has expanded as follows:

- **Baseline coverage** was established in 2013 through services agreements offered to all qualified depot operators (local government, First Nations, private, not-for-profit) who indicated that they wished to join the Recycle BC program. In May 2014 these offers resulted in a depot collection base of 134 depots which resulted in 96% of the BC population being within a 30 and 45 minute drive time of a depot for urban residents and rural residents respectively.

Packaging and Paper Product Extended Producer Responsibility Plan

- **Expanded in-program coverage.** Recycle BC annually assesses the need to expand depot collection coverage in order to fill under-serviced areas and to provide depot accessibility for packaging and paper materials that are not collected at curb side or through multi-family service (e.g. film and foam). Seventy-seven depots have been added since 2014, with the resulting expansion raising accessibility in 2017 to 98% of the BC populations now located within a 30 and 45 minute drive time of a depot for urban residents and rural residents respectively.

The drive-time-to-depot measurement establishes the depot coverage benchmark by which Recycle BC reports its depot accessibility performance. Prospectively, depot coverage will be expanded giving consideration to where existing community services are located (e.g. a primary shopping hub) in order to ensure any incremental depot locations make a meaningful contribution to collection volumes and to convenience without duplication of transportation and with minimal cannibalization of collection volumes from existing depots. Where incremental depot capacity is deemed desirable, Recycle BC will expand depot coverage by:

- Providing existing depot operators with the option to establish satellite depots for selected smaller communities peripheral to their existing depots. A satellite depot is an approved depot operating to specific standards, from which the collector (depot operator) transports the PPP to their principal depot for pick-up by the designated post-collection service provider; and
- Providing the opportunity to collect PPP in-store and transport it to a centralized distribution centre for pick-up by the designated post-collection service providers.

4.3.9 First Nations Recycling Initiative

In 2017, Recycle BC founded the First Nations Recycling Initiative (FNRI). The initiative is a collaborative venture comprising nine BC stewardship agencies whose purpose is to support the collection and recycling of a wide variety of materials disposed by First Nations communities.

Staffed by a dedicated, First Nations representative whose primary role is outreach and liaison, Recycle BC has conducted the following activities under the auspices of the FNRI:

- Published a recycling guide for First Nations communities interested in starting recycling programs,
- Attended First Nations events and visited First Nations communities to assess current recycling activities and provide guidance; and
- Organized a pilot round-up event to assess the effectiveness of such events.

In 2017, Recycle BC had 11 First Nations communities as collection partners. Recycle BC will expand First Nations PPP recycling annually under the following initiatives:

- Provide a financial offer and services agreement to two First Nation recycling programs each year while working to maintain the continuity of the existing First Nations collection programs within its network;
- Review existing Recycle BC curbside and multi-family collectors' service areas to determine if they can include non-serviced First Nations communities in the same service area; and
- Participate in the First Nations Recycling Initiative to provide round-up event PPP collection accessibility for First Nations communities.

Each year the FNRI will establish goals and report outcomes for each participating stewardship organization's annual report.

4.3.10 Streetscape Collection

Recycle BC conducted three pilots to test the effective delivery of streetscape collection systems in each of

Packaging and Paper Product Extended Producer Responsibility Plan

the following years: 2014, 2015 and 2016-2017. In each of these pilots, Recycle BC undertook waste composition audits of PPP and garbage. A behavioural study was also conducted during three audit periods in 2016-2017 to better understand consumer preferences regarding the design of streetscape collection and to further inform the effective delivery of streetscape collection to pedestrians. Based on these study results Recycle BC proposed a preferred approach for streetscape services as well as a financial incentive offer during its November 2017 consultations. Since that time, new challenges have emerged affecting streetscape collection.

The new challenge for streetscape collection and recycling services

As Recycle BC's pilot studies demonstrated, PPP material can be collected but it is poorly sorted, heavily contaminated, wet with residual liquids, and unclean with food waste. Hazardous material can also be present. The processing and recovery of PPP from streetscape collection containers in the 2014-2017 pilots proved challenging due to the highly contaminated nature of this material; now, the increasingly strict marketing specifications imposed by changing market conditions such as the China Ban have exacerbated the contamination problem. As discussed in Section 1, the closure of Chinese commodity markets and the resultant inability to find end markets for low quality mixed material demands that Recycle BC drive down contamination in collected materials. With greater than 30% contamination, existing streetscape PPP collection practices may need to be revisited in their entirety.

Recycle BC's delivery of streetscape collection and recycling services

Recycle BC will continue to perform further research through streetscape collection projects to determine alternate approaches to streetscape collection. R&D will be conducted on the container type, bin signage and other design elements, utilizing accompanying composition audits, until a workable model for streetscape can be found.

Should streetscape produce a reasonable amount of recoverable PPP¹⁸ and a suitable recycling model be successfully tested, Recycle BC will consult on the program's design and financial offering.

Post-consultation, Recycle BC will provide a financial incentive offer and services agreement to local government collectors to service streetscape in areas where they operate litter collection systems (referred to as 'streetscape collection service').¹⁹ The service must meet Recycle BC's reasonable access criteria, defined as urban commercial areas with business activities that generate large amounts of PPP within municipalities with a population of 20,000 or more and a population density of 200 or more people per square kilometre.

The financial incentive to the local government for the provision of services includes PPP collection and recycling services, public education, promotion and first point of contact for collection service customers.

4.4 Post-Collection

Recycle BC contracts directly for post-collection services which include the following activities: receiving PPP from collection vehicles, picking up PPP from depots, consolidation and transfer where required, handling and sorting PPP, preparing PPP for shipment to end-markets or downstream processors, marketing PPP to maximize commodity revenue, appropriately managing residual materials, reporting the quantities of material received and marketed, and other metrics to Recycle BC as required.

Primary processors are considered to be the first receivers of collected PPP that market at least some types of processed PPP directly to end markets. Primary processors may engage subcontractors to provide

¹⁸ Subject to proof of concept through testing effective delivery of streetscape collection systems.

