



Canada

British Columbia Stewardship Plan for Electric Outdoor Power Equipment

DRAFT FOR CONSULTATION

Submitted To:

Director, Extended Producer Responsibility Programs

Environmental Standards Branch

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Executive Summary

The Outdoor Power Equipment Institute of Canada (OPEIC) Extended Producer Responsibility Plan (“Program Plan”) addresses the end-of-life management of electrical outdoor power equipment (EOPE) products captured under Schedule 3, section 2(1)(d) (“Electronic and Electrical Product Category”) of the BC Recycling Regulation B.C. Reg. 449/2004 (O.C. 995/2004) (“Regulation”). EOPE is a broad category of products classified into four sub-categories: hand-held EOPE, walk-behind EOPE, free-standing EOPE and lawn tractors. This plan replaces the OPEIC Product Stewardship Plan approved on April 20, 2012.

The Outdoor Power Equipment Institute of Canada (OPEIC) assists its participants in providing end-of-life product management by handling products in accordance with the Ministry’s pollution prevention hierarchy. After seven years operating based on a market-driven approach, the Program has seen many accomplishments. However, on August 14, 2018, the Ministry rejected OPEIC’s program plan based on a market-driven approach, signaled to OPEIC to adopt a traditional stewardship model with an independent collection system and assume responsibility for the cost of managing the collected EOPE. To accomplish this transition in a timely manner and minimize redundancy of efforts, OPEIC has contracted with the Canadian Electrical Stewardship Association (CESA) to handle the program’s operations. CESA has an established and robust collection system providing free access to more than 99% of British Columbians, achieved a consumer awareness level of 79% as of 2016 and continued to increase absolute collection weights year over year.

This Program Plan addresses the following:

- The regulatory responsibilities of producers of EOPE;
- The appointment of OPEIC as agent for EOPE producers;
- Products managed under the Program;
- The consultation process followed in developing the Program Plan;
- The Program’s collection system;
- Public awareness of the Program, collection system and proper handling of Program Products;
- Management of program costs and dispute resolution;
- Product management in relation to the pollution prevention hierarchy; and

A summary of the key program performance metrics, including product collected, waste composition audits, accessibility and consumer awareness, is provided in section 11 of the Program Plan.

Glossary of Terms and Abbreviations

CESA	Canadian Electrical Stewardship Association
CWMA	Coast Waste Management Association
EHF	Environmental Handling Fee
EOPE	Electrical Outdoor Power Equipment
EPR	Extended Producer Responsibility
EPSC	Electronics Product Stewardship Canada
ERS	Environmental Recycling Standard
ICI	Industrial, Commercial & Institutional
OPEIC	Outdoor Power Equipment Institute of Canada
PPH	Pollution Prevention Hierarchy
RCBC	Recycling Council of British Columbia
RCC	Retail Council of Canada
SABC	Stewardship Agencies of B.C.

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1 Introduction

The revised OPEIC Extended Producer Responsibility Plan (“Program Plan”) is submitted by the Outdoor Power Equipment Institute of Canada (OPEIC) to the British Columbia Ministry of Environment and Climate Change Strategy, pursuant to the requirements of the BC Recycling Regulation (“Regulation”).¹ The Program Plan replaces the OPEIC Product Stewardship Plan approved on April 20, 2012.

OPEIC will administer the program and contract the collection, transport, and processing of EOPE to CESA, which has achieved numerous accomplishments over the past seven years of operation. Their Program has established a free collection system for consumers providing access to over 99% of British Columbians, and has achieved a consumer awareness level of 79%. The Program recognizes the continued success of the CESA program and has contracted services with CESA to preclude redundancy of efforts, to capitalize on their efficiencies, improve awareness, and to provide enhanced access to consumers.

2 Duty of Producer

Section 2.1 of the Regulation provides:

Except as otherwise specifically provided in this regulation, a producer must

(a) have an approved plan under Part 2 [Product Stewardship Plans] and comply with the approved plan, or

(b) comply with Part 3 [Product Stewardship Program Requirements If No Product Stewardship Plan]

with respect to a product in order to sell, offer for sale, distribute or use in a commercial enterprise the product in British Columbia.

The Regulation defines “Producer” as:

(b) in respect of the producer of a product within a product category other than the beverage container product category or the tire product category,

(i) a person who manufactures the product and sells, offers for sale, distributes or uses in a commercial enterprise the product in British Columbia under the manufacturer's own brand,

(ii) if subparagraph (i) does not apply, a person who is not the manufacturer of the product but is the owner or licensee of a trademark

¹ British Columbia Ministry of Environment, BC Recycling Regulation, B.C. Reg. 449/2004 (O.C. 995/2004).

under which a product is sold, distributed or used in a commercial enterprise in British Columbia, whether or not the trademark is registered, or
(iii) if subparagraphs (i) and (ii) do not apply, a person who imports the product into British Columbia for sale, distribution or use in a commercial enterprise;

The BC Recycling Regulation Guide further details the definition of a producer as an “importer, broker or retailer who sells the product directly to a consumer or imports and uses the product in a commercial enterprise and includes catalogue or Internet transactions.”²

3 Appointment of Stewardship Agency

The Outdoor Power Equipment Institute of Canada (“OPEIC”) is a not-for-profit organization of manufacturers, brand owners and retailers of electrical outdoor power products (“Program Products”) created to provide its participants with EOPE end-of-life product management by handling Program Products in accordance with the pollution prevention hierarchy.

