British Columbia Lamps & Lighting Equipment Extended Producer Responsibility Program

2019 Annual Report

productcare.org

Contents

1 Executive Summary

This annual report has been prepared by Product Care Association of Canada ("Product Care") based on the requirements set in the BC Lamps and Lighting Equipment Stewardship Plan dated and approved by the BC Ministry of Environment and Climate Change Strategy (BC MoECCS) on November 13, 2018, and pursuant to the requirements of the Recycling Regulation B.C. Reg. 449/2004 ("Regulation")[1]. This annual report references the 2018-2022 Program Plan with regard to the Program's performance between January 1 to December 31, 2019.

The products captured under the British Columbia Lamps and Lighting Equipment Extended Producer Responsibility Program ("Program") are broken down into thirteen Product Categories as listed in Table 1 below.

Table 1: Program Product Categories and Website

Product Categories	1. Fluorescent Tubes measuring ≤ 2 feet 2. Fluorescent Tubes measuring > 2 feet and ≤ 4 feet 3. Fluorescent Tubes measuring > 4 feet 4. Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps 5. Light Emitting Diodes (LED) 6. High Intensity Discharge (HID), Special Purpose and Other 7. Incandescent / Halogen 8. Miniature Bulb Package 9. Designated Small Fixtures / Decorative Light Strings 10. Fixture Category A 11. Fixture Category B 12. Large Outdoor Fixtures 13. Ballasts / Transformers (not integrated into lamps or fixture)
Program Website	https://www.productcare.org/products/lights/british-columbia/

A complete list of products accepted and not accepted by the Program is available in the Program's Product Guide available for download on Product Care's website: https://www.productcare.org/app/uploads/2017/04/Lights-Product-Guide-EN.pdf

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[1] Recycling Regulation B.C. Reg. 449/2004 Part 4, Schedule 3, Section 2 (1) (e).

The Program's regulatory reporting requirements and key performance targets for 2019 are summarized in Table 2 and Table 3 below.

Table 2: Regulatory Reporting Requirements

Regulation Provision	Topic	Summary
Part 2, section 8(2)(a)	Public Education Materials and Strategies	- Website - Consumer-focused Awareness (Residential) - Residential Consumer Awareness Survey - Consumer-focused strategies and tactics - Television and Radio, Earned Media, Print, and Digital Advertising - Program Hotline - Community Events and Partnerships - PoS and PoR material - Industry-focused Awareness - Industry Events - Print and Digital Advertising - Online Industry Forums - ICI Outreach Campaign
Part 2, section 8(2)(b)	Collection System and Facilities	The Program's collection system had 449 contracted collection sites. Additional collection services included: - Courrier service and direct pickup service for PCB containing ballasts - Direct pickup service from Large Volume Generators of lamps and pre-crushed lamps 18 collection events
Part 2, section 8(2)(c)	Product Environmental Impact Reduction, Reusability and Recyclability	Producers are working to reduce the environmental impact of lighting products through innovative product design and technology. Life-cycle management is also playing an important role in reducing the environmental impact of lighting products. The proliferation of LEDs (which do not contain mercury) has resulted in fewer mercury-containing products entering the market.

Regulation Provision	Topic	Summary

Part 2, section 8(2)(d)	Pollution Prevention Hierarchy and Product / Component Management	• Lamps[2] were broken down into component parts and managed as follows:
		  - Glass was sent to be used as sandblasting material and aggregate in concrete.
		  - Metal was sent to various downstream metal sites for recovery and recycling.
		  - Phosphor powder contaminated with mercury was stabilized, and sent to secure landfill.
		• Residential-use fixtures were broken down into component parts for recovery / recycling.
		• Commercial fixtures and non-PCB ballasts were collected and managed through the existing market-driven scrap metal recycling system.
		• PCB containing ballasts were collected and managed as hazardous waste and sent for incineration at licensed/permitted facilities.

Part 2, section 8(2)(e)	Product Sold and Collected and Recovery Rate	• Program members reported selling 31,635,670 units of program product in 2019.
		• In 2019, the Program collected an estimated:
		  - 7,241,776 units of lamps
		  - 722 tonnes of fixtures from residential collection network
		  - 7,351 kilograms of PCB containing ballasts
		  - 9,617 kilograms of crushed lamps
		• Scrap metal sites sampled in 2019 found 0.60% of material was commercial fixtures and non-PCB ballasts

Part 2, section 8(2)(e.1)		• See Table 17 for estimated lamp collection volumes by regional district. • See Table 19 for estimated residential fixture collection volumes by regional district
Part 2, section 8(2)(f)	Summary of Revenues and Expenses	• The Program is funded by fees remitted by members on the sale of new program products sold in or into British Columbia.

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[2] Includes whole lamps and crushed lamps

Regulation Provision	Topic	Summary
		• An independent financial audit for the reporting period is appended to the report (see Appendix C).

Table 3: 2019 Key Performance Targets

2019 Key Performance Targets			
Regulation, Part 2 section 8(2)(g)			
2019 Program Plan Targets		2019 Performance	Strategies for Improvement
Consumer Awareness	Minimum 70%, surveyed bi-annually	69%	New strategies implemented in 2019 have successfully delivered significant improvements in awareness, these will be retained in anticipation of continued improvement
Accessibility Targets[3]			
Residential Lamps	Minimum 95%	99.7% (as of Dec 31st 2019)	N/A
Residential Fixtures	Minimum 95%	98.4% (as of Dec 31st 2019)	N/A
Commercial Lamps	Minimum 95%	99.6% (as of Dec 31st 2019)	N/A
Commercial Fixtures and Non- PCB Ballasts	Minimum 95%	96.2% (as of Dec 31st 2019)	N/A

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[3] The program reports on accessibility based on the SABC Accessibility Standard, where "access" is defined, as a 30 minute drive or less to a collection point in urban centres with a population of 150,000 or more, and a 45 minute drive or less for those living in communities greater than 4,000 people.

2 Program Outline

The Program has been in operation since 2010 under the operation and management of Product Care Association of Canada ("Product Care"). Product Care is a federally incorporated, not-for-profit extended producer responsibility agency formed in response to recycling regulations and is governed by a multi-sector industry board of directors.

In 2019, the Program operated in accordance with Product Care's Program Plan approved by the BC MoECCS pursuant to the requirements of the Regulation. Producers of designated products are required to meet the obligations set out in British Columbia's Recycling Regulation (BC Reg 449/2004 as amended) ("Regulation") under the Province's *Environmental Management Act*. The Program is funded by membership fees, known as environmental handling fees ("EHF"), remitted to Product Care by its members based on unit sales of products identified in the Program Plan ("Program Products"). A current list of Program members is available here: https://www.productcare.org/members/membership-documents/.

Between January 1, 2019, and December 31, 2019, the Program captured end-of-life lamps and lighting equipment products from all sectors (residential, institutional, commercial and industrial) and diverted them from landfill.

3 Public Education Materials and Strategies

In 2019, Product Care implemented a number of different tactics to raise awareness in the residential and commercial sectors about the Program in British Columbia, in accordance with regulatory requirements. The following section provides details regarding communication and public education activities for the Program in 2019 as outlined in the program plan commitments.

3.1 Website

In January 2019, the regeneration.ca and lightrecycle.ca websites were replaced with the new Product Care website, productcare.org. The new website reflects a refreshed, consolidated brand focused on an improved user experience for consumers, industry and members. Similar to regeneration.ca and lightrecycle.ca, the Product Care site includes the following content for the Program, in accordance with the commitments outlined in the Program Plan:

- The "find a recycling location" tool (a map displaying collection site locations and drop-off events, as well as collection site location hour and operation details)
- Lists of accepted and not accepted products
- Important consumer information (information on Environmental Handling Fees (EHFs), Program description, safe handling information, frequently asked questions, etc.)
- Program member support centre with news and updates
- Consumer videos showing the product management approach for program products
- An online fillable form for ordering promotional materials, like rack cards and posters
- Information for the industrial, commercial, and institutional (ICI) markets, including commercial volume program information and product management options
- Information about Product Care Association of Canada, including annual reports, program plans, and membership information

An estimated 527,307 unique visitors accessed *productcare.org* during the 2019 calendar year. The Program's section (including sub-sections for accepted products, fee information, and commercial volumes) received 55,060 page views. In addition, there were 102,974 searches through the "find a recycling location" tool for collection sites of Product Care programs operating in British Columbia[4], including the Program.

3.2   Consumer Awareness (Residential)

To raise awareness among residential consumers, the Program employs a variety of strategies and tactics. In 2019, to gauge the awarenss level of the public, a consumer awareness survey was conducted. The following section provides the results of the survey and the consumer-focused strategies and tactics that were employed to in 2019.

3.2.1   Consumer Awareness Survey

In fall 2019—per our commitment in the Program Plan to conduct a consumer awareness survey every two years—an online survey representative of British

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[4] We are unable to filter by product and many searches will not include a product filter at all (because results load automatically). This means the website is easier to use, but also means we don't have 100% clarity on which product users are searching for, because they don't always tell us.

Columbia's adult population was conducted among 1,006 residents, by an independent third party survey company.

The survey asked consumers "to the best of your knowledge, can lightbulbs be recycled in British Columbia?" This question focuses on the relevant consumer knowledge about product recycling. The survey found that 69% of residents are aware of a recycling program for lights in the province, an increase of 14 percentage points over 2017 awareness levels (55%); one percentage point below the 70% awareness target outlined in the Program Plan and within statistical margins of error. This strong increase is reflective of the Program's extensive outreach activities and new strategies and approaches that were used in 2019. Highlights include, working with a media agency to leverage their expertise and gain maximum exposure; an increased digital marketing effort, advertsing for the first time on the Weather Network app, Global TV website and explainer videos on YouTube and Facebook; and direct mail campaigns through Corus. Details of these strategies are provided below. It is anticipated that the current awareness strategy and tactics successfully implemented in 2019 will continue to increase consumer awareness in 2020.

The Program also committed to providing a qualitative report on products that may require additional focus to increase awareness. The survey results reveal similarities in consumer behaviour between Program Products, specifically consumers reported having comparable numbers of unwanted fixtures and lamps. Consumers also indicated they managed both lamps and fixtures in a similar manner. The similarities in consumer behaviours for Program Products indicates that rather than segregating awareness strategies by product, similar strategies should be employed to increase awareness for all Program Products.

The Program will continue to leverage the information gained from consumer research focusing its efforts on raising awareness regarding lamp and fixture recycling in the province in 2020. The next consumer awareness survey will be conducted in 2021.

3.2.2   Consumer-focused strategies and tactics
Television and Radio Advertising
Television commercials aired on Global TV from October to December 2019, resulting in approximately 7,095,800 impressions. In January 2019, 80 thirty-second spots aired on News 1130 promoting the Program to people in the Lower Mainland.

Program Hotline

Product Care continued to operate a toll-free hotline (1-888-772-9772) where consumers obtained information about the Program. In addition to the hotline, consumers also had the ability to contact Product Care through email. In 2019, Product Care received 56 consumer inquires by phone and email.

The Program also participated in the Recycling Council of British Columbia (RCBC) recycling hotline service (1 800 667 4321 or 604 RECYCLE). Consumers were able to contact RCBC operators during business hours and obtain information about return options for Program products.

Collection site locations were included in the Recyclepedia app developed by RCBC, Recyclepedia is a free smart phone app that allows users to locate recycling sites for over 70 product types in BC, including Program products. The app creates a list of the 10 closest recycling sites for a product in question based on the user's current location and the product they select in the app's product menu.

These three platforms received a combined total of 6,184 inquiries about Program products in 2019.

Corus Advertising Campaign

In early 2019, two awareness-oriented direct mail campaigns were distributed, by Corus, to nearly 48,300 individuals who were most likely to recycle Program products at key times of year like after the holidays, for Blue Monday, and around daylight savings time in March (see Appendix for examples). These mail-outs were complimented by re-targeted digital advertising to the same individuals (see below).

Print Advertising

Print ads focusing on general consumer awareness were published in the municipal calendars for Chilliwack, Summerland, Mission, Penticton, and Oliver. An estimated 48,000 calendars were distributed between the five areas.