¹⁹ The provision of a streetscape garbage collection service is critical to the operation of a streetscape PPP collection service.

Packaging and Paper Product Extended Producer Responsibility Plan

consolidation, transfer, and transportation services to move PPP from the collection location to the processing facility. Primary processors may also engage secondary or downstream processors that can more efficiently or effectively sort, process, and market certain types of PPP.

The primary processor contract(s) is awarded based on an RFP process. Processors are considered to be qualified based on compliance with the processor qualification standards and evaluation criteria including but not limited to price, location, capability, capacity, output to recycling end-markets per tonne received, and material revenue received.

4.5 Collector and Processor Qualification Standards

Collector and processor qualification standards, including reporting protocols, are the minimum operating standards that a service provider must meet on a continuous basis in order to be eligible to provide collection, depot operation and/or processing services under a contract with Recycle BC.

Qualification standards are used by Recycle BC to support the continued growth of a safe, stable and sustainable PPP collection and processing system across British Columbia. Recycle BC incorporates qualification standards into the RFP for post-collection services and into contracts with collectors and processors.

Qualification standards set out basic requirements, such as free collection service to residents, proof of all necessary licenses and permits, compliance with health and safety requirements and specified liability and business insurance coverage. Qualification standards also include reporting requirements to allow Recycle BC to meet its reporting requirements to the MoECCS. Collector and processor qualification standards can be found [here](#).

4.6 Dispute Resolution

Recycle BC seeks to balance the principles of access, efficiency, fairness and equitable outcomes in the design of its dispute resolution mechanisms. Dispute resolution processes are tailored to the nature of disputes as well as the likely parties to a typical dispute. The objectives of the dispute resolution process are to manage disputes to resolution rather than adjudication, earlier and faster and at a reduced cost to all parties involved.

The following suite of alternative dispute resolution processes are used:

| Dispute Type | Path of Escalation/Resolution |
|--------------|---|
| Residents | <ul style="list-style-type: none">• Discussion with Recycle BC management• If unresolved, involvement of the Recycle BC Advisory Committee |

Packaging and Paper Product Extended Producer Responsibility Plan

| | |
|----------------------------------|---|
| Collectors and processors | <ul style="list-style-type: none">• Discussion with Recycle BC senior management• Facilitation: to prevent escalation and to explore interests/remedies• Mediation: to be used if facilitation is unsuccessful. Process to be specified in commercial agreements regarding selection of mediator, roles of parties, time and place of mediation, conduct of mediation, length, responsibility for fees/costs, confidentiality, conclusion of mediation by agreed settlement or final settlement proposal by the mediator• Arbitration: to be used if mediation is unsuccessful; process to be specified in commercial agreements regarding notice of arbitration, submission of written statements, place and conduct of meetings and hearings, the process for rendering and delivering decisions; jurisdiction and powers of the arbitrator, allocation of costs/fees; application of the B.C. Arbitration Act (RSBC 1996) |
|----------------------------------|---|

The dispute resolution process described above for collectors and processors is contained in Recycle BC's services agreement (Master Services Agreement, Section 14, Dispute Resolution).

4.7 Communications

The Recycling Regulation requires that, as part of the Program Plan, Recycle BC design and deliver an effective resident education program that achieves two primary objectives:

- Increase resident awareness of the program features and benefits through communication activities; and
- Engage and encourage residents to make informed and proper decisions concerning the preparation and management of PPP for collection and recycling by employment of general and targeted promotion and education (P&E) activities.

To achieve the above objectives, Recycle BC employs the following strategies:

1. Advertising

Recycle BC conducts targeted advertising campaigns independently or in partnership with stakeholders, such as other EPR agencies, producers, local governments, and community-based organizations.

2. Strategic partnerships

Recycle BC partners with organizations with targeted local or provincial market penetration to broaden the reach and raise the profile and awareness of Recycle BC.

3. Brand management

Recycle BC works with collectors and other stakeholders to maintain brand integrity (accuracy and consistency).

4. Collector resources

Resources are made available to Recycle BC collectors to be used to help educate their residents on

Packaging and Paper Product Extended Producer Responsibility Plan

various aspects of the Recycle BC program. In many instances templates are available for customization.

5. Additional resident communication

Recycle BC communicates directly with residents about various program elements including accepted and not-accepted materials, depot locations, collections schedules, contests, special projects, etc. using various channels.

6. Research

Recycle BC regularly conducts quantitative research to gather accurate provincial information on recycling habits, service levels, and brand and program awareness.

In keeping with its continuous improvement program, Recycle BC will employ the above strategies to target and improve the various areas of underperformance in the recycling system, using consumer research to determine where P&E efforts should be strategically deployed. For example, if research indicates that a particular demographic is not participating in the recycling program, a promotion and education campaign will be targeted towards that group. Similarly, if certain accepted materials have a lower than desired recovery rate, or a specific non-obligated material is consistently found in the recovered material, targeted campaigns will be conducted to improve performance. Over the next five years of its mandate Recycle BC will closely monitor program performance to strategically plan its annual consumer awareness and education campaigns and will seek opportunities to work with stakeholder partners to increase program performance. For example, in 2018 Recycle BC conducted a P&E campaign to encourage BC residents to use reusable bags and take their single-use bags to depots for recycling. Recycle BC also partnered with the Retail Council of Canada to develop a Resource Guide for BC retailers to reduce the use of single-use shopping bags.

4.8 Administration of the Program Plan

Recycle BC is responsible for administering this Program Plan on behalf of the producers that have chosen to be members.

Recycle BC's objective is to manage the Program Plan effectively and efficiently through a combination of in-house resources and outsourcing of key specialized functions or services.

Recycle BC directly administers collection and processing services including dispute resolution, communications to BC residents and performance reporting to the BC MoECCS.