OPEIC is incorporated under the Canada Not-for-Profit Corporations Act and is governed by the Outdoor Power Equipment Institute (OPEI), the industry association for the outdoor power equipment industry in North America. OPEIC’s incorporation documents are available for review upon request.

OPEIC’s Board of Directors is comprised of the same EOPE manufacturer representatives on OPEI’s board. A current list of OPEIC’s Board of Directors responsible for the oversight of the Program is available on [OPEI’s website](http://www.opei.org/aboutopei) (www.opei.org/aboutopei). OPEIC’s bylaws and financial statements (contained in the Program’s annual report) are available on the [OPEIC website](http://www.opeic.ca) (www.opeic.ca). Any changes to OPEIC’s governance structure will be reflected in the annual report. Additionally, OPEIC consults with other manufacturer and retailer associations, including the Retail Council of Canada (RCC).

The Program works and consults with an advisory group called the Outdoor Power Equipment Institute – Canadian Task Force (“OPEI-CTF”), comprised of representatives from the industry sector. Product Care Association (“PCA”) continues to be engaged as Program Manager by OPEIC.

OPEIC participants represent the vast majority of the electrical outdoor power equipment market in British Columbia for obligated products. Program membership is open to all, including the manufacturers, brand owners, distributors, first importers and retailers of designated products that are directly sold within or into BC.

² British Columbia Ministry of Environment, *Recycling Regulation Guide* (April 2012).

Each of the Program’s participants appoint OPEIC as their stewardship agency as described in section 2(2) of the Regulation. OPEIC participants confirm the appointment by accepting the terms of OPEIC’s participant agreement during the registration process. A record of this acceptance is available upon request by the Director. A current list of OPEIC participants is available on OPEIC’s website (www.opec.ca).

4 Products Covered Under the Stewardship Plan

EOPE products are captured under Schedule 3, section 2(1)(d) (“Electronic and Electrical Product Category”) of the Regulation:

(d) electronic or electrical tools, other than large-scale stationary industrial tools, including, without limitation,

...

(v) snow blowers and mowers and other gardening tools,

The Regulation and this Program Plan address electric outdoor power equipment (EOPE) only. EOPE is a broad category of products classified into four categories: hand-held EOPE, walk-behind EOPE, free-standing EOPE and electric lawn tractors. These categories include battery powered (primarily lithium ion and perhaps some lead-acid) and electric powered (primarily 110V plugged in) products as summarized in Table 1 below. Examples include electric lawn mowers, electric snow blowers and electric-powered gardening equipment. OPEIC reserves the right to amend this list of products in the future, as appropriate.

4.1 Inclusion/Exclusion of Products

The decision to include or exclude a product in the Program involves the consideration of a variety of product attributes, including but not limited to the features listed below. An internal decision tree is used to guide product decisions in addition to input received from the OPEI-CTF comprised of manufacturers and retailers.

4.1.1 Product Design

Electrical powered products designed for household outdoor use are included in the Program. Electrical powered products designed for large-scale industrial or commercial purposes are excluded from the Program.

4.1.2 Orphaned Products

Accepted products include orphaned products. This includes items that are no longer in production or which the manufacturer is no longer producing, provided that their function was the same as Program Products.

4.1.3 Batteries

The Program manages all components of regulated Program Products, including primary and rechargeable batteries that are embedded in Program Products and not easily removed. The Program’s primary processors remove the batteries from Program Products and send them to an approved downstream processor where base materials are extracted and commodified at the Program’s expense.

4.2 Product Categories

Program Products are organized into four categories with examples of accepted products listed in Table 1.

Table 1: OPEIC Product Categories

Hand-Held EOPE	Walk-Behind EOPE	Free-Standing EOPE	Electric Lawn Tractor
Brush cutter/lopper	Lawn mower	Mulcher	Lawn tractor
Chain saw	Snow thrower/snow blower	Pressure washer	
Garden shear	Tiller/cultivator	Wood chipper/shredder	
Garden sprayer/insect fogger/weed steamer	Dethatcher	Wood splitter	
Ice drill	Walk-behind sprayer		
Lawn blower/vacuum	Edger/trimmer		
Lawn scarifier/dethatcher	Lawn aerator		
Pole saw/pole pruning saw	Walk-behind blower/vacuum		
Post hole digger			
Stick edger			
Tiller			
Trimmers (grass, hedge, split-boom, etc.)			

OPEIC’s product categories and products included under each category are subject to change at OPEIC’s discretion. Future products that fit within the above categories will be considered for inclusion in the Program. Participants are made aware of any product decisions and/or changes to product categories through notices and updates to product lists on the website.

OPEIC maintains a current list of product inclusions and exclusions online at

<https://www.opeic.ca/consumers.html#products>.

5 Stakeholder Consultation

[This section will be completed following completion of stakeholder consultations on the program plan.]