See Appendix for examples of all print advertising activities.

Earned Media Advertising

To broaden awareness of the Program, in December 2019, Product Care pitched an earned media story to BC news outlets, focusing on seasonal light and light fixture recycling (Christmas string lights). Earned media coverage was picked up by 13 local media outlets, garnering more than 950,000 impressions. Outlets included, but were not limited to:

- *The Burnaby Now* newspaper:
- *New West Record* newspaper:
- *Squamish Chief* newspaper:
- *Salmon Arm Observer* newspaper:

Digital Advertising

The consumer awareness survey continues to show that internet/digital media remains a primary source of information for BC residents. As a result, the Program increased its digital marketing efforts in 2019. All digital campaigns listed below reached the entire province and garnered more than 4.6 million impressions.

1. Google Search Advertising Campaign: March to December, 2019
   A search advertising campaign served Program ads to provincial residents based on an extensive list of keyword searches relevant to the Program. British Columbia's ads collectively generated 7,270 impressions.
2. Google Display Advertising Campaign: June to December, 2019
   a. A British Columbia-specific display advertising campaign served Program ads to provincial residents based on increasingly refined targeting. The ads received 3,918,663 impressions. Ads were specifically targeted to internet users who performed online searches related to Program Product purchasing, usage, and disposal in British Columbia. Secondary targeting focused on individuals searching for home improvement and DIY-related terms, in order to reach a wider, but still relevant, population.
   b. A Gmail text and image advertising campaign ran between October and December, receiving a total of 12,357 impressions, and resulting in 144 clicks to the website.
3. YouTube Video Advertising Campaign: August to December, 2019
   The Program explainer video ran as a pre-roll ad on YouTube, targeting relevant content, such as Home and Garden. The video received 326,489 impressions and 87,298 views, a view rate of 27%.
4. Facebook Advertising Campaign: A British Columbia-specific campaign promoted the Program, targeting the province's residents on an ongoing basis. In January and February, coverage coincided with a mail-out sent to BC residents and was targeted using lookalike techniques for 'Eco-Aspirer' and 'Eco-Enthusiast' personas. Later in the year, activity was focused around seasonal themes, including daylights savings and a campaign that focused specifically on Christmas lights recycling, promoting the Program explainer video and other assets on both Facebook and Instagram.

5. <u>Gated Facebook Content Strategy</u>[5]: To promote the Program in 2019, content visible only to residents of British Columbia was posted regularly. Topics of these targeted posts included information regarding safe management of Program Products, information about collection site locations in the province, local recycling news and stories, and promotion of environmental events taking place in the province (for example, an Earth Day celebration at Habitat for Humanity in Victoria). Targeting these posts ensures they are seen by the right communities and that clear, correct, province-specific information is available to BC residents. It also allows sharing of program-specific pages of the website, such as the Program's page, allowing consumers to easily navigate to information that is relevant to them.

6. <u>Targeted blog posts:</u> More than 30 blog posts were targeted at relevant audience members including, but not limited to, homeowners, female heads of households, and environmentally-inclined individuals in British Columbia. Topics included specific information on the Program, "do it yourself" ("DIY") content, renovation tips, and sustainability best practices. All posts included a call-to-action to find a collection site location or interact with the brand on social media. Collectively, these posts received 45,568 views.

7. <u>Influencer marketing</u>: February 2019
Product Care partnered with two Canadian bloggers / influencers, Loving Littles and One Smiley Monkey, to publish a series of blog posts and social media content about the Program. The campaign took place in February and was focused around recycling for the Family Day weekend, aimed to resonate with young families. Collectively, the posts received 372,000 impressions, 7,000 blog views and 2,198 engagements.

8. <u>Pinterest advertising campaign</u>: November – December, 2019
Promoted pins were run on Pinterest, targeting British Columbia residents, to promote Christmas lights recycling in British Columbia. They received a total of 11,210 impressions.

See Appendix for examples of all digital advertising activities.

Community Events and Partnerships
To further establish partnerships in the community, Product Care attended two events with the goal of educating the public on the importance of waste diversion and recycling, including:

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[5] Posts on Product Care Recycling's Facebook page include both general, publically viewable content, and gated content, which specifically targets provincial residents who are fans of the page. Gated content is only visible to a selected audience and can be targeted both geographically and demographically.

- Party for the Planet (City of Surrey): April 14
- Vancouver Pride Festival: August 5

At these events, knowledgeable staff interacted with thousands of event attendees through a direct engagement program including trivia, giveaways, branded print materials, and other activities.

Product Care also sponsored Science World's BC Green Games, which is a digital eco-storytelling contest for schools throughout British Columbia. As part of the sponsorship, Science World's "On the Road" team visited schools across the province and educated more than 36,000 students on Program Product recycling. In addition, the BC Green Games website listed Product Care as a sponsor with a description of its recycling programs.

Point of Sale (PoS) and Point of Return (PoR) Materials

In 2019, Product Care distributed both PoS and PoR materials as requested by retailers and collection site locations. The following materials were available for order, free of charge, through the online form:
- Brochures
- Posters

3.3 Industry-Focused Awareness

To raise awareness among the commercial sector, the Program has historically employed a number of targeted strategies, including but not limited to, print and e-newsletter advertising, sponsoring and attending industry events and tradeshows, hosting industry information sessions, and direct mailing and communications.

The Program has committed to conducting commerical specific sector outreach through the following additional strategies:
- Attending at least two industry events annually,
- Issuing a minimum of six print and e-newsletter ads
- Investigating online industry forums with the findings reported following the first full year of the plan approval
- Undertaking an outreach campaign within the first year of the plan approval, and
- Developing and implementing an outreach initiative within two years of Program Plan approval.

3.3.1 Industry Events

In 2019, Product Care attended three industry events to promote the Program:

1. BUILDEX Vancouver in February 2019: A two day-long trade show and conference attracted over 14,000 industry professionals from the construction, property management, interior design, renovation, and architecture industries.
2. Electro Federation Canada (EFC) Future Forum Toronto in November 2019: A one-day forum and awards presentation attended by nearly 100 industry experts. Product Care presented to the group, drawing attention the Program.
3. Building Owners and Managers Association (BOMA) Vancouver Luncheon in November 2019: The event was attended by approximately 130 BOMA members involved in commercial real estate. Product Care hosted a table at the event providing information about the Program to attendees.

The Program was also a corporate sponsor of the national electrical trade organization, Electro Federation Canada (EFC). Sponsorship included general promotion of the Program at EFC events and conferences, as well as digital advertising on EFC's website (see below).

3.3.2 Advertising

Print Advertising

In 2019, Product Care advertised in the following industry publications:

- Half page ads ran in three separate issues in *Electrical Line* Magazine; a bi-monthly electrical trade publication that reaches 19,000 building trades, consulting, engineering, architectural, and government audiences.
- A half page ad in the *Property Managers Sourcebook*, which specifically focused on the Program's commercial volume services. This publication reaches 8,000 associations, property managers and Lower Mainland Western Investor subscribers.
- Half page ads in two separate issues in *Office Space* and *Green Space* magazines, targeting the Program's direct pickup service for commercial volumes. 21,700 copies of these publications were distributed.

Digital Advertising

- Product Care's 2019 sponsorship with EFC included advertising in industry-specific e-newsletters (see Appendix), as well as a banner on the EFC website.
- A province-specific advertisement ran in the top banner position of the British Columbia Electrical Association website to promote the Program to industry members.

3.3.3   Investigation of Online Industry Forums

In conjunction with developing an ICI sector outreach campaign detailed below, the Program committed to investigate online industry forums to identify opportunities to promote the Program to the ICI sector. The following findings were made:

Opportunities	Challenges
• Posting content in industry associated forums and social media accounts, could drive traffic to the Program's website and lead the visitor to learning more about the Program. • Targeted digital ads have the potential to be most effective for promoting the program.	• Few online lighting forums were found to exist. • Forums are rarely BC focused, they either have a North American or Global reach. • Interaction in lighting industry forums is relatively weak. • The value of engaging in forums is questionable, given the limited activity observed in forums.

3.3.4   ICI Outreach Campaign

The Program committed to undertake an outreach campaign targeting commercial users with the cooperation of electrical distributors/wholesalers through which the majority of commercial users procure Program Products. Elements included:

1. Identify opportunities and challenges to raising awareness of the Program among their customers.
2. Develop a campaign in partnership with provincial distributors/wholesalers of commercial lighting products to raise awareness amongst their customers.
3. Report on this initiative in the Program's annual report.

To achieve these objectives, Product Care engaged with the Program's Advisory Committee - a group of industry representatives that provide advice, information and recommendations to Product Care. Product Care also engaged with nine wholesaler/distributor members who were identified as working directly with the ICI market and were willing to engage and provide support in raising awareness amongst their customers.

Through a survey conducted with the Light Recycling Advisory Committee and direct communications with the distributors/wholesalers, the opportunities and challenges associated with engaging with the commercial market were identified as follows:

Opportunities	Challenges
• Promote the free pick up service for large volumes of lights to contractors as a	• Not all ICI users turn to web-based communications for information; some rely on print communications.

business advantage they can leverage when bidding for contracts. • Direct communication works best with commercial users. • Have a variety of assets/tactics in one "toolkit" for distributors/wholesalers to pick and choose what fits them best for use.	• Commercial foot traffic in stores is low, majority of sales occur by phone or email • Distributing materials to customers on behalf of the Program could be perceived as a burden of time on distributors/wholesalers, reducing their willingness to assist. • Sales staff do not have full knowledge of the Program and may not be able to answer specific questions from customers in the right way. • The campaign that is developed may not align with distributor/wholesaler marketing strategies and therefore may not be used.

Through direct communications with the distributors/wholesalers, it was identified that their current communication and marketing strategies include a range of communication tactics, such as print and electronic materials, corporate websites, corporate events, newsletters and social media.

Based on the above findings, Product Care worked together with distributors/ wholesalers to develop a diverse campaign consisting of a possible range of tactics that will hopefully be adopted for use, including:

- **Blog posts** – informative articles that can be published on websites and in newsletters of distributors/wholesalers.
- **Print assets** – this includes, but is not limited to, brochures and rack cards, which distributors/wholesalers can provide to the ICI customers.
- **Direct mail outs** – one-page information sheets providing key Program information which distributors/wholesalers can send directly to ICI customers.
- **Fact sheet** – a one-page information sheet, which can be used as a resource by sales staff of the distributors/wholesalers when sharing information about the Program with their ICI customers.
- **Social media templates** – easily shareable social media posts available for distributors/wholesales to use in social media accounts.
- **Website tiles** – a brief blurb with key information about the Program that can be easily placed on distributor/wholesaler websites.

These tactics will be combined into an ICI Toolkit that will be accessible on the Program's website. Through engaging with the distributors/wholesalers, it was also identified that there is an opportunity to participate in corporate events that they

host. Product Care will remain in communication with distributors/wholesalers to identify opportunities to participate in the events.

Product Care will continue to work together with distributors/wholesalers to advance this initiative.

4   Collection System

The Program provides a free and convenient collection system for all consumers of Program Products. Product Care does not directly own or manage collection sites, but has contracts with them based on the services they provide (see Section 4.1 for descriptions of collection site services). These sites include retailers, recycling organizations (both non-profit and for profit), local government recycling centers or transfer stations/landfills and other associations or businesses interested in participating in the Program.

Contracted collection sites accept "Program Products" as outlined in Table 4 below. A complete list of products accepted and not accepted by the Program is available in the Program's Product Guide on Product Care's website: https://www.productcare.org/app/uploads/2017/04/Lights-Product-Guide-EN.pdf

Table 4: Summary of Program Products

Summary of Program Products
Whole Lamps: - Fluorescent, induction and UV tubes of all lengths and shapes   - Compact fluorescent lights (CFL) and screw-in induction lamps   - Light emitting diodes (LED)   - High intensity discharge lamps (HID) of all types   - Special purpose lamps   - Incandescent lamps   - Halogen lamps   - Miniature lamps   **Pre-Crushed Lamps**
Fixtures: Small light fixtures and light strings

Summary of Program Products
• Portable fixtures, emergency/egress lights, small outdoor fixtures, decorative fixtures, and linear fixtures • Commercial and industrial non-linear fixtures • Large outdoor fixtures for use in institutional, commercial and industrial settings
Ballasts: • PCB Containing • Non-PCB Containing

4.1 Collection Sites

A collection site is a physical location where consumers can drop off Program Products at no charge. Collection sites can offer one or more collection services based on various factors. Services offered by collection sites are generally advertised to the public. In some cases, collection sites are not advertised where the location does not collect from the general public. Product Care enters into separate contracts with collection sites for each collection service offered and as a result, there is no one-to-one relationship between the number of sites and the number of services offered. The seven different collection services offered through the Program are listed in Table 5.