Recycle BC outsources producer registration, reporting, fee invoicing, payments, audits and compliance in order to facilitate harmonized systems for Canadian producers, whether operating only in BC or in other Canadian provinces as well. Activities administered through out-sourcing include those that will not compromise the relationship between Recycle BC and BC stakeholders and where effectiveness and efficiency is enhanced by the best practices already incorporated by the service provider that would otherwise be a multi-year continuous improvement effort for Recycle BC.

4.9 Program Financing

Recycle BC is responsible to the producers that have chosen to be its members to deliver an efficient and effective PPP EPR program.

Producers that choose to be members of Recycle BC are responsible for paying fees that are sufficient, in aggregate, to deliver the requirements and commitments of the Program Plan. Costs fall into three categories:

Packaging and Paper Product Extended Producer Responsibility Plan

- Material management - what it takes to collect, transport, process and market materials. This is by far the largest cost component and is expressed net of commodity revenue in financial statements;
- Administration - what it takes to manage the business; and
- Resident awareness - what it takes to promote the behaviours that drive collection.

Producers that supply obligated PPP pay fees that are intended to cover:

- A contribution to the costs of managing the collection, consolidation, processing and marketing of the recyclable PPP that is the basis for the PPP EPR program performance;
- Where required, a contribution to advance the material's adoption in the recycling system, improve the cost efficiency to manage the material and/or to develop end markets for the material.
- An equitable share of resident awareness costs; and
- An equitable share of Recycle BC administration costs.

Costs incurred by Recycle BC to deliver and administer the Program Plan are allocated among producers based on the following principles:

- All obligated materials should bear a fair share of the costs to manage the packaging and paper product program, irrespective of whether a material is collected, because all obligated producers who put obligated materials into the marketplace should contribute to the recycling system;
- The material management costs allocated to each material should reflect the material's cost to collect and manage it in the recycling system because a material's unique characteristics can drive costs in distinctive ways; and
- The commodity revenue should be attributed only to the materials that earn revenue because materials that are marketed have value and should benefit from earned revenue.

To allocate the program costs in accordance with the principles above, Recycle BC conducts a number of studies that serve as inputs to fee setting, including waste composition and cost studies. The fee setting methodology then uses the inputs from these studies to calculate the portion of the program's budget that is attributed to each category of material supplied by producers.

As recycling systems change to accommodate new packaging formats that enter the marketplace (i.e. the "evolving-tonne") methodologies must be nimble enough to account for those changes and calibrate their cost effects. All methodologies undergo periodic review to verify their fit to purpose and are updated in consultation with the producer community where required.

The fee setting methodology itself plays a critical role in ensuring Recycle BC has the tools necessary to raise funds in material categories where the material is difficult, if not impossible, to collect and recycle using today's recycling practices and technologies. A key component of the fee setting methodology is its mechanism for adding cost to uncollectable and/or underperforming material categories to enable the investment in performance improvement. These investments can be directed to research and development, end market development and/or promotion and education – all are necessary strategies to ensure materials advance upwards along the pollution prevention hierarchy.

5. Program Performance

5.1 Managing Environmental Impacts

Section 5(1)(c)(vii) of the Recycling Regulation requires that an EPR plan adequately provide for the elimination or reduction of the environmental impacts of a product throughout the product's life cycle.

Packaging and Paper Product Extended Producer Responsibility Plan

Recycle BC works to reduce the environmental impact of its PPP by managing the collection and recycling of material which involves partnering with communities on collection and overseeing the sale of processed material to select end markets. The program also seeks to innovate by engaging with producers to advance the recycling of various materials and finding new ways to encourage source reduction, re-use and good recycling practices.

As discussed in Section 1, a number of Recycle BC member producers have made ambitious commitments to reduce their PPP footprint and are actively engaged in national and international discussions on initiatives to drive a circular economy²⁰.

For example, the Canadian based Circular Economy Leadership Coalition is working in collaboration with the Ellen MacArthur Foundation and the Finnish Innovation Fund (Sitra) to engage Canadian businesses, NGOs, First Nations communities, and all three levels of government to:

1. Foster deep knowledge and understanding of the issues, barriers and benefits associated with eliminating plastic waste and transitioning to a circular economy
2. Support the development of a national vision, strategy, action plan that focuses on bold but achievable solutions and opportunities for all levels of government, business, and civil society
3. Encourage and support the adoption and implementation of strategies, action plans and policies aimed at eliminating plastic waste and transitioning to a circular economy

As national and international efforts such as the CELC proceed, Recycle BC acts as both a recipient and provider of information to these forums.

At the same time, Recycle BC members continue to work independently and with their suppliers and processors on a number of fronts to reduce the environmental impact of the packaging and paper product they distribute to BC consumers. Examples of this work include:

- Light weighting packaging to reduce material while maintaining packaging integrity;
- Simplifying packaging and paper product by removing unnecessary layers or components to improve recyclability;
- Utilizing lifecycle modeling tools in order to more fully understand the impact of their packaging throughout its lifecycle – encompassing both post-consumer management and carbon impact;
- Removing elements from packaging that might act as contaminants in the recycling stream such as utilizing new adhesives that are more compatible with the recycling process;
- Commitments to using 100% recyclable materials within a specified timeframe in order to support the market for recycled materials;
- Commitments to convert all packaging to recyclable materials within a defined timeframe; and
- Optimizing packaging in a way that reduces the carbon footprint over its lifetime.

All of these factors play a role in the way in which Recycle BC members innovate and build eco-efficiency into the packaging and paper products distributed to British Columbians.

²⁰ A circular economy is characterized by the closed loop flow of materials as either:

- Technical nutrients: The reuse of products and packaging or the recovery of the constituent materials in products and packaging for their reintroduction into manufacturing in a closed life-cycle²⁰ without loss of the utility of those materials; or,
- Biological nutrients: The consumption of constituent materials in products and packaging by biological systems with no adverse impact to those systems.

Towards the Circular Economy: Economic and Business Rationale for an Accelerated Transition 2013. Ellen MacArthur Foundation

Packaging and Paper Product Extended Producer Responsibility Plan

While the majority of PPP diverted is collected in dedicated recycling systems, some local governments accept specific types of PPP such as soiled paper packaging in organic waste stream collection. In 2018, Recycle BC is conducting research to determine the amount of PPP being collected and managed in organic waste collection programs and the role that organic waste collection could have long-term in the overall post-collection management of PPP in British Columbia.