6 Collection System and Consumer Accessibility

OPEIC has contracted with a service provider for the collection of EOPE. Therefore, the OPEIC collection network will, at a minimum, mirror the network of the contracted service provider. In accordance with Section 5(1)(c)(iii) of the Regulation, OPEIC through the contracted service provider will employ a system of permanent year-round collection facilities located across British Columbia to provide access to recycle Program Products at no cost to consumers. This collection system has been developed in collaboration with other stewardship programs to enhance program performance through increased operational efficiencies. This also assists in reducing consumer confusion by providing consumers with a one-stop-shop for designated products where they can recycle multiple products at one location. Where feasible, OPEIC through the contracted service provider will continue to manage the collection network with a focus on stewardship collaboration in the future.

Neither the contracted service provider nor OPEIC directly own or manage any collection facilities, but rather contract with organizations that can provide a collection location. Collection facilities include any location that accepts Program Products, including but not limited to private drop-off centres, local government sites, service organizations and return-to-retail. Regardless of the type of collection facility, there is no charge to the consumer to drop-off Program Products.

6.1 Collection Site Types

OPEIC defines two streams of products included in the Program when sourcing collection facilities: “regular” and “heavy”. Regular items are designed to be carried by the equipment operator either on their back or in their hands, and might have one accessory wheel. Heavy items include products that have two wheels or more, such as lawn mowers, snow blowers, pressure washers with wheels and cultivators.

According to the contracted service provider’s 2017 Annual Report, there were 211 facilities contracted collection facilities in its advertised collection network, of which 215 accept regular items and 77 accept heavy items. The majority of heavy item collection facilities overlap with regular product collection facilities. The Program’s website provides consumers with access to a depot finder that indicates if a collection site accepts regular and/or heavy items.

Advertised collection facilities accept public drop-off of Program Products. The contracted service provider’s collection network includes some unadvertised collection sites that do not allow public drop-off, including thrift stores and some municipal facilities and landfills, these are not listed as a facility on OPEIC’s website or through RCBC’s consumer hotline.

The collection network is augmented by participating in one-day collection events. These events are organized through the contracted service provider’s Ambassador Program, which is tasked with increasing the Program’s reach beyond its network of permanent collection sites. The success of these

collection events is increased through collaboration with a variety of community partners including retailers, regional districts, municipalities and indigenous communities, as well as other stewardship agencies. Since its inception, the Ambassador Program has participated in more than 425 community events across the province, including 118 collection events in 2017 alone. The Program will continue to evaluate the success of the Ambassador Program and will consider alternative collection possibilities as they develop. The contracted service provider will also pursue partnerships with retail locations to establish return-to-retail collection facilities in the province.

In addition, the Program has partnered with other stewardship agencies to create a First Nations Field Specialist who liaises directly with indigenous communities throughout BC:

- To partner with more Indigenous communities
- To organize joint collection events in Indigenous communities
- To collect greater tonnages of Program Products from Indigenous communities

6.2 Accessibility

The Program measures consumer access to collection facilities in accordance with the Accessibility Standard established by the Stewardship Agencies of BC (SABC). SABC is an informal organization through which provincial stewardship programs work together on common issues of interest. The Accessibility Standard was put forward to assist in defining the “Reasonable Access” requirements under the Recycling Regulation for communities of varying sizes. SABC’s Standard defines reasonable access as a 30-minute drive to a collection site in urban areas of a population more than 4,000, and a 45-minute drive to a collection site in rural areas with a population more than 4,000.

For the purposes of this Standard, rural communities are defined as cities, towns, resort municipalities and district municipalities with a population of between 4,000 and 29,999 outside the Metro Vancouver and Capital Regional Districts. Urban communities are defined as cities, district municipalities and towns within the Metro Vancouver and Capital Regional Districts with a population of 4,000 or more, and cities and district municipalities with a population of 30,000 or more in the remainder of the province.

The Statistics Canada definition of urban and rural population size has changed since SABC originally developed this Standard, however SABC maintains that the Standard is still applicable. OPEIC services the majority of communities that are defined by the Standard as rural with a population of more than 4,000. Residents of communities where the population is less than the minimum requirement for the Standard to apply must also visit larger commercial centres for other basic needs such as food, fuel, and clothing. Therefore, it is reasonable to expect that the recycling of designated products can be done in the centre where the residents undertake other commercial activities.

Recognizing that it is not possible to have depot coverage in all of the remote and rural areas of the province, the Standard was established as a minimum threshold to ensure reasonable access to collection facilities for a high percentage of the province’s population. Remote areas in the province can pose challenges for accessibility due to their isolated locations, therefore permanent collection facilities

may not exist in all remote areas of BC. The Program collaborates with community partners and in some cases other stewardship agencies, to host collection events in gap areas where a permanent collection site is not available. See section 6.1 for additional information on collection events.

In accordance with an accessibility study conducted in 2015 on behalf of the contracted service provider by an independent third party consultant utilizing commonly accepted GIS practices, 99.5% of British Columbians had access to a collection site for regular products. Since this analysis was completed, the collection network has expanded into new communities of BC increasing accessibility for British Columbians. Table 2 provides the results of the 2015 analysisTable .