Table 5: Light Recycling Collection Service Types

Type of Service	Description
Advertised Residential Lamps	Collection sites accepting residential volumes of lamps (up to 16 units)
Advertised Residential Fixtures	Collection sites accepting residential volumes of fixtures
Advertised All Sectors Lamps (Commercial and Residential)	Collection sites accepting commercial volumes of lamps (up to one full skid spot)
Advertised Commercial Fixtures and Non-PCB Ballasts	Collection sites accepting commercial volumes of fixtures & Non-PCB Ballasts
Unadvertised Residential Fixtures	Collection sites accepting residential volumes of fixtures from specific sources only
Unadvertised Commercial Lamps	Collection sites accepting commercial volumes of lamps from specific sources only

Unadvertised Consolidators Lamps	Collection sites consolidating volumes of Program Products into larger quantities from specific sources only

The Program's collection system included 449 contracted collection sites, with 14 advertised sites added in 2019 and seven (7) advertised sites removed, representing a net increase of seven (7) sites from 2018. See Table 6 for a list of these changes. See Appendix B for a full list of collection sites by location.

Table 6: Collections Sites Added/Removed in 2019

Depot Name	Depot Location	Change from 2018
Vancouver Landfill	Delta	Opened
Mayne Island Recycling Society	Mayne Island	Opened
Lake Country Ace Hardware	Lake Country	Opened
Ace Hardware Golden	Golden	Opened
Denman Island Waste Management Recycling Depot	Denman Island	Opened
Rona Golden	Golden	Opened
London Drugs #88 - Dunbar	Vancouver	Opened
Habitat For Humanity ReStore – Uptown	Victoria	Opened
Habitat For Humanity ReStore - Westshore	Victoria	Opened
Habitat For Humanity ReStore - Tillicum	Victoria	Opened
Fort St. James Transfer Station	Fort St James	Opened
East Vancouver Bottle Depot Ltd	Vancouver	Opened
Castlegar Return-it Depot	Castlegar	Opened
Mount Pleasant Return-It	Vancouver	Opened
Rona New Westminster	New Westminster	Closed
Sechelt PU Recylers	Sechelt	Closed
Eco Depot Fort St John	Fort St John	Closed
Nak'azdli Recycling	Fort St James	Closed
Schnitzer Steel Pacific	Duncan	Closed
Salvation Army Thrift Store - SOOKE	Sooke	Closed
MacLeod's True Value Hardware (Ace)	Fort St James	Closed

Table 7 provides the number of contracted collection sites by Regional District.

Table 7: Contracted Collection Sites by Regional District

Regional District	# of Collection Sites
Alberni-Clayoquot	5
Bulkley-Nechako	9
Capital Regional District	43
Cariboo	10
Central Coast	4
Central Kootenay	10
Central Okanagan	16
Columbia Shushwap	9
Comox Valley	8
Cowichan Valley	12
East Kootenay	8
Fraser Valley	25
Fraser-Fort George	8
Kitimat Stikine	8
Kootenay Boundary	5
Metro Vancouver	152
Mt Waddington	9
Nanaimo Regional District	15
North Coast	4
North Okanagan	12
Northern Rockies	1
Okanagan Similkameen	15
Peace River	8
qathet	4
Squamish Lillooet	12
Strathcona	9
Sunshine Coast	8
Thompson Nicola	20
Total	**449**

The Program measures consumer access to collection facilities in accordance with the Accessibility Standard established by the Stewardship Agencies of BC (SABC). This Standard defines minimum accessibility levels as a 30 minute drive or less to a collection point in urban centres with a population greater than 4,000, and a 45 minute drive or less for those living in rural communities greater than 4,000 people. An accessibility study was conducted on contracted collections sites for 2019 by an independent third party company. Table 8 provides the total population with access

to collection site locations as of December 31, 2019 based on the SABC Accessibility Standard.

Table 8: Percentage of Population with Access to Collection Sites per SABC Accessibility Standard in 2019

Collection Site Type	% Population[6]
Residential Lamps	99.7
Residential Fixtures	98.4
Commercial Lamps	99.6
Commercial Fixtures	96.2

Table 9 provides the percentage of population that does not have access to a collection site based on the SABC Accessibility Standard.

Table 9: Percentage of Population that did not have Access in 2019 according to SABC Accessibility Standard

Collection Site Type	% Population[7]
Residential Lamps	0.3
Residential Fixtures	1.6
Commercial Lamps	0.4
Commercial Fixtures	3.8

Services to Small Communities

The Program provided collection services beyond the SABC accessibility standard. Of the 449 contracted collection sites, 77 of those collections sites were in communities with populations of less than 4,000.

The Program also provided collection services to six communities with populations less than 4,000 that did not have a permanent collection site, through collection events or direct pick-up service. Table 10 lists these communities and the type of service provided.

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[6] Based on the SABC Accessibility Standard.

[7] Based on the SABC Accessibility Standard.

Table 10: Services to Small Communities

Community	Population	Type of Service
McBride	616	Collection Event
Savona	650	Collection Event
Nakusp	1,605	Collection Event
Crofton	1,373	Direct Pick-Up Service
Likely	860	Direct Pick-Up Service
Port Mellon	1,328	Direct Pick-Up Service

Indigenous Communities

The Program also worked on providing services to indigenous communities, providing collection services to a number of Indigenous communities such as Lax Kw'alaams, Shalath and Bella Bella.

Product Care also engaged with the Indigenous Zero Waste Technical Advisory Group (IZWTAG), assisting the organization with its incorporation, and becoming a member of IZWTAG.

4.2   Large Volume Collections

In addition to collection sites, the Program provided free of charge, direct pick-up services for large volume generators (LVGs). LVGs are organizations/companies that generate qualifying quantities of Program Products at their own site or at offsite locations that would overburden any one collection site.

The following Program Products are covered under this service for specified minimum quantities:
- Whole lamps
- Drums of pre-crushed lamps
- PCB ballast over 5kg

Product Care provided courier service for collections of PCB containing ballasts under 5kgs.

4.3　Collection Events

The Program continued to partner with local governments and not-for-profit organizations in holding collection events to provide temporary collection services for Program Products. Table 11 lists the dates and locations of the 18 collection events in 2019 that the Program participated in.

Table 11: 2019 Collection Events

Date	Location
February 23, 2019	Vancouver
March 9, 2019	Barclay Manor
April 7, 2019	Surrey
April 12, 2019	Vancouver
May 4, 2019	Vancouver
May 25, 2019	McBride
June 15, 2019	Vancouver
June 22, 2019	Vancouver
July 7, 2019	Surrey
July 13, 2019	Vancouver
August 11, 2019	Surrey
September 2, 2019	Nakusp
September 14, 2019	Killarney
September 21, 2019	Kitsilano
September 22, 2019	Castlegar
October 5, 2019	Barclay Manor
October 5, 2019	Chilliwack
October 26, 2019	Langley

5　Product Environmental Impact Reduction, Reusability and Recyclability

Lighting product producers continue working to reduce the environmental impact of lighting products through innovative product design and technology. New design and technology has addressed environmental concerns by reducing material use, increasing lamp life, increasing energy efficiency and increasing recycling rates. For

example, efforts in this area have resulted in the development of smaller diameter fluorescent tubes now readily available in the marketplace and prevalent in new construction and renovations. These products can provide the same or more light with fewer material resources, such as a decrease in the amount of glass used in the products. The amount of mercury contained within fluorescent lights has also been decreasing with most lamps now containing less than 5mg of mercury, representing an 80% to 90% reduction.

Life cycle management is also playing an important role in reducing the environmental impact of lighting products. For example, producers are focusing their attention on increasing product energy efficiency. This has resulted in a substantial increase in the lifespan of fluorescent lights in the last decade, with some lamps now having a life of more than 30 000 hours, reducing the cumulative environmental impact associated with these products.

The advancement of LED lighting technology is having a significant impact on the lighting market as a whole. Manufacturers are focusing most of their efforts in this area and no longer spending research energy on expanding the CFL product line. Acceptance of LED technologies is increasing as prices decrease. In fact, the acceptance and adaptation to LED technology has been much more rapid and widespread than most industry experts would have forecasted some years ago.

Due to the significantly longer lifespan of LED lights, sales have decreased for other traditional lighting technologies, such as halogen, incandescent and fluorescent lights. A review of lamp sales trends from the past 3 years reveals declining sales in all lamp categories, with the exception of LED lamp categories. According to members of Product Care's Light Recycling Advisory Committee, it can be expected that declining sales trends will continue for mercury containing lamps. In particular, sales of CFLs have experienced a decline at a faster rate than anticipated. The Advisory Committee foresees that CFLs will likely be eliminated from the market within the next 3 to 4 years. Furthermore, it is anticipated that fluorescent tubes will follow CFLs and likely be eliminated from the market in the next 5 to 10 years. As older lighting technologies are eliminated from the market, the Advisory Committee expects that they will be replaced by LED lamp technologies. LEDs contain no mercury and have an even longer life of about 15 000–20 000 hours. Most CFLs, in comparison,

only have an average life of 10,000 hours. It is expected that we will also likely see more and more integration of LEDs into fixtures.

The shift to more energy efficient and longer lasting lighting technology is clear. Most LED lamps are more than 50% more efficient than CFL lamps, reducing electricity use and reducing pollution from power generation[8]. These changes all help to decrease the impact on the environment, with longer life lamps helping to reduce waste, make lamps less hazardous and reducing the size of lamps thereby reducing the amount of materials required to manufacture them and minimizing waste.

6   Pollution Prevention Hierarchy and Product / Component Management

The objective of the Program is to minimize the improper disposal of Program Product by providing an effective collection program and ensuring that the collected materials are either recycled or disposed of in an environmentally responsible manner. Product Care works with its service providers to ensure Program Products are managed, within reason, using the highest option on the Pollution Prevention Hierarchy (PPH)[9]. The application of the PPH and the management option varies by Program Product depending on options available and economic feasibility.

After collection, Program Products are transported to the Program's primary processors. These processors include one for processing whole lamps, two for fixtures, one for crushed lamps and one for PCB containing ballasts. At the processors, Program Products are broken down into their respective component materials and either processed on site or sent to a downstream processor for further processing. Information about how material was managed by the Program's primary processors was based on information provided to Product Care by the Program's primary processors. Processing and management details are set out below.

Lamp processors are required to conform to the Program's Lamp Processor Standard, which defines the minimum requirements to become an approved

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[8] Personal Communication with representative of GE.

[9] The pollution prevention hierarchy is explained on pages 9 and 10 of the BC Recycling Regulation Guide available here: https://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/recycle/recycle_reg_guide.pdf

processor. The Standard sets out environmental, occupational health and safety, and material handling rules to ensure materials are handled appropriately.

Whole Lamps

Whole lamps were processed and broken down into various components under a controlled environment. As reported by the Program's processors, the component parts were recycled or disposed of as follows:

- Metal was sent to a downstream metal site for recycling.
- Glass was sent for use as sand blasting material.
- Phosphor powder contaminated with mercury were stabilized, and sent to secure landfill.

Crushed Lamps

- Crushed lamps were sent to a processor and were managed using the same method for whole lamps with the same material end-fates, with the exception of glass which was used as aggregate in concrete.