With the expansion of packaging and paper into compostable formats, Recycle BC will also undertake research to determine the extent to which the quantity of PPP in organic waste collection programs is actually composted (i.e. reduced to biological nutrients) at end of life (as opposed to being designated as contamination in commercial and municipal composting systems). If the quantity is significant (based on the above studies), and Recycle BC is able to determine the quantity of PPP recovered annually in organic waste collection programs (resource recovery to a beneficial use), Recycle BC will include the end-of-life disposition of this PPP in its Pollution Prevention Hierarchy report. Where these research efforts indicate both demand and technical feasibility, Recycle BC will develop financial incentives to incentivize the management of appropriate types of PPP (e.g. soiled fiber and compostable bio-plastics) in the organic waste stream. The outcomes of this research can also serve to guide Recycle BC members' decisions as to whether to incorporate compostable material into the design of their packaging and paper formats.

5.2 Pollution Prevention Hierarchy

Section 5(1)(c)(viii) of the Recycling Regulation requires that an EPR plan adequately provide for the management of the product in adherence to the order of preference in the pollution prevention hierarchy.

The Program Plan adheres to the pollution prevention hierarchy through the following activities:

| Pollution Prevention Hierarchy | Activity |
|--|--|
| Reduce the environmental impact of producing the product by eliminating toxic components and increasing energy and resource efficiency | <ul style="list-style-type: none"> • Initiatives undertaken by individual producers • Program Plan encourages reduction by rewarding companies that reduce or eliminate the quantities of packaging supplied to market |
| Redesign the product to improve reusability or recyclability | <ul style="list-style-type: none"> • Initiatives undertaken by individual producers • Program Plan encourages redesign through cost allocation that rewards easier-to-recycle materials |
| Eliminate or reduce the generation of unused portions of a product that is consumable | <ul style="list-style-type: none"> • Not applicable as packaging and paper product are not consumable |
| Reuse the product | <ul style="list-style-type: none"> • Initiatives undertaken by individual producers • Program Plan encourages reuse through cost allocation that presumes supplied materials only enter the marketplace once |

Packaging and Paper Product Extended Producer Responsibility Plan

| Pollution Prevention Hierarchy | Activity |
|--|---|
| Recycle the product | <ul style="list-style-type: none"> • Program Plan utilizes payments to service providers to encourage collection of PPP and processing of PPP to meet recycling end-market requirements • Upon request, Recycle BC provides guidance to producers on design for recyclability |
| Recover material or energy from the product | <ul style="list-style-type: none"> • Primary and downstream processors are encouraged to further process system residues to meet recovery end-market requirements and minimize the amount of residue sent to landfill • Research and development to explore ways to recover material that is currently non-recyclable (e.g. multi-laminated plastic packaging)²¹ |
| Otherwise dispose of the waste from the product in compliance with the Act | <ul style="list-style-type: none"> • Primary and downstream processors are required to manage residue in compliance with the Act |

When selecting end-markets for materials, Recycle BC gives priority to those located in countries that are members of the Organization for Economic Co-operation and Development (OECD). Recycle BC will allow marketing of processed PPP to packaging and paper end-markets located in countries that are not members of OECD only if the end-market meets or exceeds environmental, health and safety standards equivalent to OECD standards. Recycle BC commits to providing oversight to the recycling and recovery of PPP by visiting end-market destinations of the marketed materials over the lifespan of this Program Plan.

5.3 Performance Metrics

Recycle BC will report two levels of performance metrics:

1. **Program level performance** which is the recovery performance of the program for the aggregate of all PPP collected ;
2. **Material category performance** which is the recovery performance for four separate material categories: Paper, Plastics, Metal and Glass; and
 - Plastic sub-category specific recovery targets for:
 - **Rigid plastics** including PET, HDPE, Polystyrene and Other Plastics such as #5 Polypropylene
 - **Flexible Plastics** including Film and Laminates.

5.3.1. Program Performance Target

²¹ For example, in 2018 Recycle BC launched a pilot project for flexible packaging. Material is being collected by 115 depots which will be used to conduct processing trials with Recycle BC's downstream plastics processors. The objective of the pilot study is to determine the most effective process to collect and sort this material.

Packaging and Paper Product Extended Producer Responsibility Plan

Recycle BC operates under a regulatory recovery rate target of 75% where the recovery rate is defined in Section 1 of the *Recycling Regulation* as “the amount of product collected divided by the amount of product produced, expressed as a percentage”.

Every load of material collected in the PPP program is recorded, reviewed, verified and approved by Recycle BC. In 2017, approximately 250,000 loads of material were processed. Annually, an independent auditor performs an assurance audit on collected quantities reported by Recycle BC to verify the data used to calculate the reported recovery rate.

Recycle BC also reviews the reported quantities of PPP producers supply to residents of British Columbia. Quantities are also subjected to periodic third party assurance audits.

Consistent with the regulatory requirement stated above, the total verified quantity collected divided by the total verified quantity supplied yields the program recovery rate. To date, Recycle BC has achieved the 75% recovery rate and will build upon its successful performance by increasing the program target over time. For example, using 2017 quantities: 174,942 tonnes of collected PPP, divided by 234,847 tonnes of PPP supplied by Recycle BC members, equals 75%.²²

To increase the program’s performance beyond the current 75% will require that Recycle BC expand accessibility and continually seek opportunities to increase the quantity of materials collected in the system. These initiatives require careful planning and implementation efforts before improved program performance can be realized.