Table 2: Number of Collection Sites (2015 – 2017)

Collection Sites	Regular Only	Regular & Heavy Items	Heavy Items Only	Total
2015	130	61	6	197
2016	131	67	4	202
2017	139	71	5	215

Table 3: 2015 Accessibility Analysis

SABC Accessibility	Urban Population with Access; and % of Urban Population	Rural Population with Access; and % of Rural Population	Total SABC Population with Access; and % of SABC Population	Total BC Population with Access; and % of Total Population
Total Population	3,374,825	619,424	3,994,249	4,398,961
Regular Products	3,373,479 99.96%	599,775 96.83%	3,973,254 99.47%	4,284,501 97.40%

Given the challenges associated with managing heavy items, the Program does not intend to report on accessibility for heavy item collection sites. The Program encourages potential collection sites to consider participating in the heavy item collection program when applying to participate in the Program, however due to infrastructure and space requirements, establishing a permanent collection site for heavy items is not an option for many communities. If this is the case, the Program will consider hosting a collection event individually or examine the possibility of participating in a collection event with other parties, such as municipalities, regional districts, retailers or other stewardship programs.

6.3 Collections

Since the start of the Program in 2012, OPEIC has reported on collections using sampling studies in lieu of reporting on actual collection volumes. OPEIC visited select scrap metal recycling facilities where Program Products were collected under a market-driven system and sampled metal piles to confirm that EOPE was being managed through the scrap metal system.

Under the new collection system, regular EOPE products (i.e. not including heavy products) will be collected together with the contracted service provider's regular products. The total weight of EOPE collected will be estimated by sampling 10% of bags collected monthly (based on total bag count from previous month) and multiplying the monthly average of EOPE found in sampled bags by the total weight of products collected by the contracted service provider.³ For heavy items, OPEIC will report on units collected as reported by the contracted service provider's heavy item collectors. To account for all products processed by the contracted service provider's processors, OPEIC will report out annually on the total amount material processed and the breakdown amongst the three programs managed through the contracted service provider's collection system – CESA, BC Lamps & Lighting Equipment and OPEIC.

6.4 Capture Rate and Recovery Rate

A “capture rate” compares the quantity of products collected in a year to the quantity of products estimated to be “available to collect” in the same year. In contrast, a “recovery rate” compares the quantity of products collected in a year to the quantity of Products actually sold into the market in that year. Recovery rates are not an appropriate metric for products with long lifespans because the amount sold into the market in a year is not directly related to the amount collected in the same year, as it is with consumables like beverage containers. A capture rate is generally applied in the context of long-life products, however neither capture rate nor recovery rate can be used as a performance metric for EOPE products for the following reasons:

- Collecting unit data on Program Products collected is cost prohibitive. The required effort to track unit counts of each category of product collected is not feasible due to the number and variance of product categories and Program Products. OPEIC accepts more than X products, which are commingled with more than 350 products collected by the contracted service provider, ranging in size from a microwave to an electric toothbrush.
- There is no common unit of measure for units sold and collected. The quantity of product sold is determined from sales reports submitted by participants in units, whereas product collected is reported by weight (kg). There is no standard conversion factor for weight to units or units to weight for product categories due to the variety

³ Absolute collection of regular items for OPEIC reflects the weight of Program Products collected annually by the Program across BC. The Program measures collections by weight (kg), not units collected.

and breadth of products collected within the OPEIC's product categories. It is problematic to report total units or total weight for as there are four categories that contain both regular and heavy items.

- Participants report units sold broken down by product category. In contrast, products collected are reported by weight (regular items) or units (heavy items). As noted, most of the product categories contain both regular and heavy items. Therefore, it is not possible to calculate a recovery rate or capture rate for regular or heavy items.
- In the case of capture rates, the amount "available to collect" is an inexact exercise that needs to take into consideration the number of units of a product sold into the market historically over successive years and the product's lifespan. The life expectancy of products is based on hours of use that is often determined by the motors within the equipment. As a result, the number of years that a product lasts may vary greatly based on its level of use.

6.5 Waste Composition Audits

Waste composition audits are conducted in partnership with local governments and other stewardship programs, subject to mutually agreed upon terms, to determine if the Program Product is being successfully diverted from landfill. Each year, the Program consults with local governments to identify waste composition studies scheduled for that year. OPEIC collaborates with local governments and other stewardship programs to make the studies as economical and efficient as possible. The Program will participate in all waste composition studies committed to by SABC.

The waste composition study methodology and sample sizes are determined by the local government responsible for the audit. The product categories included in the studies are determined in cooperation with the various stewardship agencies, including EOPE as a product category.

The report provided by the consultant conducting the study includes the date and location of the audits, as well as the number of units of Program Products identified. The audit results are considered to be informative for the region in which the study was conducted, but due to variations in collection patterns and waste management practices, are not considered applicable to other regional districts.

6.5.1 Accessibility Reporting Metrics

The collection system has increased modestly over the past several years and OPEIC will continue to seek opportunities for expansion where feasible. Going forward, the Program will strive to maintain the accessibility rate of 99.5% for regular products based on SABC's Accessibility Standard and will continue to monitor its collection network. After five years, the Program will reevaluate its collection network to ensure that accessibility rates have not materially changed over the duration of this Program Plan. For each year that an accessibility study is conducted, the Program will report out on the survey techniques and results in the annual report.