Residential Fixtures

Residential fixtures contain materials similar to small appliances (e.g., metal, glass, plastics, etc.). As a result, the Program partnered with the Canadian Electrical Stewardship Association's (CESA) program (ElectroRecycle) to collect residential fixtures along with small appliances and power tools at CESA-contracted collection sites. They were shipped to two independent processors where they were comingled with other electronics and broken down into their respective components to be recycled and/or recovered.

Commercial Fixtures and Non-PCB Ballasts

Commercial fixtures and non-PCB ballasts were collected and managed outside the Program through the existing market-driven scrap metal recycling system. A description of this recycling system provided by a Canadian Association of Recycling Industries[10] (CARI) spokesman explains that the collected materials are sent to a downstream scrap metal recycling processor, where the main materials recovered are metals. According to industry representatives, all metal is extracted and recycled

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[10] It is the Program's experience and understanding that the vast majority of scrap metal recycled in BC moves through eight CARI member companies

and the remaining shredder residue is sent to landfill for use as landfill cover. Since it is a market-driven system, the Program has no ability to verify or report on the volume and portion of the material recycled and or disposed of through this system.

PCB Containing Ballasts

PCBs are strictly regulated from transportation to disposal by the BC Ministry of Environment and Climate Change Strategy, Environment Canada, and Transport Canada. The Program contracted with a hazardous waste management company to collect, transport and manage PCB containing ballasts. Through the hazardous waste management company, the PCB ballasts were incinerated at high temperature in a PCB licensed incinerator.

Table 12 provides a consolidated overview of the treatments and final disposition of materials derived from Program Products.

Table 12: Material Treatments

Material	Sub-Component	Downstream Processing	End-Fate
Lamps (all technologies)	Phosphor Powder contaminated with Mercury	Chemical treatment, stabilization	Securely landfilled
	Metal	Physical treatment and smelting	Recycled – metal commodity
	Glass	Physical treatment	Recycled as sand blasting material
Crushed Lamps	Metal	Same as whole lamps	Same as whole lamps
	Glass	Physical treatment	Recycled as aggregate in concrete
	Mercury and Phosphor Powder	Same as whole lamps	Same as whole lamps
Residential Fixtures[11]	Ferrous Steel	Production, Processing, Non-processing	Recycled
	Plastics	Processing, Non-processing	Recycled
	Aluminum	Production, Processing, Non-processing	Recycled
	Wire and Cables and String lights	Refining, Non-processing	Recycled

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

Material	Sub-Component	Downstream Processing	End-Fate
	Copper	Processing, Refining	Recycled
	Glass	Non-processing	Recycled
	Circuit Boards	Refining	Recycled
	Rechargeable and Non Rechargeable Batteries	Processing, Non-Processing	Recycled
Commercial Fixtures and Non-PCB Ballasts	N/A	Managed through the existing market driven scrap metal recycling system	
PCB Containing Ballasts	N/A	Hazardous Waste Management Company sent to PCB licensed incinerator.	Incineration

7 Product Sold, Product Collected and Recovery Rate

7.1   Products Sold

In 2019, members of the Program reported sales of 31,635,670 units of Program Products in BC. Table 13 shows the reported units sold in 2019 broken down by product category.

Table 13: Units Reported Sold by Product Category in 2019

Product Category	Units Reported Sold
1. Fluorescent Tubes measuring ≤ 2 feet	152,933
2. Fluorescent Tubes measuring > 2 feet and ≤ 4 feet	1,919,154
3. Fluorescent Tubes measuring > 4 feet	168,549
4. Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps	964,718
5. Light Emitting Diodes (LED)	10,826,382
6. High Intensity Discharge (HID) and Other	295,192
7. Incandescent / Halogen	5,338,132
8. Miniature Bulb Package	754,820
9. Designated Small Fixtures/Decorative Light Strings	6,291,361

Product Category	Units Reported Sold
10. Fixture Category A	4,284,918
11. Fixture Category B	253,320
12. Large Outdoor Fixtures	59,319
13. Ballasts/Transformers (not integrated into lamps or fixtures)	326,872
Total	**31,635,670**

7.2 Products Collected

In 2019, the Program collected approximately 7,241,776 units of lamps, 722 tonnes[12] of fixtures through residential collections, 7,351 kg of PCB containing ballasts[13] and 9,617 kg[14] of crushed lamps. Table 14 provides a summary of the collection data. Collection quantities for the different Program Products are based on annual processor reports and/or estimated based on quantities processed by the Program's processors between January 1 and December 31, 2019, as reported by the Program's processors. The reported quantities may include Program Products received in the 2018 fiscal year, but processed in the 2019 fiscal year and may exclude units collected in the 2019 fiscal year that were not processed as of December 31, 2019.

Table 14: Estimated Quantity of Products Collected in 2019

Program Product	Estimated Quantity Collected
Whole Lamps	7,241,776 units
Residential Fixtures	722 tonnes
PCB Containing Ballasts	7,351 kg
Crushed Lamps	9,617 kg

[12] Residential light fixtures are collected together with CESA products. The Program and CESA use a sampling protocol to determine the proportion of CESA products and lighting fixtures. The Program utilizes the sampling results to approximate the tonnage of residential light fixtures.

[13] This weight includes the weight of the collection container.

[14] This weight includes the weight of the drum.

Table 15 presents a breakdown of the estimated number of units of each lamp Product Category collected by the Program in 2019.

Table 15: Whole Lamp Units Collected by Product Category

Lamp Product Category	Units Collected
1. Fluorescent Tubes (All sizes and shapes)[15]	2,859,979
2. Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps	1,254,566
3. Light Emitting Diodes (LED)	252,885
4. High Intensity Discharge (HID) and Other[16]	195,671
5. Incandescent / Halogen[17]	2,678,675
Total Units Collected	**7,241,776**

Table 17 sets out the estimated number of lamp units collected by individual regional districts. The estimated quantities were calculated by multiplying an average of units per box type (see Table 16) by total boxes received according to product type as reported by the Program's processors. The average units per box type were determined by sampling shipments of each box type collected in January, April, July and October 2019. During those months, the majority of box types[18] received were counted.

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[15] This number includes 0-2', 2-4', 4-8', U and O shaped tubes and Poly-coated tubes. Poly-coated tubes are reported from the processor in length of feet. The length is then divided by 4 and rounded to nearest whole number to obtain reported units.

[16] This number includes Sodium lamps, HPS lamps (High Pressure Sodium), Metal Halide lamps, Mercury Vapour lamps, Induction tubes, UVC lamps and tubes, and Neon tubes. Neon tubes are reported from the processor in length of feet. The length is then divided by 4 and rounded to nearest whole number to obtain reported units.

[17] This number includes projector bulbs and miniature bulbs.

[18] Shipments that had the same lamp technology (4' tubes) but in different size boxes (Gaylord box and 4' LVG box) were not included – as we could not differentiate which tubes were in which different size box.

Table 16: Average Units per Box Type 2019[19]

Box Type	Average Units per box
Residential CFL and mixed bulbs	151
Residential four foot tubes	33
Residential eight foot tubes	16
Commercial CFL and mixed bulbs	421
Commercial four foot tubes-gaylord	919
Commercial large four foot tube box	22
Commercial four foot tubes-plywood	229
Commercial eight foot tubes	30

Table 17: Estimated Units of Lamps Collected by Regional District in 2019

Regional District	Estimated Lamp Units	Units/Capita[20]
Alberni Clayoquot	32,817	1.06
Bulkley Nechako	19,802	0.52
Capital Regional District	448,765	1.17
Cariboo	57,390	0.93
Central Coast	4,364	1.31
Central Kootenay	56,727	0.95
Central Okanagan	426,384	2.19
Columbia Shuswap	46,444	0.90
Comox Valley	84,664	1.27
Cowichan Valley	154,900	1.85
East Kootenay	52,970	0.88
Fraser Fort George	98,881	1.05
Fraser Valley	438,469	1.48
Kitimat Stikine	62,146	1.66
Kootenay Boundary	51,501	1.64
Metro Vancouver	4,684,124	1.90
Mt. Waddington	14,915	1.35
Nanaimo Regional District	207,110	1.33

[19] Average units per box were determined by sampling shipments of each container size.

[20] Regional district populations based on 2016 census data.

Regional District	Estimated Lamp Units	Units/Capita[20]
North Coast	15,907	0.88
North Okanagan	105,769	1.25
Northern Rockies	4,440	0.82
Okanagan Similkameen	81,925	0.99
Peace River	46,701	0.74
qathet	38951	1.94
Squamish Lillooet	61,122	1.43
Strathcona	30,450	0.68
Sunshine Coast	66,760	2.23
Thompson Nicola	136,897	1.03
Total	**7,531,295**	**1.62**

Due to the variability in the number of units actually collected within a box, the total number of units by regional district only represents an estimate of collected units and does not necessarily reflect the actual number of units collected by regional district. The estimated total units collected by regional district and units collected by product type may vary as the methodology for calculating the units by regional district versus calculating the units collected by product type is based on different estimations.

Table 18 presents a breakdown of the estimated weight of PCB-containing ballasts collected by regional district by the Program in 2019.

Table 18: Approximate Weights Collected by Regional District in 2019

Regional District	Approximate PCB-Containing Ballast Weight (Kg)
Alberni Clayoquot	2
Capital Regional District	3,916
Cariboo	2
Central Kootenay	127
Central Okanagan	3
East Kootenay	3
Fraser Valley	43
Metro Vancouver	2,738

Regional District	Approximate PCB-Containing Ballast Weight (Kg)
Nanaimo Regional District	212
North Okanagan	257
Sunshine Coast	7
Thompson Nicola	41
Total	**7,351**

Product Care partners with CESA for the collection of residential light fixtures. As fixtures are collected together with CESA products, the program and CESA use a sampling protocol to determine the proportion of CESA products and lighting fixtures collected in CESA's collection containers. The proportion of lighting fixtures determined through sampling is applied to the total weight of material collected by CESA to approximate the tonnage of residential light fixtures collected. Table 19 shows the approximate tonnage collected for the Program and CESA. Table 20 provides the approximate weight of product collected by regional district.

Table 19: Approximate Weights Collected by Program in 2019

Program	Approximate Tonnage Collected (tonnes)
Light Fixtures	722
CESA	5,447

Table 20: Approximate Weights and Per Capita Collected by Regional District in 2019

Regional District	Approximate Fixture Weight (Kg)	Kg/capita[21]
Alberni Clayoquot	2,701	0.09
Bulkley Nechako	2,943	0.08
Capital Regional District	73,421	0.19
Cariboo	5,901	0.10
Central Coast	417	0.13
Central Kootenay	6,512	0.11
Central Okanagan	62,789	0.32
Columbia Shuswap	8,744	0.17

[21] Regional district populations based on 2016 census data.

Regional District	Approximate Fixture Weight (Kg)	Kg/capita[21]
Comox Valley	17,187	0.26
Cowichan Valley	14,273	0.17
East Kootenay	4,493	0.07
Fraser Fort George	13,312	0.14
Fraser Valley	36,526	0.12
Kitimat Stikine	5,485	0.15
Kootenay Boundary	8,427	0.27
Metro Vancouver	335,598	0.14
Mt. Waddington	2,853	0.26
Nanaimo Regional District	29,154	0.19
North Coast	2,468	0.14
North Okanagan	18,852	0.22
Northern Rockies	244	0.05
Okanagan Similkameen	19,683	0.24
Peace River	4,990	0.08
qathet	2383	0.12
Squamish Lillooet	7,472	0.18
Strathcona	4,270	0.10
Sunshine Coast	5,973	0.20
Thompson Nicola	21,940	0.17
Total	**719,011**	**0.15**

Commercial fixtures and non-PCB containing ballasts were collected and managed outside the Program through the existing market-driven scrap metal recycling system. These facilities manage various types of scrap metal obtained from a range of products. Given the relative size and volume of the Program Products, the manner in which materials are received at scrap metal sites, and the space and resources required to separate Program Products on site, it is not practical for scrap metal sites to segregate commercial fixtures and non-PCB containing ballasts from the mixed-stream of recycled products and provide discrete collection volumes to report out on units collected.