As such, the program will seek to achieve the following recovery targets:

| 2018 | 2019 | 2020 | 2021 | 2022 |
|------|------|------|------|------|
| 75% | 75% | 77% | 77% | 78% |

Today, some 70% of the total tonnes collected by the program is comprised of the Paper category. This category recovers at a rate much higher than the Plastic, Metal and Glass categories and as such, makes a significant contribution to the program’s recovery performance. Recycle BC will closely monitor the impacts of changing material composition (i.e. the evolving tonne) on the mix of material available for collection to ensure the operational responses needed to maintain performance are incorporated in annual plan activities.

5.3.2. Material Category Performance Targets

This plan introduces material category recovery performance targets for Paper, Plastic, Metal and Glass. In addition to establishing targets for these four major categories, Recycle BC has set recovery performance targets for rigid and flexible plastic subcategories described above.

The proposed targets are:

| Material Category | 2017 Recovery Rate | Target Recovery Rate | Year to Achieve Target |
|-------------------|--------------------|----------------------|------------------------|
| Paper | 87% | 90% | 2020 |
| Plastic | 41% | 50% | 2025 |
| Rigid Plastic | 50% | 55% | 2022 |

²² 174,942 collected tonnes and 75% recovery rate reflect the exclusion of tonnes collected by Recycle BC on behalf of other stewardship programs.

Packaging and Paper Product Extended Producer Responsibility Plan

| Material Category | 2017 Recovery Rate | Target Recovery Rate | Year to Achieve Target |
|-------------------|--------------------|----------------------|------------------------|
| | | 60% | 2025 |
| Flexible Plastic | 20% | 22% | 2022 |
| | | 25% | 2025 |
| Metal | 66% | 67% | 2020 |
| Glass | 72% | 75% | 2020 |

As material categories achieve and maintain the target recovery rate for two years, a new target will be proposed.

These material-specific recovery targets are consistent with the European Union's targets, including plastic targets of 50% by 2025 and 55% by 2030, set as part of the efforts to transition to a circular economy. Similarly, they are consistent with the targets set in the Plastics Charter, recently tabled by Canada at the 2018 G7 meeting in Charlevoix, Quebec, (i.e., recycle and reuse 55% of plastic packaging by 2030 and recover 100% of all plastics by 2040)²³.

The following table indicates the year-over-year growth rates that will be required to achieve the proposed targets. The growth rates have been colour-coded to indicate whether Recycle BC believes they are achievable with or without intervention, using, for example, targeted consumer P&E campaigns and/or innovations in recycling technologies or new end markets.

| Material Category | Recovery Rates - Current | PP Recovery Rate Targets | | Annual Growth Rate Required to Achieve Targets | |
|-------------------|--------------------------|--------------------------|------|--|-------------|
| | | 2020 | 2025 | 2017 - 2020 | 2017 - 2025 |
| Paper | 87% | 90% | | 1.1% | |
| Plastic | 41% | | 50% | | 2.5% |
| Metal | 66% | 67% | | 0.1% | |
| Glass | 72% | 75% | | 1.0% | |

| | |
|---------|------------------------------|
| < 1% | <i>Achievable</i> |
| | <i>Risk, may need</i> |
| 1% - 2% | <i>intervention</i> |
| > 2% | <i>Intervention required</i> |

It should also be note that when calculating the program and material category recovery rates, Recycle BC will exclude any quantities of material collected on behalf of others to ensure there is no 'double-counting' of recovered tonnes by Recycle BC and other agencies on behalf of whom material is collected. For example, some deposit containers are disposed of by residents in the Recycle BC system. These quantities are sold to Encorp Pacific and are not included when Recycle BC calculates its program and material category performance. Further, newspapers are managed in the Recycle BC system and reported by News Media Canada in the Annual Report of its Stewardship Plan performance. These are two examples where Recycle BC is compensated to manage materials on behalf of others but does not credit its program

²³ Ibid. Ref. 8

Packaging and Paper Product Extended Producer Responsibility Plan

performance with these materials.

5.4 Reporting

Recycle BC reports annually on indicators as summarized below:

- **Accessibility indicators** to describe access to PPP collection services in the province of BC such as:
 - Single-family and multi-family households receiving household collection service;
 - Number and service area locations of depots accepting PPP;
- **Operational effectiveness indicators** characterizing program performance such as:
 - Tonnes of PPP collected within each regional district;
 - Kilograms per capita of PPP collected within each regional district;
 - Tonnes of PPP recycled and recovered for the province;
 - Kilograms per capita of PPP recycled for the province;
 - Recovery rate expressed as a percentage for the province;
 - Recovery rate expressed as a percentage for the material categories Paper, Plastic, Metal and Glass
 - Recovery rate expressed as a percentage for the Plastic sub-categories of Rigid Plastic and Flexible Plastic
- **Quantities managed on behalf of other parties**
 - Tonnes of newspapers recovered in British Columbia
 - Tonnes of other material recovered on behalf of other parties in British Columbia
- **Management of collected PPP and other materials in relation to the pollution prevention hierarchy**
 - Total Tonnes of PPP and other materials managed by recycling;
 - Tonnes of Paper, Plastic, Metal and Glass managed by recycling
 - Tonnes of PPP and other materials managed by recovery;
 - Tonnes of PPP and other materials managed by disposal;
- **Operational efficiency indicators** reflecting program performance in financial terms such as:
 - Total program cost per tonne;
 - Total program cost per household;
- **Environmental impact measures** to characterize actions intended to reduce the environmental impacts of packaging and paper product by producers who are members of Recycle BC and by Recycle BC; and
- **Resident awareness indicators** to assess public awareness and engagement such as:
 - Percentage of residents aware of the Recycle BC program;
 - Percentage of residents reporting use of available collection services; and
 - Visits to the Recycle BC website.

In addition to compiling data for the indicators listed above, Recycle BC will begin to compile GHG data from its contractors in 2018 with the full data tracking system functional by 2019 and GHG performance reported in 2020.

Also, in 2019 recovery rates for the following material categories will be reported: Paper, Plastic, Metal and Glass, as well as Plastic sub-categories of Rigid Plastic and Flexible Plastic.