6.6 Collections Performance Metrics

Performance Metric	Reporting Commitment/Target
Collection Sites	
Number and location of contracted collection sites for regular and heavy items, identifying changes from previous year	Report annually
Number of collection sites by regional district	Report annually
Number of collection events by regional district	Report annually
Collections	
Estimated weight of “regular” products collected	Report annually
Estimated weight of “regular” products collected by regional district	Report annually
Estimated weight of “regular” products collected per capita by regional district	Report annually
Number of units of heavy items collected	Report annually
Accessibility	
Accessibility rate for “regular” products	Strive to maintain 99.5% based on SABC’s Accessibility Standard
Reevaluate collection network to ensure that accessibility rates have not materially changed over the duration of this Program	Conduct an accessibility study in or before 2023
Survey techniques and results	Report each year in which a survey is conducted
Waste Composition Audits	
Participate in all waste composition studies committed by SABC	Report annually
Number and location of waste audits conducted	Report annually

Performance Metric	Reporting Commitment/Target
Kilograms per capita of Program Product identified	Report annually
Total weight of batteries found per waste audit conducted	Report annually

7 Consumer Awareness

Section 5(1)(iv) requires that a stewardship plan make adequate provision for informing consumers about the Program, including the location of facilities and proper management of Program Products. To achieve this, OPEIC will build on its existing communications activities by disseminating program information, in part, through many of the contracted service provider's outreach channels. The Program will also continue to work with other stewardship agencies to provide coordinated program information and access to consumers. This includes collaboration with RCBC to provide a single point of consumer information through a hotline, website and Recyclepedia smartphone app, as well as a joint product guide with other stewardship programs through SABC.

7.1 Consumer Market in BC

According to sales reported by program participants, approximately 200,000 units of EOPE were sold into British Columbia in 2017. Table 3 provides a breakdown of units sold in 2017 by product category.

Table 3: 2017 Sales of EOPE in BC

Product Category	2017 Unit Sales
Hand-Held OPE	134,601
Walk-Behind OPE	29,214
Free-Standing OPE	32,617
Lawn Tractors	467
Total	196,899

Research indicates that there is a limited market for EOPE in the province. Unlike many other stewarded consumable products, EOPE dealers indicate that the vast majority of EOPE products are sold in urban/suburban areas of the province. Furthermore, sales of EOPE are seasonal. Based on this information, the program's focus is to raise awareness about recycling opportunities for EOPE amongst the segments of the population that use EOPE.

7.2 Communication Objectives

The Program's communications objectives are to:

- a) Increase consumer awareness levels year-over-year beyond 2017 levels (29%) with the goal of achieving 70% awareness amongst consumers of EOPE within 5 years (end of 2024).
- b) Use an array of general and targeted media platforms that speak to the Program's various audiences.
- c) Engage stakeholders to collaborate with and support the Program proactively with available resources (i.e. collection events, point of sale/point of return materials).
- d) Build on the contracted service provider's extensive network of third-party organizations and institutions and leverage existing partnerships to maximize communications reach and market penetration.

While OPEIC is committed to achieving program awareness amongst consumers of EOPE, the program cannot control consumer behavior. OPEIC relies on findings from waste composition audits (see section 6.5 above) to confirm that program products are not ending up in landfill at end-of-life.

7.3 Target Audiences

In addition to general population marketing, the program will use our current understanding of the market to target the following market segments:

- a) Suburban consumers
- b) Indigenous communities

7.4 Communications Strategy, Tools and Methods

The Program will utilize a robust communications strategy for British Columbia in order to increase awareness levels and encourage consumer participation throughout the province. The strategy is informed by a number of key insights revealed through provincial and national research⁴, findings from engagement with communities around the province, and learnings taken from the administration of the Program since inception.

OPEIC will employ industry best practices in the promotion of the Program, adjusting its specific mix of media channels, partners and suppliers based on ongoing performance analysis. The following describes the tools/methods OPEIC may employ in service of program growth:

- **Service Provider Communications**

OPEIC will deploy regular communications via email to its service providers to advise of developments in the Program, which they in turn can pass on to their customers.

- **Point of Sale (PoS) & Point of Return (PoR) Materials**

⁴ Provincial Consumer Awareness studies conducted by CESA and OPEIC, as well as a National Consumer Behavior study conducted by Product Care Association.

Rack cards, semi-permanent signage, event posters, branded prize materials, etc. will continue to be distributed free of charge at retail stores, collection depots, trade shows and through community events.

- **Website**

OPEIC operates a dedicated program website (www.opec.ca) with relevant information for all audiences with whom it engages. Information includes, but is not limited to:

- Collection site locations (supplied via a location-based finder tool) with details on hours of operation and products accepted
- Details on upcoming collection events
- Proper handling and management of Program Products and accessories
- Detailed description of products accepted by the Program
- Details on environmental handling fees associated with the Program
- Contact information for those with questions
- Annual reports and other program information
- FAQs related to the Program
- Relevant news and updates

- **Dedicated Phone and Email Contacts**

The Program will continue to provide a dedicated phone and email address where the public can call to obtain information about the program.