To estimate the quantity of commercial fixtures and non-PCB containing ballasts managed through the scrap metal system, sampling studies at ten collection sites in the Lower Mainland and Vancouver Island were conducted, in conjunction with other

extended producer responsibility programs. It is the Program's experience and understanding that the vast majority of scrap metal recycled in BC moves through eight CARI member companies. Therefore, these company's locations were used as sampling sites for four sampling events in 2019 (April, July, September, and November). Selection of these locations was based on the specific amenities of each site, the ability to complete sampling safely and geographic location. Table 21 lists the metal recycling facilities where the four sampling events were conducted in 2019.

Table 21: Collection Sites Sampled in 2019

Collection Site Sampled	Site Address	City
ABC Metals Recycling	8081 Meadow Ave	Burnaby
ABC Metals Recycling	4318 Terminal Place	Campbell River
Davis Trading & Supply Ltd.	1100 Grant Street	Vancouver
Richmond Steel Recycling	11760 Mitchell Road	Richmond
Rypac Aluminum Recycling Ltd.	11849 Tannery Road	Surrey
Schnitzer Steel Pacific Recycling	5551 Duncan Bay Road	Campbell River
Schnitzer Steel Pacific Recycling	13271 Trans Canada Hwy	Cassidy
Coast Environmental	3015 Boys Road	Duncan
Schnitzer Steel Pacific Recycling	307 David Street	Victoria
Schnitzer Steel Pacific Recycling	12301 Musqueam Dr.	Surrey

While all collection sites where sampling was conducted were within the Lower Mainland and Vancouver Island, these locations also received materials from smaller scrap metal collectors located in other jurisdictions.

To begin, Product Care staff first coordinated sampling dates with each facility. Sites were scheduled based on delivery schedules of municipal bins, driving distances and a variety of other factors. To assess the material at each facility, each site was visited for approximately two hours to a half day over a one or two week period, depending on the size of the facility.

Piles, large bins, small bins and public drop-off scrap metal were assessed at each site, as applicable. The results of the sampling events found approximately 0.60% of

the sampled material was commercial fixtures and non-PCB ballasts. This result was based on the inclusion of actual and estimated weights for sampled material (i.e., in the majority of instances, the Program was not able to get an actual weight on a sample pile and had to estimate the weight.)[22] For each scrap metal pile, weights were recorded if made available by the facility. In cases where no weight was available, due to operational limitations, estimates were made by site staff or Product Care staff.

7.3   Waste Composition Audits

Waste composition audits are conducted, in partnership with local governments and other extended producer responsibility programs, to determine if Program Product is being successfully diverted from landfill. The Program committed to participating in annual waste composition studies committed to by SABC.

SABC and the Program participated in one waste composition study in 2019 undertaken in partnership with the Cariboo Regional District and SABC members. Table 22 presents the results[23] of the audit. The results identified 0.68 kg/capita of the landfill material was Program Product. Waste composition audits track the total number of batteries found during the audit, as batteries cannot necessarily be associated with specific products found during the audit. Accordingly, the Program committed to reporting the total amount of batteries found per waste audit conducted. In 2019, there were 261 batteries (0.4 kg/capita) found during the audit.

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[22] Sampled piles with an estimated weight of more than 100,000lbs were excluded from the total material sampled on the basis that the pile was too large to estimate with any degree of confidence.

[23] The results reflect extrapolated weights per capita based on a small sample of material audited at the landfill. This provides a snapshot of the waste stream during each sampling period and may not account for variances in composition throughout the year.

Table 22: Waste Audit Results

Regional District	Locations	Kg/capita – Program Product[24]	Total Quantity – Batteries[25]
Cariboo Regional District	• Quesnel Landfill • Williams Lake Landfill • 100 Mile House Landfill	0.68	261

[24] Calculated using the combined weight of lamps, fixtures and ballasts, with the populaton based on 2016 census data.

[25] The source of single use and rechargeable batteries is not identified during the audit process, therefore it is not possible to discern if the battery was used to power a Program Product, or another stewarded product (e.g. EPRA, OPEIC, CESA).

8 Summary of Expenditures and Fees

The Program is funded by members based on environmental handling fees (EHFs) applied to the sale of new Program Products in or into British Columbia. The fee may be passed on by the member to their customers, either as a visible fee or by incorporating the cost directly into the price of the product.

In 2019, all fees were used for program purposes; directly funding the promotion, administration, collection, transportation and recycling of collected products. Table 23 provides a list of the EHF rates charged per unit for product categories in 2019.

Table 23: 2019 EHF Rate Schedule

Product Category	Fee Category	EHF in 2019
Lamps	1. Fluorescent/Induction/UV Tubes measuring ≤ 2 feet	$0.20
	2. Fluorescent/Induction/UV Tubes measuring > 2 feet and ≤ 4 feet	$0.40
	3. Fluorescent/Induction/UV Tubes measuring > 4 feet	$0.80
	4. Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps	$0.15
	5. Light Emitting Diodes (LED)	$0.15
	6. High Intensity Discharge (HID) and Other	$1.10
	7. Incandescent / Halogen	$0.05
	8. Miniature Bulb Package	$0.10
Fixtures	9. Designated Small Fixtures / Decorative Light Strings	$0.15
	10. Fixture Category A	$0.15
	11. Fixture Category B	$0.15
	12. Large Outdoor Fixtures	$0.15
Ballasts	13. Ballasts	$0.15

9   Plan Performance

2019 Key Performance Targets			
Regulation, Part 2 section 8(2)(g)			
2019 Program Plan Targets		**2019 Performance**	**Strategies for Improvement**
Consumer Awareness	Minimum 70%, surveyed bi-annually	69%	New strategies implemented in 2019 have successfully delivered significant improvements in awareness, these will be retained in anticipation of continued improvement
Accessibility Targets[26]			
Residential Lamps	Minimum 95%	99.7% (as of Dec 31st 2019)	N/A
Residential Fixtures	Minimum 95%	98.4% (as of Dec 31st 2019)	N/A
Commercial Lamps	Minimum 95%	99.6% (as of Dec 31st 2019)	N/A
Commercial Fixtures and Non- PCB Ballasts	Minimum 95%	96.2% (as of Dec 31st 2019)	N/A

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[26] See note 3

Appendix A – Advertising and Communication Materials

Recycling Locator tool

Below is a snapshot of the recycling locator tool found at ProductCare.org:
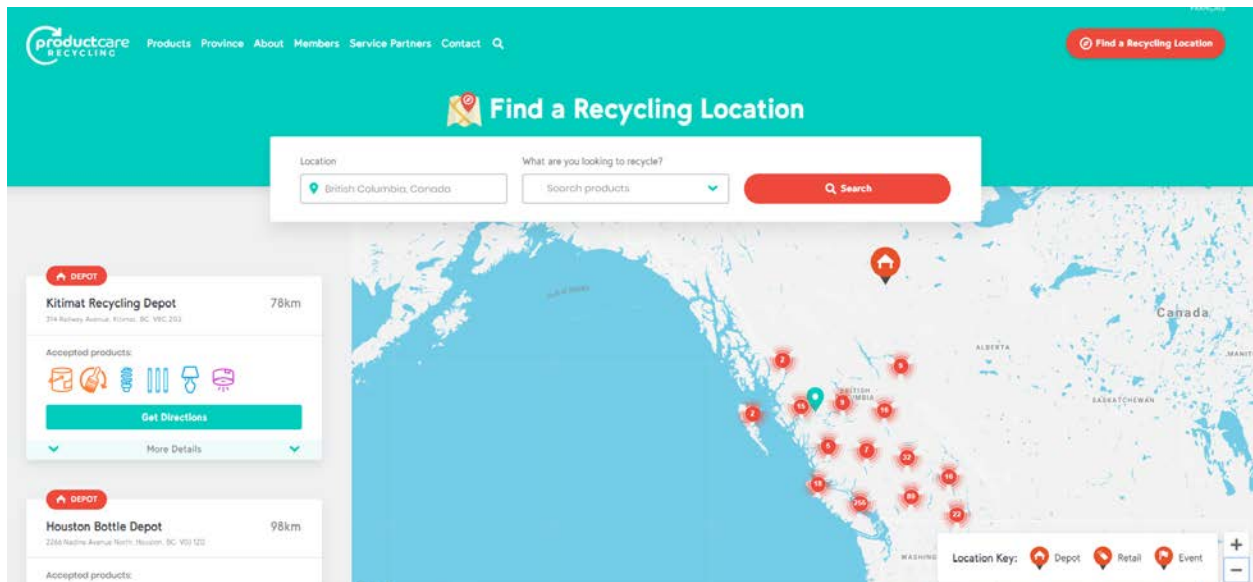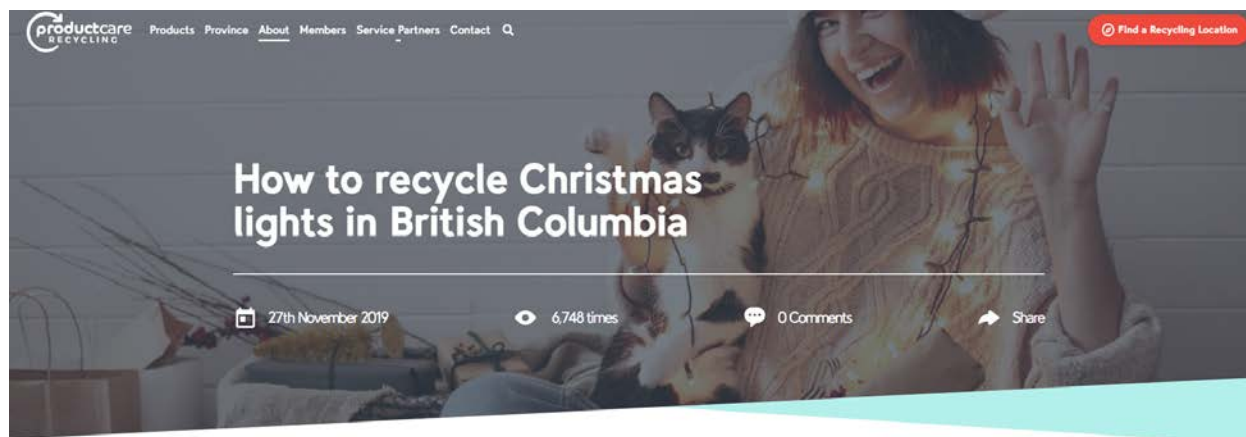

Wallet-sized Card
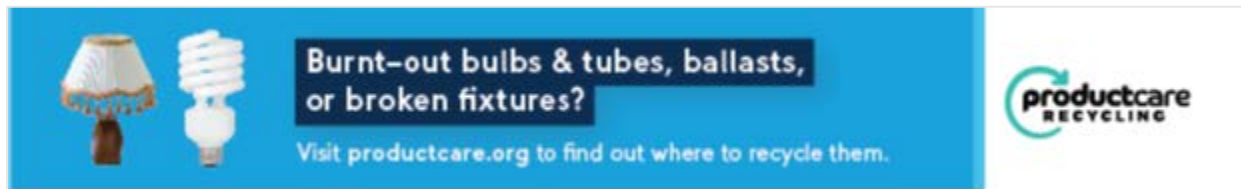
General Awareness Posters

Website Blog posts
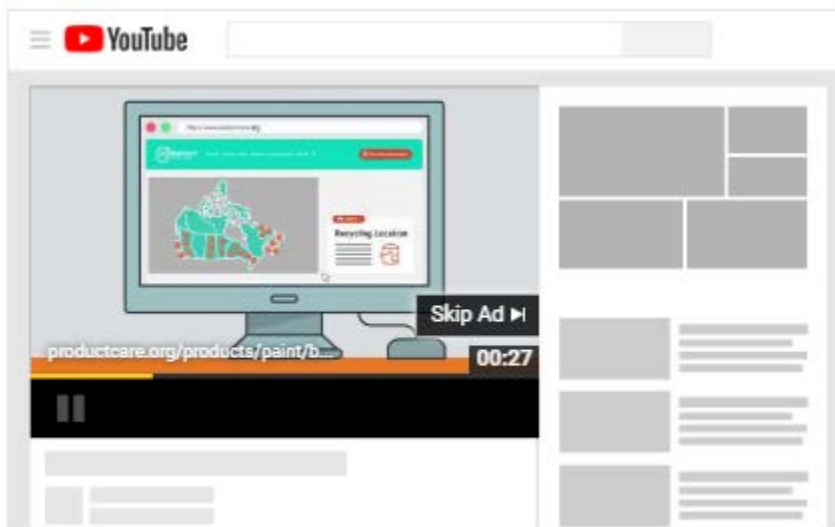
Google and TWN Display Ads

YouTube Video Ad

Sample Social Media Post

Sample Facebook Ad

Municipal Calendar Ad

Green Space and Office Space Magazine Ads

Electrical Line Magazine Ad

Direct Mail Campaign

Influencer Marketing

LET'S PASS IT DOWN TO OUR KIDS | LIGHT RECYCLING
HABITS!!

february 15, 2019

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Y ou know the phrase, "Monkey see, monkey do"? When you're a family with little children, you
know how true this can be! They watch us – constantly and everything we do and say is
imprinted in their minds. Children so badly want to mimic the things we do as parents and want
to be involved. When it comes to habits in my home that display values of home cleaning,
responsibility, kindness to others, and recycling, I try really hard to make sure my kids follow my lead.