Packaging and Paper Product Extended Producer Responsibility Plan

Recycle BC reports on the performance of the PPP program in an annual report submitted to the BC MoECCS and posted on its website by July 1 each year. A comprehensive list of the performance metrics

reported by Recycle BC is available as Appendix B to this Program Plan. Recycle BC includes a reasonable assurance opinion of the accessibility indicators and operational effectiveness indicators by a third-party in its annual report.

5.4.1 Third Party Assurance

Stakeholders can be confident in the metrics reported by Recycle BC because each year Recycle BC is subject to third party assurance for non-financial information in the annual report. Annually, Recycle BC provides its auditors with the Guidance provided by the Ministry of Environment and Climate Change Strategy to ensure the objectives of the audit are satisfied.

The findings of the third party assurance audit are included in the Recycle BC Annual Report.

6. Consultation

During the lead up to the launch of Recycle BC (then Multi-Material BC) in 2014, Recycle BC used a combination of mechanisms to consult with stakeholders during development of the Program Plan. This consultation period resulted in a number of changes to the original version of the Program Plan.

Recycle BC was required to host a stakeholder consultation within five years of the launch of the original program plan. In November 2017, Recycle BC began the consultation process with a two-day series of workshops.

The consultation was held on November 15 and 16, 2017 in New Westminster, BC and included nine workshop sessions on topics as listed below:

- 3 Years of Data;
- Curbside Collection;
- Multi-family Collection;
- Depot Collection;
- Contamination;
- Research and Development: Other Flexible Plastic Packaging;
- Streetscape;
- Marketing and Communications; and
- Program Plan Updates.

Stakeholders who were not able to attend the event in person were able to view four workshops via webcast and submit feedback or comments online until December 15, 2017. A consultation report summarizing feedback on a variety of topics was posted in February 2018. Click [here](#) to read the Consultation Report.

The process of reviewing and revising the program plan in conversation with our stakeholder community continued in 2018 as Recycle BC explored how it could make significant progress toward achieving a circular economy for plastics and other materials. During the summer of 2018, our stakeholder community will be asked to consider several important revisions to the draft plan designed, among other things, to increase the plastics recovery rate and prevent leakage into our environment. Based on their comments, the final plan is expected to be submitted to the MoECCS for approval by early October.

Packaging and Paper Product Extended Producer Responsibility Plan

Appendix A – Glossary

Collector

Entity providing services for collection of PPP from households or from streetscapes under contract with Recycle BC.

Depot

Facility where residents can drop off PPP under contract to Recycle BC.

Market Clearing Price

Payment available to collection service providers (subject to executing an agreement to provide the collection service, comply with the collector qualification standard on a continuous basis, report specified data on a defined schedule) designed to stimulate collection activities and act as a market clearing mechanism that causes quantities of supply and demand to be equal.

ICI

Industrial, commercial and institutional.

Processing

Manual or mechanical sorting and quality control of PPP for the purpose of shipping to recycling end-markets.

Primary Processor

First receivers of collected PPP that market at least some types of processed PPP directly to end markets. Primary processors may engage downstream processors that can more efficiently or effectively sort, process and market some types of PPP.

Qualification Standard

Minimum operating standard that a service provider must meet on a continuous basis in order to be eligible to provide collection, depot operation and/or processing services under a contract with Recycle BC.

Recovery Rate

Calculated as a percentage with the numerator representing the quantity of PPP collected and the denominator representing the quantity of PPP supplied.

$$\text{Recovery Rate \%} = \frac{\text{Collected}}{\text{Supplied}} \times 100$$

Service Provider

Entity that collects PPP from single-family or multi-family households or streetscapes, operates a depot or provide post-collection services under contract with Recycle BC

Packaging and Paper Product Extended Producer Responsibility Plan

Appendix B – Summary of Performance Measures

| Measures | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|--|--|--|
| Recovery Target | Continue to on-board eligible communities to achieve and annually maintain, at a minimum, the overall provincial collection rate of 208,700 tonnes as assessed during preparation of the report titled <i>Current System for Managing Residential Packaging and Printed Paper</i> (March 2012). ²⁴ | | | While continuing to maintain performance target and reporting as outlined in Appendix B, begin consultation process on performance targets and measures in preparation for next 5-year Program Plan. | |
| | Submit targets to achieve a 75% recovery rate if a 75% recovery rate is not achieved due to on-boarding timing. Goal to collect all packaging types. | | | | |
| | Establish targets for Paper, Plastic, Metal and Glass. Establish targets for Plastic sub-categories of Rigid Plastic and Flexible Plastic. | Report 2018 category recovery performance for Paper, Plastic, Metal and Glass and Plastic sub-categories of Rigid Plastic and Flexible Plastic. Develop action plans to achieve material specific targets by dates as stated in Section 5.3.2. | Achieve a 2% increase in overall program performance – new target is 77% Establish corrective action plans for under-performing material categories | Maintain program recovery rate of 77% | Achieve a program recovery rate of 78% |
| Recovery/Collection Reporting²⁵ | <ul style="list-style-type: none"> • Tonnes of PPP and other materials collected within each Regional District; • Kilograms per capita of PPP and other materials collected within each Regional District; • Tonnes of PPP and other materials recycled and recovered for the province; • Kilograms per capita of PPP and other materials recycled and recovered for the province; • Recovery rate expressed as a percentage for the province. • Recovery rate expressed as a percentage for the major categories of Paper, Plastic, Metal and Glass and for the plastic sub-categories of Flexible and Rigid | | | | |

²⁴ Subject to adjustments to correct any errors in the Phase 1 survey data identified during program implementation and to reflect any significant changes in the quantity of PPP available for collection.

²⁵ Reported in annual report submitted to BC Ministry of Environment and Climate Change Strategy on July 1 each year.