- **Events and Ambassador Program**

The Program will participate in the contracted service provider's ambassador program. The contracted service provider's ambassador team travels to key regions in the province engaging directly with various stakeholder audiences to raise program awareness and obtain constructive program feedback. Ongoing activities may include participation in relevant third-party community events, remote community collection events, service partner, municipal and regional government visits, etc. The ambassador role may change or be replaced over time with other means of regional outreach and communication efforts.

- **Advertising**

OPEIC will make use of media partners to promote the Program throughout the province. Advertising platforms may include, in various combinations:

- Mainstream and community telecommunications
- Print (dailies, periodicals, community publications)

- Radio
 - Digital
 - Out of Home (billboards, CCTV, poster boards, in-venue promotion)
 - Events (partnering with existing third party events or hosting ElectroRecycle-specific events)
 - Tradeshows and conferences
- **Stewardship Agency Collaboration**

OPEIC will continue to maintain its participation in the Recycling Council of BC's hotline and RCBC's online information portal "Recyclopedia", where the public can find information about accepted Program Products and where to take them. OPEIC will work with other stewardship agencies to minimize consumer confusion and address common issues through collaboration with other stewardship programs.

7.5 Dealer Support

The Program will offer EOPE dealers with program information and materials. In addition to the information provided on the program's website and rack cards, the Program will create a free downloadable FAQ document available to all Program Product dealers.

7.6 Consumer Awareness Survey

The Program conducts consumer awareness surveys every two years to determine consumer habits and perceptions of EOPE recycling options in BC. Surveys are carried out by an independent third party survey provider. As OPEIC's collection network will be synonymous with the contracted service provider's network, OPEIC will consider undertaking a survey independently or in conjunction with the contracted service provider to allow for greater comparability and to maximize cost efficiencies.

7.7 Consumer Awareness Reporting Measures

Performance Metric	Reporting Commitment/Target
Percent of residential consumers of EOPE that are aware that EOPE can be recycled	Increase year-over-year above 2017 baseline (29%) with goal of achieving 70% by end of 2024.
Residential consumer awareness survey	Conduct every two (2) years from 2020
Description of program’s educational materials and strategies	Report annually
Summary of survey methodology and survey question asked	Report annually
Program website visits	Report annually
RCBC Recyclepedia website visits and hotline calls	Report annually, as applicable
Create free downloadable FAQ document for dealers.	Within one year of program plan approval.

8 Management of Program Costs

8.1 Product Sales

EOPE is sold across Canada, with British Columbia representing approximately 13 per cent of national sales, which is consistent since the start of the Program. EOPE is typically sold by dealers, hardware stores, department stores and other retailers, many of which are national in scope.

EOPE includes seasonal products, with the majority of sales occurring in the Spring and Fall. The winter months (December through February) have the lowest sales presumably because this is a period of low utilization of EOPE by consumers. Year-to-year variations can also occur as a consequence of variances in weather conditions. However, historic annual sales have remained relatively stable overall since the start of the Program.

The majority of EOPE is purchased in urban areas. A sampling of sales data from select retailers in BC between 2015-2017 indicates that nominal amounts of EOPE are sold in rural areas of the province. Members of the OPEIC-CTF confirm that rural consumers seldom use plug-in or battery operated OPE because the larger average size of rural properties makes it impractical to do so. This has important implications when considering the management of EOPE at end-of-life (EoL) in rural areas, as well as the need to address consumer awareness in rural areas (see section 7 below).

Program revenues are derived entirely from environmental handling fees charged on product retail sales. The program receives no direct revenue from the sale of products; the program's processors retain revenues from the sale of processed commodities and offset any revenues from commodity sales against their processing charges. Consequently, the Program does not have direct control over its revenue stream as this is dependent entirely on product sales, which in turn is dependent on a number of factors, including weather conditions and the state of the economy. Sales of EOPE in British Columbia are seasonal reflecting the time of year they are used (e.g., weed trimmers, snow blowers) and the severity of weather conditions. The variability in these factors year-over-year makes forecasting future sales difficult.

OPEIC will report annually the total units of EOPE sold in BC by product category aggregated to maintain confidentiality of individual participant market share.

8.2 Program Membership and Fees

The Program is funded by Environmental Handling Fees (EHFs), remitted to OPEIC by its participants based on the quantity of sales of new Program Products sold in British Columbia. The EHF is not a tax or a refundable deposit and at the discretion of the Producer, the EHF may appear at the time of retail sale as a separate charge or integrated as part of the program cost, and is subject to provincial sales tax. As the majority of retailers choose to show the EHF at point of sale, OPEIC continues to work towards educating consumers by ensuring information on EHFs is accessible (e.g. information on the Program's website).

EHFs are set by OPEIC based on budgeting of fee revenue and program expenses and are adjusted from time to time to maintain the program's financial sustainability. Program revenues generated by EHFs are applied to the full operation of the Program, including:

- Administration;
- Communication and education; and
- Collection, transport and processing of collected products.