Our children are the generation who will take care of our planet, and it's up to us to pass down positive
environmental habits by showing them how and what to recycle, and where to take the recyclable items. I

Pinterest Ads

Appendix B – List of Contracted Collection Sites as of December 31st 2019

	Depot Name	City	Regional District
1.	7 Mile Landfill	Port McNeill	Mt. Waddington
2.	Abbotsford Bottle Depot	Abbotsford	Fraser Valley
3.	Abbotsford Community Services Recycling	Abbotsford	Fraser Valley
4.	ABC Recycling – Fort St. John	Fort St. John	Peace River
5.	ABC Recycling – Kelowna	Kelowna	Central Okanagan
6.	ABC Recycling – Prince George	Prince George	Fraser Fort George
7.	ABC Recycling – Terrace	Terrace	Kitimat Stikine
8.	ABC Recycling LTD – Burnaby	Burnaby	Metro Vancouver
9.	ABC Recycling LTD – Campbell River	Campbell River	Strathcona
10.	ABC Recycling LTD – Surrey	Surrey	Metro Vancouver
11.	Ace Building Centre-Vanderhoof #70519	Vanderhoof	Bulkley Nechako
12.	ACE Hardware – Abbotsford (Formerly Wilway) #70636	Abbotsford	Fraser Valley
13.	Ace Hardware Golden	Golden	Columbia Shuswap
14.	Action Steel Sales (Okanagan) Ltd	Penticton	Okanagan Similkameen
15.	Agassiz Bottle Depot Ltd	Agassiz	Fraser Valley
16.	Aldergrove Bottle Depot	Aldergrove	Metro Vancouver
17.	Allied Salvage & Metals (1985) Ltd	Richmond	Metro Vancouver
18.	Allied Scrap Metal Squamish	Squamish	Squamish Lillooet
19.	Armstrong Bottle Depot	Armstrong	North Okanagan
20.	Augusta Recyclers	Powell River	qathet
21.	Bay Street Castle	Victoria	Capital Regional District
22.	Bella Bella Eco-Depot	Bella Bella	Central Coast
23.	Bella Coola Recycling Depot –COM	Hagensborg	Central Coast
24.	Bill's Bottle Depot	Salmon Arm	Columbia Shuswap
25.	Bings CreekRecycling Centre	Duncan	Cowichan Valley
26.	Blight's Home Hardware	Vancouver	Metro Vancouver
27.	Border Town Recycling Group – Shipping (Stewart Aquatic Ctr)	Stewart	Kitimat Stikine
28.	Bottle Depot – Glanford	Saanich	Capital Regional District
29.	Bottle Depot – Queens Ave	Victoria	Capital Regional District
30.	Boucherie Bottle Depot & Self Storage	West Kelowna	Central Okanagan
31.	Bowen Island Recycling Depot	Bowen Island	Metro Vancouver
32.	Brentwood Auto & Metal Retailers	Saanichton	Capital Regional District
33.	Bridgeview Return-It Bottle Depot	Surrey	Metro Vancouver
34.	Bulkley Valley Bottle Depot – COM	Smithers	Bulkley Nechako
35.	Burns Lake Home Hardware	Burns Lake	Bulkley Nechako
36.	Burns Lake Return-It Recycling Depot – COM	Burns Lake	Bulkley Nechako
37.	Campbell Mountain Sanitary Landfill	Penticton	Okanagan Similkameen

	Depot Name	City	Regional District
38.	Campbell River Waste Management Centre	Campbell River	Strathcona
39.	Canadian Tire #355 Kamloops	Kamloops	Thompson Nicola
40.	Canadian Tire #362 Nanaimo	Nanaimo	Nanaimo Regional District
41.	Canadian Tire #368 Victoria	Victoria	Capital Regional District
42.	Canadian Tire #389 Vancouver Cambie	Vancouver	Metro Vancouver
43.	Canadian Tire #433 Chilliwack	Chilliwack	Fraser Valley
44.	Canadian Tire #434 Abbotsford	Abbotsford	Fraser Valley
45.	Canadian Tire #437 Campbell River	Campbell River	Strathcona
46.	Canadian Tire #438 Williams Lake	Williams Lake	Cariboo
47.	Canadian Tire #443 Surrey Newton	Surrey	Metro Vancouver
48.	Canadian Tire #480	Powell River	qathet
49.	Canadian Tire #487 Quesnel	Quesnel	Cariboo
50.	Canadian Tire #488 Port Alberni	Port Alberni	Alberni Clayoquot
51.	Canadian Tire #489 Surrey	Surrey	Metro Vancouver
52.	Canadian Tire #601 North Van	North Vancouver	Metro Vancouver
53.	Canadian Tire #603 Burnaby	Burnaby	Metro Vancouver
54.	Canadian Tire #604 Vancouver	Vancouver	Metro Vancouver
55.	Canadian Tire #608 Coquitlam	Coquitlam	Metro Vancouver
56.	Canadian Tire #609 Port Coquitlam (GreenSpace)	Port Coquitlam	Metro Vancouver
57.	Canadian Tire #610 Richmond	Richmond	Metro Vancouver
58.	Canadian Tire #636 Sechelt	Sechelt	Sunshine Coast
59.	Canadian Tire #678 Surrey	Surrey	Metro Vancouver
60.	Capital Salvage Co. Ltd.	Vancouver	Metro Vancouver
61.	Carney's Waste Systems - Squamish	Squamish	Squamish Lillooet
62.	Castlegar Return-it Depot	Castlegar	Kootenay Boundary
63.	Central Builders' Supply Prince George	Prince George	Fraser Fort George
64.	Central Hardware Ltd	Enderby	North Okanagan
65.	Central Saanich Home Hardware	Saanichton, BC,	Capital Regional District
66.	Century Home Hardware	100 Mile House	Cariboo
67.	Chase Home Hardware	Chase	Thompson Nicola
68.	Chasers Bottle Depot	Vernon	North Okanagan
69.	Chetwynd Home Hardware	Chetwynd	Peace River
70.	Chetwynd Recycling & Bottle Depot	Chetwynd	Peace River
71.	Chilliwack Bottle Depot	Chilliwack	Fraser Valley
72.	Clearwater Eco-Depot	Clearwater	Thompson Nicola
73.	CM Recycling Ltd. (formerly Cariboo Metal Recycling)	Quesnel	Cariboo
74.	Collingwood Bottle Exchange	Burnaby	Metro Vancouver
75.	Columbia Bottle Depot - Dease	Kelowna	Central Okanagan

	Depot Name	City	Regional District
76.	Columbia Bottle Depot - Kent (Kirschner)	Kelowna	Central Okanagan
77.	Columbia Bottle Depot - St. Paul	Kelowna	Central Okanagan
78.	Columbia Recycle Ltd.	Kimberley	East Kootenay
79.	Comox Valley Auto & Metal Recyclers	Courtenay	Comox Valley
80.	Comox Valley Waste Management Centre	Cumberland	Comox Valley
81.	Cook St. Castle Building Centre	Victoria	Capital Regional District
82.	Coquitlam Return-It Depot	Coquitlam	Metro Vancouver
83.	Coquitlam Transfer Stn (Emterra Environmental)	Coquitlam	Metro Vancouver
84.	Cormorant Island Recycling Facility Alert Bay	Alert Bay	Mt. Waddington
85.	Cortes Island Waste Management Centre	Cortes Island	Strathcona
86.	Courtenay Return-It Depot	Courtenay	Comox Valley
87.	Cranbrook Bottle Depot	Cranbrook	East Kootenay
88.	D&S Electric	Williams Lake	Cariboo
89.	D.C. Campbell Recycling	Dawson Creek	Peace River
90.	Davie Village Home Hardware	Vancouver	Metro Vancouver
91.	Davis Trading & Supply Ltd.	Vancouver	Metro Vancouver
92.	Denman Island Waste Management Recyling Depot	Denman Island	Comox Valley
93.	District of Oak Bay Recycling Depot	Oak Bay	Capital Regional District
94.	District of Tumbler Ridge	Tumbler Ridge	Peace River
95.	DL's Recycling Centre	Saanichton	Capital Regional District
96.	Do Your Part Recycling	Terrace	Kitimat Stikine
97.	Dolly's Home Hardware	Qualicum Beach	Nanaimo Regional District
98.	Duncan Home Hardware Building Centre	Duncan	Cowichan Valley
99.	Dunlop's Home Hardware Building Centre	Port Hardy	Mt. Waddington
100.	East Hastings Bottle Depot	Burnaby	Metro Vancouver
101.	East Vancouver Bottle Depot Ltd	Vancouver	Metro Vancouver
102.	Edmonds Return-It Depot	Burnaby	Metro Vancouver
103.	Enderby Return-it Depot	Enderby	North Okanagan
104.	Fernie Bottle Depot	Fernie	East Kootenay
105.	Fernie Home Hardware Building Center	Fernie	East Kootenay
106.	Fisher Road Recycling	Cobble Hill	Cowichan Valley
107.	Fleetwood Bottle Return Depot	Surrey	Metro Vancouver
108.	Fort St. James Transfer Station	Fort St. James	Bulkley Nechako
109.	Fraser Lake Bottle Depot	Fraser Lake	Bulkley Nechako
110.	Fraser Valley Metal Exchange	Maple Ridge	Metro Vancouver
111.	Fraser Valley Metal Recycling Ltd. (formerly Ccon Steel)	Abbotsford	Fraser Valley
112.	Fraservalley Return-It Depot	Langley	Metro Vancouver