Packaging and Paper Product Extended Producer Responsibility Plan

| Measures | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|--|--|--|------|------|
| Accessibility Performance | Provide curbside collection of PPP to a minimum of 973,400 curbside households and 421,600 multi-family households (active service counts as of February 14, 2018). | Continue to on-board eligible communities with the exception of any households where a local government eligible to participate in the Recycle BC program declines to enter into a collection agreement with Recycle BC. | Annually maintain, at a minimum, single-family and multi-family household service levels where these households currently receive PPP collection. ²⁶ Recycle BC will continue to offer financial incentives to all eligible curbside programs to join the Recycle BC program. Recycle BC will review multi-family household participation levels annually and expand multi-family service to BC residents through financial incentive offers to qualified multi-family collectors each year. Recycle BC will identify communities without significant Recycle BC presence in multi-family recycling and offer an established financial incentive to deliver multi-family building collection services. | | |
| | Annually provide depot collection to communities across BC with a minimum of 200 depot locations. Recycle BC will annually assess the need to expand depot collection coverage in order to fill under-served areas and to provide depot accessibility for packaging and paper materials that are not collected at curb side or through multi-family service. | | | | |
| Accessibility Reporting²⁷ | <ul style="list-style-type: none"> • Single-family and multi-family households receiving household collection service; and • Number and locations of depots accepting PPP. | | | | |
| Other Collection: Streetscape | Continue to perform further research through streetscape collection projects to determine if a viable recovery of PPP can occur in the new restricted global marketing conditions. | Recycle BC will consult on the program's design and financial offering. Implement streetscape collection and recycling services by offering a financial incentive to eligible local governments for the provision of services. ²⁸ | | | |
| Consumer Awareness Targets | Maintain a resident awareness target of 90% or greater for a packaging and paper product recycling program. Continue annual consumer research to measure resident awareness. Conduct regular quantitative research to measure the effectiveness of resident education programs and to gather accurate provincial information on recycling habits, service levels, and brand and program awareness. | | | | |
| Consumer Awareness Reporting²⁹ | <ul style="list-style-type: none"> • Percentage of residents aware of packaging and paper product recycling program; • Percentage of residents reporting use of available collection services; and • Visits to the Recycle BC website. | | | | |

²⁶ With the exception of any households where a service provider that currently provides collection of PPP terminates their Services Agreement with Recycle BC.

²⁷ Reported in annual report submitted to BC Ministry of Environment and Climate Change Strategy on July 1 each year.

²⁸ Subject to proof of concept through testing effective delivery of streetscape collection systems.

²⁹ Reported in annual report submitted to BC Ministry of Environment and Climate Change Strategy on July 1 each year.

Packaging and Paper Product Extended Producer Responsibility Plan

| Measures | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|--|---|---|------------------------------------|------|
| Pollution Prevention Hierarchy Performance | Target all PPP for collection and manage according to the pollution prevention hierarchy including shifting as much of the currently unrecyclable PPP from disposal or recovery up the hierarchy into recycling as possible. | | Continue research and development to explore ways to recover material that is currently non-recyclable. | | |
| | Direct 85% to 90% of collected PPP to recycling commodity markets. Assess options to increase the percentage of collected PPP directed to recycling commodity markets. | | | | |
| Pollution Prevention Hierarchy Reporting³⁰ | <ul style="list-style-type: none"> • Tonnes of PPP managed by recycling; • Tonnes of PPP managed by recovery; • Tonnes of PPP managed by disposal; and • Environmental impact measures to characterize actions intended to reduce the environmental impacts of PPP by producer members of Recycle BC, and by Recycle BC. | | | | |
| Other Performance Measure: Greenhouse Gas Emissions (GHG) | Compile GHG data from Recycle BC service providers. | Full GHG data tracking system functional. | GHG performance reported – baseline year report. | GHG performance reported annually. | |
| Other Reporting Metric: Program Cost³¹ | <ul style="list-style-type: none"> • Total program cost per tonne; and • Total program cost per household. | | | | |

³⁰ Reported in annual report submitted to BC Ministry of Environment and Climate Change Strategy on July 1 each year.

³¹ Reported in annual report submitted to BC Ministry of Environment and Climate Change Strategy on July 1 each year.

Packaging and Paper Product Stewardship Plan

Appendix C – Producer Members of Recycle BC

A total of 1291 producers are currently members of Recycle BC as of February, 2018. Recycle Producer companies that have joined Recycle BC fall into the following sector categories:

- Food and consumer products
- Retailers (grocers, mass/general merchandisers, hardware/housewares, drug stores and specialty merchandisers)
- Electronic manufacturers/brand owners
- Horticulture and agriculture
- Media and printed paper
- Quick service/take-out restaurants
- Paint and chemical products
- Other/miscellaneous

A complete membership list is updated annually and posted on Recycle BC's website [here](#).

Packaging and Paper Product Stewardship Plan

Appendix D – Definition of Producer for the Purposes of Producer Obligation and Reporting

“**Brand**” is a trademark.

“**Brand Owner**” is a Person Resident in British Columbia who is:

- (a) the owner of the registered or unregistered trademark; or
- (b) a licensee of the registered or unregistered trademark, where “licensee” includes a person who packages goods and includes any person whose corporate name or business name registration contains the trademark.

“**Consumer**” means an individual (other than a Person in the Industrial, Commercial, or Institutional (IC&I) sector) to whom Packaging or Paper Product is Supplied.

“**First Importer**” is a Person Resident in British Columbia who imports Packaging or Paper Product into British Columbia or is the first to take possession or control of Packaging or Paper Product in British Columbia for which a Brand Owner does not exist.

“**Franchisor**”, “**Franchisee**”, “**Franchise System**”, or “**Subfranchise**” have the meaning ascribed to these terms in the *Franchises Act* or as may be amended or replaced from time to time:

<http://www.bclaws.ca/civix/document/id/lc/statreg/15035> . This includes Franchisors who conduct business in British Columbia through their British Columbia Franchise System, regardless of whether the Franchisor has a Franchisor-owned fixed place of business in British Columbia.

“**IC&I Material**” means Packaging or Paper Product which is supplied to the industrial, commercial, or institutional sector and which is not subsequently Supplied to Consumers.