8.3 Service Provider Compensation

OPEIC does not contract directly with collection sites, transporters and processors, but relies on the contractual relationships established by the contracted service provider. Accordingly, OPEIC does not determine compensation. The contracted service provider will be undertaking consultations in 2019 on its methodology for determining compensation for collection sites as per directives from the Ministry of Environment and Climate Change Strategy.

8.4 Risk Management and Reserve Fund

OPEIC actively reduces the risk arising from product management using a number of methods including:

- Requiring service providers conduct third-party audits of their operations (including operating procedures and control systems) as part of responsible environmental management practices.
- Maintaining adequate insurance to cover liabilities, environmental or other, including directors’ and officers’ liability insurance.
- Providing collection site guidelines to all contracted collection facilities. The guidelines provide practical guidance and best management practices for collection site operators regarding staff handling and storage of Program Products collected.
- Maintaining a reserve fund. The reserve fund provides financial stability to the Program in the event of unexpected increases in collection volumes, fluctuations in operating costs or reduced revenue due to economics or other factors. It also provides funds to facilitate the Program’s windup, if necessary. OPEIC monitors the Program’s financial performance on an ongoing basis to ensure it remains financially sustainable and that an adequate reserve fund is maintained.

8.5 Audited Financial Statements

The Program reports out annually on total sales in its annual report in accordance with generally accepted accounting principles and industry practice to ensure transparency and accountability. The Program’s financial statements are audited annually by an independent third party auditor and are published on the Program’s website.

8.6 Management Costs Performance Measures

Performance Metric	Reporting Commitment/Target
Annual aggregated unit sales by product category	Report annually
Audited financial statements	Report annually

9 Management of Environmental Impacts

In response to section 13 of the Regulation, OPEIC through the contracted service provider will work with its service providers to ensure Program Products are managed, where feasible, in accordance with the Pollution Prevention Hierarchy (PPH). The following section details the program’s current management options for Program Products at end-of-life and relevant considerations.

9.1 Product Design

Product design influences the durability and reliability of products, which has a direct impact on the life of a product and EoL management options. Producers optimize product design to reduce the materials used, which in turn reduces product weight, material content and product volume. Specifically, Producers

conduct analyses on the use of plastics and other materials in the design and manufacture of EOPE, maximizing the use of materials that can be recycled and reused.

Product design eliminates, wherever possible, the use of hazardous substances, replacing them with non-hazardous materials that can be reprocessed and reused.

Producers actively work to reduce the environmental impact associated with product packaging waste. Trends include the reduction in packaging weight and volume, more efficient use of packaging materials, the use of recycled content and recyclable materials.

Producers actively encourage dealers to consolidate orders, rather than place multiple, small orders to lower packaging and transportation requirements.

9.2 Manufacturing Processes

Producers have ongoing initiatives to reduce waste associated with the manufacturing of products. These include the collection, recycling and reuse of remnant ferrous and non-ferrous metals that result from the manufacture of components. Other waste materials that can be recovered and recycled during the manufacturing process for productive uses, including plastic, corrugated and paper materials, are collected for processing and alternate uses.

Supply chain initiatives include the use of returnable/reusable packaging for components from suppliers. Suppliers are encouraged to locate support operations in close proximity to manufacturing operations, thereby reducing transportation-related energy use in the delivery of components.

Producers seek to reduce water use in water-dependent manufacturing processes through improved process efficiencies. Initiatives include the treatment and reuse of process water to reduce total needs.

9.3 Reuse and Repair

While reuse and repair of Program Products are worthy goals, there are several considerations that make it difficult to include it as a viable management option for Program Products. In Canada, there are requirements for mandatory safety testing under programs such as the Canadian Standards Association (CSA) or Underwriters Laboratories of Canada (ULC). Manufacturers are responsible for the safety of all products with safety certification. Outside of licensed and authorized service facilities, manufacturers cannot guarantee the safety of the product after it has reached end of life. Additionally, manufacturers may have warranty restrictions on the sale of used products.

The Program Plan recognizes that consumers give properly working EOPE to friends and family as well as to charitable organizations. As long as the product is in good working order, such reuse does exist outside the parameters of the Program.

9.4 Recycle/Recover

The Program strives to manage collection materials using the highest option on the PPH as set out under subsections 5(3)(d-g) of the Regulation, where economically feasible and viable. OPEIC utilizes the contracted service provider's product management system to meet these objectives.

The service provider contracts with all processors who handle its collected material. Its processors are required to conform to the Electronics Product Stewardship Canada (EPSC) Electronic Recycling Standard (ERS), among other required tracking, inspection and reporting standards as set out of the Program. The contracted service provider retains the right to audit processors at any given time to ensure awareness of health, safety and environment concerns are in place and adherence to responsible downstream recycling processes, as per the EPSC Standard.

The EPSC Electronic Recycling Standard defines the minimum requirements for handling end-of-life electronics and contains mandatory environmental, occupational health and safety, and material handling requirements. This Standard was originally developed by EPSC in 2004 and is employed by electronic recycling programs and processors across Canada. Although the contracted service provider's processors currently use the EPSC Standard, it may choose to adhere to a different recycling standard, such standard to be recognized and accepted nationally or by other provinces. OPEIC will commit to reporting annually on any changes to the environmental standards to which the contracted service provider holds its processors accountable.