	Depot Name	City	Regional District
113.	Gabriola Island Recycling	Gabriola Island	Nanaimo Regional District
114.	Galiano Island Recycling Resources	Galiano Island	Capital Regional District
115.	Galiano Trading Co.	Galiano Island	Capital Regional District
116.	Gandy's Home Hardware	Vancouver	Metro Vancouver
117.	General Grant's North Shore Bottle Depot	Kamloops	Thompson Nicola
118.	General Grant's Sahali	Kamloops	Thompson Nicola
119.	GFL – Langford	Langford	Capital Regional District
120.	Gibsons Building Supplies	Gibsons	Sunshine Coast
121.	Gibsons Recycling Depot	Gibsons	Sunshine Coast
122.	Go Green Bottle Depot	Vancouver	Metro Vancouver
123.	Gold Trail Recycling	100 mile House	Cariboo
124.	Grand Forks Bottle Depot	Grand Forks	Kootenay Boundary
125.	Grand Forks Home Hardware	Grand Forks	Kootenay Boundary
126.	GRIPS	Madeira Park	Sunshine Coast
127.	Guildford Bottle Depot	Surrey	Metro Vancouver
128.	Habitat for Humanity Restore - Tillicum	Victoria	Capital Regional District
129.	Habitat for Humanity Restore - Uptown	Victoria	Capital Regional District
130.	Habitat for Humanity Restore - Westshore	Victoria	Capital Regional District
131.	Hagens Home Hardware Building Centre	Mackenzie	Fraser Fort George
132.	Haney Bottle Depot	Maple Ridge	Metro Vancouver
133.	Happy Stan's Recycling	Port Coquitlam	Metro Vancouver
134.	Hartland Landfill Recycling Depot (CRD)	Victoria	Capital Regional District
135.	Hazelton Bottle Depot	New Hazelton	Kitimat Stikine
136.	Hewer Home Hardware	Vancouver	Metro Vancouver
137.	Highway 4 Auto Salvage	Coombs	Nanaimo Regional District
138.	Hipperson Home Hardware	Nelson	Central Kootenay
139.	Home Building Centre Salmon Arm	Salmon Arm	Columbia Shuswap
140.	Home Building Centre Vernon	Vernon	North Okanagan
141.	Home Hardware Bldg Cntr Merritt (store # 5738-2)	Merritt	Thompson Nicola
142.	Home Hardware Building Center - Courtenay	Courtenay	Comox Valley
143.	Home Hardware Cranbrook	Cranbrook	East Kootenay
144.	Home Hardware Penticton	Penticton	Okanagan Similkameen
145.	Home Hardware Princeton	Princeton	Okanagan Similkameen
146.	Home Hardware Revelstoke	Revelstoke	Columbia Shuswap
147.	Home Hardware Sidney	Sidney	Capital Regional District
148.	Home Hardware Williams Lake	Williams Lake	Cariboo
149.	Hope Bottle Depot	Hope	Fraser Valley
150.	Hornby Island Waste Management Centre	Hornby Island	Comox Valley
151.	Houston Bottle Depot –COM	Houston	Bulkley Nechako
152.	Interior Freight and Bottle Depot	Vernon	North Okanagan

	Depot Name	City	Regional District
153.	Invermere Home Hardware	Invermere	East Kootenay
154.	Ironwood Bottle Depot	Richmond	Metro Vancouver
155.	Island Return It - DUNCAN	Duncan	Cowichan Valley
156.	Island Return-It Campbell River	Campbell River	Strathcona
157.	Island Return-It ESQUIMALT - Com	Esquimalt	Capital Regional District
158.	Island Return-It Sidney - COM	Sidney	Capital Regional District
159.	Island Return-It South Cowichan	Cobble Hill	Cowichan Valley
160.	Island Solid Waste Landfill Port Clements	Port Clements	North Coast
161.	Island Solid Waste Management - Queen Charlotte	Queen Charlotte	North Coast
162.	J&C Bottle Depot	Penticton	Okanagan Similkameen
163.	Junction Bottle Depot	Ladysmith	Cowichan Valley
164.	Kamloops Home Hardware	Kamloops	Thompson Nicola
165.	Kaslo Building Supplies #70024（Ace）	Kaslo	Central Kootenay
166.	Kensington Return-it	Burnaby	Metro Vancouver
167.	Keremeos Sanitary Landfill	Keremeos	Okanagan Similkameen
168.	Kerrisdale Lumber Co.	Vancouver	Metro Vancouver
169.	Kitchener Bottle Depot Ltd.	Burnaby	Metro Vancouver
170.	Kitwanga Transfer Station	Kitwanga	Kitimat Stikine
171.	Knox Mountain Metals Inc.	Kelowna	Central Okanagan
172.	KUTE Kitimat Recycling Depot	Kitimat	Kitimat Stikine
173.	Ladner Bottle Depot	Delta	Metro Vancouver
174.	Lake Country Ace Hardware #70036	Lake Country	Central Okanagan
175.	Lake Cowichan Home Hardware	Lake Cowichan	Cowichan Valley
176.	Langley Bottle Depot	Langley	Metro Vancouver
177.	Lax Kw'alaams Band	Lax Kw'alaams	North Coast
178.	Lee's Bottle Depot Ltd.	Burnaby	Metro Vancouver
179.	Lillooet Landfill	Lillooet	Squamish Lillooet
180.	London Drugs #10	Vancouver	Metro Vancouver
181.	London Drugs #11	Kelowna	Central Okanagan
182.	London Drugs #11	Richmond	Metro Vancouver
183.	London Drugs #14	Victoria	Capital Regional District
184.	London Drugs #15	Coquitlam	Metro Vancouver
185.	London Drugs #16 - Abbotsford	Abbotsford	Fraser Valley
186.	London Drugs #17	Delta	Metro Vancouver
187.	London Drugs #18	Langley	Metro Vancouver
188.	London Drugs #19	Vancouver	Metro Vancouver
189.	London Drugs #2	Vancouver	Metro Vancouver
190.	London Drugs #25	Burnaby	Metro Vancouver
191.	London Drugs #28	Vancouver	Metro Vancouver
192.	London Drugs #29	Victoria	Capital Regional District

	Depot Name	City	Regional District
193.	London Drugs #3	New Westminster	Metro Vancouver
194.	London Drugs #35	Kamloops	Thompson Nicola
195.	London Drugs #36 Nanaimo	Nanaimo	Nanaimo Regional District
196.	London Drugs #37	Delta	Metro Vancouver
197.	London Drugs #39	Vernon	North Okanagan
198.	London Drugs #4	Vancouver	Metro Vancouver
199.	London Drugs #41	Chilliwack	Fraser Valley
200.	London Drugs #42	White Rock	Metro Vancouver
201.	London Drugs #44	West Vancouver	Metro Vancouver
202.	London Drugs #46 Sooke Road	Victoria	Capital Regional District
203.	London Drugs #47	Maple Ridge	Metro Vancouver
204.	London Drugs #5	North Vancouver	Metro Vancouver
205.	London Drugs #50	Vancouver	Metro Vancouver
206.	London Drugs #51	Prince George	Fraser Fort George
207.	London Drugs #52	Richmond	Metro Vancouver
208.	London Drugs #53	Vancouver	Metro Vancouver
209.	London Drugs #54	Victoria	Capital Regional District
210.	London Drugs #55	Mission	Fraser Valley
211.	London Drugs #56	Burnaby	Metro Vancouver
212.	London Drugs #6	Burnaby	Metro Vancouver
213.	London Drugs #61	Gibsons	Sunshine Coast
214.	London Drugs #67	Courtenay	Comox Valley
215.	London Drugs #7	Vancouver	Metro Vancouver
216.	London Drugs #70	Penticton	Okanagan Similkameen
217.	London Drugs #71	Burnaby	Metro Vancouver
218.	London Drugs #72	Nanaimo	Nanaimo Regional District
219.	London Drugs #73	Campbell River	Strathcona
220.	London Drugs #74	Vancouver	Metro Vancouver
221.	London Drugs #75	Surrey	Metro Vancouver
222.	London Drugs #76	Westbank	Central Okanagan
223.	London Drugs #77	Duncan	Cowichan Valley
224.	London Drugs #78	Vancouver	Metro Vancouver
225.	London Drugs #8	Surrey	Metro Vancouver
226.	London Drugs #80	Squamish	Squamish Lillooet
227.	London Drugs #81	Surrey	Metro Vancouver
228.	London Drugs #82 Olympic Village	Vancouver	Metro Vancouver
229.	London Drugs #85 – Mt Leehman Rd	Abbotsford	Fraser Valley
230.	London Drugs #88 – Dunbar	Vancouver	Metro Vancouver
231.	London Drugs #9	Surrey	Metro Vancouver

	Depot Name	City	Regional District
232.	Lone Butte Supply Ltd.	100 Mile House	Cariboo
233.	Lorne Street Bottle Depot	Kamloops	Thompson Nicola
234.	Lougheed Return-It Depot	Coquitlam	Metro Vancouver
235.	Louis Creek Eco-Depot - TNRD	Louis Creek	Thompson Nicola
236.	Lower Nicola Eco-Depot - TNRD	Merritt	Thompson Nicola
237.	Lowes - Langford # 3702	Victoria	Capital Regional District
238.	Lowe's Abbotsford (#3322) - 82050	Abbotsford	Fraser Valley
239.	Lowe's Nanaimo (#3323) 82049	Nanaimo	Nanaimo Regional District
240.	Lowe's Prince George (#3326) 82051	Prince George	Fraser Fort George
241.	Lowe's Queensborough (#3056) 82045	New Westminster	Metro Vancouver
242.	Lowe's Victoria (#3330)	Victoria	Capital Regional District
243.	Mac's Traders Inc. (MTI)	Langley	Metro Vancouver
244.	MAKE/DO	Creston	Central Kootenay
245.	Maple Ridge Bottle Depot	Maple Ridge	Metro Vancouver
246.	Maple Ridge Lighting	Maple Ridge	Metro Vancouver
247.	Mayne Island Building Center	Mayne Island	Capital Regional District
248.	Mayne Island Recycling Society	Mayne Island	Capital Regional District
249.	McMynn's Ace Building Centre #70025	Midway	Kootenay Boundary
250.	Meade Creek Recycling Centre	Lake Cowichan	Cowichan Valley
251.	Merritt Return-It Depot	Merritt	Thompson Nicola
252.	Metrotown Bottle Return-It Center	Burnaby	Metro Vancouver
253.	Mission Flats Landfill	Kamloops	Thompson Nicola
254.	Mission Recycling Centre & Bottle Depot	Mission	Fraser Valley
255.	Mission Recycling Depot	Mission	Fraser Valley
256.	Mount Pleasant Return-It	Vancouver	Metro Vancouver
257.	Mountain High Lighting	Castlegar	Central Kootenay
258.	Nelson Home Hardware Building Centre	Nelson	Central Kootenay
259.	Nelson Leafs Recycling Centre	Nelson	Central Kootenay
260.	New & Nearly New	Kimberley	East Kootenay
261.	New Westminster Recycle Depot	New Westminster	Metro Vancouver
262.	Newton Bottle Depot	Surrey	Metro Vancouver
263.	North Shore Bottle Depot	North Vancouver	Metro Vancouver
264.	North Shore Transfer Stn (Emterra Environmental)	North Vancouver	Metro Vancouver
265.	North Vancouver Bottle & Return-It Depot	North Vancouver	Metro Vancouver
266.	Oak Bay Home Hardware	Victoria	Capital Regional District
267.	OK Bottle Depot	Richmond	Metro Vancouver
268.	Okanagan Falls Landfill	Okanagan Falls	Okanagan Similkameen

	Depot Name	City	Regional District
269.	Oliver Sanitary Landfill	Oliver	Okanagan Similkameen
270.	Osoyoos Bottle Depot	Osoyoos	Okanagan Similkameen
271.	Osoyoos Home Hardware	Osoyoos	Okanagan Similkameen
272.	Panorama Village Return-It	Surrey	Metro Vancouver
273.	Parksville Bottle & Recycling Depot	Parksville	Nanaimo Regional District
274.	Parksville Home Building Center, Central Builders	Parksville	Nanaimo Regional District
275.	Parksville Home Hardware	Parksville	Nanaimo Regional District
276.	Parsons Scrap Metals	Surrey	Metro Vancouver
277.	Pearson's Home Hardware	North Vancouver	Metro Vancouver
278.	Peerless Road Recycling Centre	Ladysmith	Cowichan Valley
279.	Pemberton Recycling Centre	Pemberton	Squamish Lillooet
280.	Pender Island Recycling Society	Pender Island	Capital Regional District
281.	PG Recycling	Prince George	Fraser Fort George
282.	Pitt Meadows Bottle & Return-It Depot	Pitt Meadows	Metro Vancouver
283.	Planet Earth Recycling	Westbank	Central Okanagan
284.	Port McNeil Recycling Depot	Port McNeill	Mt. Waddington
285.	Powell Street Return-it Bottle Depot	Vancouver	Metro Vancouver
286.	Powerhouse Recycled Auto & Truck Parts Ltd.	Cumberland	Comox Valley
287.	Princeton Return-It Depot	Princeton	Okanagan Similkameen
288.	Puds Auto Wrecking & Towing	Osoyoos	Okanagan Similkameen
289.	Quality Glass Ltd.	Ashcroft	Thompson Nicola
290.	Queensborough Landing Return-It	New Westminster	Metro Vancouver
291.	R&T Bottle Depot	Abbotsford	Fraser Valley
292.	R3 Recycle-It Resource Recovery	Fort St John	Peace River
293.	reFUSE Resource Recovery	Victoria	Capital Regional District
294.	Regional Recycling Abbotsford	Abbotsford	Fraser Valley
295.	Regional Recycling Burnaby	Burnaby	Metro Vancouver
296.	Regional Recycling Cloverdale	Surrey	Metro Vancouver
297.	Regional Recycling Nanaimo - Hayes	Nanaimo	Nanaimo Regional District
298.	Regional Recycling Nanaimo - Old Vic	Nanaimo	Nanaimo Regional District
299.	Regional Recycling Prince Rupert	Prince Rupert	North Coast
300.	Regional Recycling Richmond	Richmond	Metro Vancouver
301.	Regional Recycling Vancouver	Vancouver	Metro Vancouver
302.	Regional Recycling Whistler	Whistler	Squamish Lillooet
303.	Revelstoke Bottle Depot	Revelstoke	Columbia Shuswap
304.	Richmond Recycling Depot	Richmond	Metro Vancouver
305.	Ridge Meadows Recycling	Maple Ridge	Metro Vancouver
306.	Rona (Lowes) Vancouver (#61760) 83004	Vancouver	Metro Vancouver