“**Person**” means an individual, partnership, joint venture, sole proprietorship, corporation, government, trust, trustee, executor, administrator or any other kind of legal personal representative, unincorporated organization, association, institution, or entity.

“**Producer**” means the Person who is obligated with respect to the Packaging or Paper Product, and includes any person who elects to become a Voluntary Producer in accordance with Recycle BC’s policies.

“**Resident in British Columbia**” with respect to a corporation, means a corporation that has a permanent establishment in British Columbia. In the case of Franchisors, it includes Franchisors who conduct business in British Columbia through their British Columbia Franchise System, regardless of whether the Franchisor has a Franchisor-owned fixed place of business in British Columbia.

Resident in British Columbia, with respect to a corporation, means a corporation that has a permanent establishment in British Columbia, where “permanent establishment” includes branches, mines, oil wells, farms, timberlands, factories, workshops, warehouses, offices, agencies and other fixed places of business. In addition to the foregoing, the following deeming provisions shall apply:

Contracting Employees or Inventory Sufficient

Where a corporation carries on business through an employee or agent who has general authority to contract for the corporation or who has a stock of merchandise owned by the

Packaging and Paper Product Stewardship Plan

corporation from which the employee or agent regularly fills orders which the employee or agent receives, such employee or agent shall be deemed to operate a permanent establishment of the corporation.

Commission Agent not Sufficient

The fact that a corporation has business dealings through a commission agent, broker or other independent agent shall not of itself be deemed to mean that the corporation has a permanent establishment.

Subsidiary of Parent not Sufficient

The fact that a corporation has a subsidiary controlled corporation in a place or a subsidiary controlled corporation engaged in a trade or business in a place shall not of itself be deemed to mean that the first-mentioned corporation is operating a permanent establishment in that place.

Licensed Insurance Company Sufficient

An insurance corporation is deemed to have a permanent establishment in each jurisdiction in which the corporation is registered or licensed to do business.

Purchasing Office not Sufficient

The fact that a corporation maintains an office solely for the purchase of merchandise shall not of itself be deemed to mean that the corporation has a permanent establishment in that office.

Ownership of Land Sufficient

Where a corporation, otherwise having a permanent establishment in Canada, owns land in a province or territory of Canada, such land is a permanent establishment.

Production Packing and other Activities Sufficient

The fact that a non-resident corporation in a year produced, grew, mined, created, manufactured, fabricated, improved, packed, preserved or constructed in whole or in part anything in Canada, whether or not the corporation exported that thing without selling it prior to exportation, shall of itself, be deemed to mean that the corporation maintained a permanent establishment at any place where the corporation did any of those things in the taxation year.

Machinery or Equipment Sufficient

The use of substantial machinery or equipment in a particular place at any time in a year of a corporation constitutes a permanent establishment of such corporation in that place for such a year.

Principal Place of Business Sufficient

Where a corporation has no fixed place of business, it has a permanent establishment in the principal place in which the corporation's business is conducted.

Charter or By Laws designating Head or Registered Office Sufficient

Where a corporation does not otherwise have a permanent establishment in Canada, it has a permanent establishment in the place designated in its charter or by-laws as being its head office or registered office.

Packaging and Paper Product Stewardship Plan

“**Service Packaging**” means packaging which may or may not bear a Brand that is Supplied at the point of sale by the retail, food-service or other service providers to facilitate the delivery of goods, and includes all bags, boxes, and other items for the containment of goods at point of sale.

“**Supplied**” means sold, leased, donated, disposed of, used, transferred the possession of or title of, or otherwise made available to a Consumer in British Columbia or distributed for use by a Consumer in British Columbia. Supply and Supplies have similar meanings.

“**Voluntary Producer**” means any non-resident Brand Owner who elects to become a member of Recycle BC in accordance with Recycle BCs policies and membership agreement.

DESIGNATION OF PRODUCERS

Designation of Producers

The following Persons are designated as Producers for Packaging and Paper Product. If two or more Persons are designated as a Producer pursuant to the following provisions, then the earlier provision shall prevail.

Producers for Packaging

For Packaging (except for Service Packaging) the Producer is the Person Resident in British Columbia who:

- a) is the Brand Owner for the British Columbia market; or
- b) if the Person described in paragraph (a) does not exist, then a Person who manufactures, packs or fills or causes the manufacturing, packing or filling of products regardless of whether the activity takes place in British Columbia or not; or
- c) if a Person described in paragraphs (a) or (b) does not exist, then the First Importer, unless the First Importer is a Consumer.

Producers for Service Packaging

Any Person that Supplies Service Packaging in British Columbia at the point-of-sale shall be the Producer for such Service Packaging.

Producers for Paper Product

For Paper Product, the Producer is the Person Resident in British Columbia who:

- a) is the Brand Owner of the Paper Product, whether production of the Paper Product takes place in British Columbia or not; or
- b) if a Person described in paragraph (a) does not exist, then a Person who is the title-owner of the Paper Product or is a licensee of those rights for British Columbia, whether production of the Paper Product takes place in British Columbia or not; or
- c) if a Person described in paragraphs (a) or (b) does not exist, then a Person who produces or manufactures the Paper Product whether the production or manufacturing takes place in British Columbia or not; or
- d) if a Person described in paragraphs (a), (b), or (c) does not exist, then the First Importer, unless the First Importer is a Consumer.

Franchisor is Obligated to Report for its British Columbia Franchisees

A Franchisor is obligated to report for its British Columbia Franchisees with respect to all Packaging and Paper Product which is Supplied within the Franchisor’s British Columbia Franchise System.

Packaging and Paper Product Stewardship Plan

More Than One Brand Owner for the Same Packaging or Paper Product

If there is more than one Brand Owner for the same Packaging or Paper Product, the Brand Owner more directly connected to the production of the Packaging or Paper Product shall be deemed to be the Producer.

Products Containing Two or More Independent Brands

If products containing two or more independent Brands are packaged to be Supplied together, the Brand Owner, First Importer or Franchisor most directly connected to the joint Packaging shall be designated as the Producer for the joint Packaging.