As OPEIC's Program Products are accepted along with the contracted service provider's products and commingled at point of collection, materials are reported out by commodity only, not by product type or component. The management of plastics will be enhanced significantly as a result of collecting OPEIC regular products with the contracted service provider's products. Its processors utilize processing techniques and technologies that separate out plastics, allowing them to be recycled. The Program follows the chain of custody through to the end fate of the product; however, the Program's ability to do so is limited by the ability of processors to provide such information. The contracted service provider provides all available material with regard to end fate in the Program's annual report.

Current recycling and recovery methods for common commodities found in OPEIC products are detailed in

Table 4. In contract with the service provider, OPEIC will continue to manage collected products and accessories, including batteries, in accordance with the Pollution Prevention Hierarchy whenever feasible and economically viable recognizing that the management process of commodities is subject to change.

Table 4: Examples of Commodity Management Derived from Program Products

Commodity	Downstream Process ⁵
Aluminum	Shred and Consolidate
Circuit Boards	Smelt
Copper	Shred and Consolidate Shred and Smelt
Ferrous Steel	Shred and Consolidate, Sorting and Processing
Glass	Crush, Smelt, Washing & Grinding
Non-Rechargeable Batteries	Consolidate
Plastics	Sorting, Separation, Grinding, Extrusion and Pelletizing, Shredding and Granulation
Rechargeable Batteries	Consolidate
Wire and Cables	Smelt, Sorting and Processing

10 Dispute Resolution

As OPEIC’s operations are managed by a contracted service provider, any disputes arising will be managed by the contracted service provider employing its dispute resolution process.

The service provider contracts with all suppliers and service providers to the Program through commercial agreements. It also contracts with reputable downstream processors and ensures compliance with vendor standards. A three-step process is employed for any unresolved disputes arising from collection or processing contracts to ensure a timely and coordinated resolution.

- Step one: The contracted service provider will address any disputes with services providers directly through face-to-face discussion;
- Step two: Any unresolved disputes will be addressed using negotiation and mediation between parties;
- Step three: If no resolution has been reached at this point, standard commercial legal procedures including arbitration and civil proceedings will be implemented if required.

11 Performance Monitoring and Reporting Commitments

⁵ Downstream Processes are based on the descriptions provided by the Recycler Qualification Office (RQO) and EPSC Electronic Recycling Standard verified Processors detailing the end disposition of product managed.

The Program’s performance is measured using a number of indicators, including collection volumes, accessibility, consumer awareness and results from regional waste composition audits. Considered together, these metrics demonstrate the success of the Program.

A summary of OPEIC’s performance metrics are listed below in

Table 5. The reporting metrics set out below align with the Ministry’s third party assurance requirements for financial and non-financial information.

Table 5: Summary of OPEIC Program Performance Measures

Performance Metric	Reporting Commitment/Target	Subject to Audit
Collection Sites		
Number and location of contracted collection sites for regular and heavy items, identifying changes from previous year	Report annually by collection site type (regular and/or very large items), provide list of sites with locations and identify changes from previous year	Yes
Number of contracted collection sites by regional district	Report annually	No
Number of collection events by regional district	Report annually	No
Absolute Collection		
Estimated weight of “regular” products collected	Report annually	Yes
Estimated weight of “regular” products collected by regional district	Report annually	No
Estimated weight of “regular” products collected per capita by regional district	Report annually	No
Number of units of heavy items collected	Report annually	No
Waste Composition Audits		
Participation in all waste composition studies committed to by SABC	Report annually	No
Number and location of waste audits conducted	Report annually	No

Performance Metric	Reporting Commitment/Target	Subject to Audit
Kilograms per capita of Program Product identified during waste audits	Report annually	No
Total weight of batteries found per waste audit conducted	Report annually	No
Accessibility		
Accessibility rate for “regular” products	Strive to maintain accessibility rate of 99.5% based on SABC’s Accessibility Standard	No
Reevaluate collection network to ensure that accessibility rates have not materially changed over the duration of this Program Plan	Conduct an accessibility study in or before 2023	No
Survey techniques and results	Report each year in which a survey is conducted.	No
Consumer Awareness		
Percent of residential consumers of EOPE that are aware that EOPE can be recycled	Increase year-over-year from 2017 baseline (29%) with goal of achieving 70% by end of 2024.	No
Residential consumer awareness survey	Conduct every two (2) years from 2020	No
Description of program’s educational materials and strategies	Report annually	No
Summary of survey methodology and survey question asked	Report annually	No
Program website visits	Report annually	No
RCBC Recyclepedia website visits and hotline calls	Report annually, as applicable	No
Create free downloadable FAQ document for dealers.	Within one year of program plan approval.	No
End Fate		
End fate management of materials	Report annually	Yes
Environmental Standards in place	Report annually	No
Management Costs		
Annual aggregated unit sales by product category	Report annually	No
Audited financial statements	Report annually	Yes

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Appendix A. Consultation Summary

[To be included upon completion of public consultations.]

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Appendix B: Submission Checklist for Product Stewardship Plans under the Recycling Regulation

[To be inserted prior to submission of program plan.]

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