	Depot Name	City	Regional District
307.	Rona Abbotsford #61220	Abbotsford	Fraser Valley
308.	Rona Alert Bay #01215	Alert Bay	Mt. Waddington
309.	Rona Burnaby #61270	Burnaby	Metro Vancouver
310.	Rona Chilliwack #61390	Chilliwack	Fraser Valley
311.	Rona Clearwater #06410	Clearwater	Thompson Nicola
312.	Rona Cobble Hill #61040	Cobble Hill	Cowichan Valley
313.	Rona Coquitlam #61260	Coquitlam	Metro Vancouver
314.	Rona Coquitlam #61290	Coquitlam	Metro Vancouver
315.	Rona Fraser Valley Mission #08470	Mission	Fraser Valley
316.	Rona Golden #61830	Golden	Columbia Shuswap
317.	Rona Hope (#61350) 08530	Hope	Fraser Valley
318.	Rona Kamloops #61310	Kamloops	Thompson Nicola
319.	Rona Kelowna #61700	Kelowna	Central Okanagan
320.	Rona Langley #61810	Langley	Metro Vancouver
321.	Rona Madeira Park #09551 (#61420)	Madeira Park	Sunshine Coast
322.	Rona Maple Ridge #61190	Maple Ridge	Metro Vancouver
323.	Rona Nanaimo #61030	Nanaimo	Nanaimo Regional District
324.	Rona North Vancouver #08140	North Vancouver	Metro Vancouver
325.	Rona North Vancouver #61740	North Vancouver	Metro Vancouver
326.	Rona Pemberton Valley Hardware #08522	Pemberton	Squamish Lillooet
327.	Rona Penticton #61490	Penticton	Okanagan Similkameen
328.	Rona Port McNeil #01195	Port McNeil	Mt. Waddington
329.	Rona Powell River #02791	Powell River	qathet
330.	Rona Quesnel #61320	Quesnel	Cariboo
331.	Rona Richmond #08040	Richmond	Metro Vancouver
332.	Rona Salmon Arm #06175 (#613302430)	Salmon Arm	Columbia Shuswap
333.	Rona Squamish #61450	Squamish	Squamish Lillooet
334.	Rona Surrey #61240 South Surrey	Surrey	Metro Vancouver
335.	Rona Surrey #61720 (Fleetwood)	Surrey	Metro Vancouver
336.	Rona Surrey Newton #61250	Surrey	Metro Vancouver
337.	Rona Tsawwassen Commons #8880	Tsawwassen	Metro Vancouver
338.	Rona Vernon #61300	Vernon	North Okanagan
339.	Rona Whistler #61460	Whistler	Squamish Lillooet
340.	Rona Williams Lake #61340	Williams Lake	Cariboo
341.	Ross Bay Home Hardware	Victoria	Capital Regional District
342.	Rypac Metal Recycling	Surrey	Metro Vancouver
343.	Salish Soils Inc	Sechelt	Sunshine Coast
344.	Salt Spring Island Recycling Depot	Salt Spring Island	Capital Regional District
345.	Salvation Army - Brentwood Thrift Store	Brentwood	Capital Regional District

	Depot Name	City	Regional District
346.	Salvation Army – E 12th Ave Thrift Store	Vancouver	Metro Vancouver
347.	Salvation Army – Hillside Thrift Store	Victoria	Capital Regional District
348.	Salvation Army – Langley Thrift Store	Langley	Metro Vancouver
349.	Salvation Army – Mill Bay Thrift Store	Mill Bay	Cowichan Valley
350.	Salvation Army – North Vancouver Thrift Store	North Vancouver	Metro Vancouver
351.	Salvation Army – Port Coquitlam Thrift Store	Port Coquitlam	Metro Vancouver
352.	Salvation Army – Prince George	Prince George	Fraser Fort George
353.	Salvation Army – View Royal Thrift Store	View Royal	Capital Regional District
354.	Sandy's Auto Parts Ltd	Langford	Capital Regional District
355.	Sapperton Return-It Depot	New Westminster	Metro Vancouver
356.	Sardis Bottle Depot	Chilliwack	Fraser Valley
357.	Schnitzer Steel Pacific Inc – Campbell River	Campbell River	Strathcona
358.	Schnitzer Steel Pacific Inc. – Cassidy	Cassidy	Nanaimo Regional District
359.	Schnitzer Steel Pacific Inc. – Victoria	Victoria	Capital Regional District
360.	Scotch Creek Bottle Depot	Scotch Creek	Columbia Shuswap
361.	Scotch Creek Home Building Center	Scotch Creek	Columbia Shuswap
362.	Scott Road Bottle Depot	Surrey	Metro Vancouver
363.	Scrap King Autowrecking & Towing Ltd.	Salmo	Central Kootenay
364.	Semiahmoo Bottle Depot	Surrey	Metro Vancouver
365.	Shearwater Marine Ltd	Denny Island	Central Coast
366.	Shepherds Home Hardware	Armstrong	North Okanagan
367.	Simpson Home Hardware	West Vancouver	Metro Vancouver
368.	Skyway Distributors Ltd	Cranbrook	East Kootenay
369.	SM Lighting and Bath Design (Save More)	Surrey	Metro Vancouver
370.	Smithers Home Hardware	Smithers	Bulkley Nechako
371.	Smithers Lumber Yard Ltd	Smithers	Bulkley Nechako
372.	Smokey Creek Salvage Ltd.	South Slocan	Central Kootenay
373.	Sointula (Malcolm Island) Recycling Depot	Sointula	Mt. Waddington
374.	Sooke Home Hardware	Sooke	Capital Regional District
375.	South Thompson Recycling – TNRD	Pritchard	Thompson Nicola
376.	South Van Bottle Depot	Vancouver	Metro Vancouver
377.	Stewart Transfer Station – RDKS	Stewart	Kitimat Stikine
378.	Summerland Landfill	Summerland	Central Okanagan
379.	Sun Coast Waste Eco-Depot	Port Alberni	Alberni Clayoquot
380.	Sun Dial Lighting Vernon	Vernon	North Okanagan
381.	Sunset Coast Bottle Depot	Powell River	qathet
382.	Surrey Central Return-It	Surrey	Metro Vancouver

	Depot Name	City	Regional District
383.	Surrey Transfer Station - Emterra Environmental	Surrey	Metro Vancouver
384.	T-2 Market Bottle Depot	Oliver	Okanagan Similkameen
385.	Terrace Bottle Depot	Terrace	Kitimat Stikine
386.	The Battery Doctors	Kelowna	Central Okanagan
387.	The Lampost	Kamloops	Thompson Nicola
388.	The Re-Use-It Centre Whistler	Whistler	Squamish Lillooet
389.	Thompson-Nicola Regional District - 660 M.F.Rd	Kamloops	Thompson Nicola
390.	Thorsen Creek Recycling Depot (CCRD) - COM	Bella Coola	Central Coast
391.	Tofino Co-op Hardware	Tofino	Alberni Clayoquot
392.	Trail Bay Hardware #51784	Sechelt	Sunshine Coast
393.	Trail Bottle Depot	Trail	Kootenay Boundary
394.	Tri Port Recycling (Port Hardy Return-It)	Port Hardy	Mt. Waddington
395.	Tsal'alh Eco-Depot (Seton Lake)	Shalalth	Squamish Lillooet
396.	Tsawwassen Home Building Centre	Delta	Metro Vancouver
397.	Tsawwassen Return-It Centre - D&G	Delta	Metro Vancouver
398.	Ucluelet Bottle Depot	Ucluelet	Alberni Clayoquot
399.	Unadvertised	Kelowna	Central Okanagan
400.	Unadvertised	Langford	Capital Regional District
401.	Unadvertised	Maple Ridge	Metro Vancouver
402.	Unadvertised	Nanaimo	Nanaimo Regional District
403.	Unadvertised	Saanich	Capital Regional District
404.	Unadvertised	Surrey	Metro Vancouver
405.	Unadvertised	Vancouver	Metro Vancouver
406.	Unadvertised	Victoria	Capital Regional District
407.	Unadvertised	Delta	Metro Vancouver
408.	Unadvertised	Victoria	Capital Regional District
409.	Unadvertised	North Vancouver	Metro Vancouver
410.	Unadvertised	Surrey	Metro Vancouver
411.	Unadvertised	Abbotsford	Fraser Valley
412.	Unadvertised	Richmond	Metro Vancouver
413.	Unadvertised	Burnaby	Metro Vancouver
414.	Unadvertised	Vancouver	Metro Vancouver
415.	Unadvertised	Surrey	Metro Vancouver
416.	Unadvertised	Victoria	Capital Regional District
417.	Unadvertised	Langley	Metro Vancouver
418.	Unadvertised	Maple Ridge	Metro Vancouver
419.	Unadvertised	Coquitlam	Metro Vancouver
420.	Unadvertised	Winlaw	Central Kootenay

	Depot Name	City	Regional District
421.	Unadvertised	Burnaby	Metro Vancouver
422.	Unadvertised	Burnaby	Metro Vancouver
423.	Unadvertised	Dawson Creek	Peace River
424.	Unadvertised	Fort St John	Peace River
425.	Unadvertised	Coquitlam	Metro Vancouver
426.	Urban Impact Recycling	Richmond	Metro Vancouver
427.	Valemount Recycling Centre	Valemount	Fraser Fort George
428.	Vancouver Central Return-It Depot	Vancouver	Metro Vancouver
429.	Vancouver Landfill (Delta)	Delta	Metro Vancouver
430.	Vancouver West Bottle Depot	Vancouver	Metro Vancouver
431.	Vancouver Zero Waste Centre	Vancouver	Metro Vancouver
432.	Venture Bottle Depot Lumby	Lumby	North Okanagan
433.	Venture Training Vernon	Vernon	North Okanagan
434.	Village of Gold River	Gold River	Strathcona
435.	Village of New Denver	New Denver	Central Kootenay
436.	Walnut Grove Bottle Depot	Langley	Metro Vancouver
437.	Wastech - Abbotsford Transfer Stn	Abbotsford	Fraser Valley
438.	Wells Gray Home Hardware	Clearwater	Thompson Nicola
439.	West Coast Metal Recycling LLP	Langley	Metro Vancouver
440.	Westbank Home Hardware 5153-0	Westbank	Central Okanagan
441.	West-Can Home Hardware	Burnaby	Metro Vancouver
442.	Westcoast Hardware	Port Alberni	Alberni Clayoquot
443.	Whistler Home Hardware	Whistler	Squamish Lillooet
444.	White Rock Return-It Depot Ltd	Surrey	Metro Vancouver
445.	Wide Sky Disposal	Fort Nelson	Northern Rockies
446.	Willow Point Bottle Depot	Campbell River	Strathcona
447.	Willowbrook Recycling Depot	Langley	Metro Vancouver
448.	Winfield Return It Centre	Lake Country	Central Okanagan
449.	Woss Recycling Depot	Woss	Mt. Waddington

Appendix C – Audited Financial Statement

PRODUCT CARE ASSOCIATION OF CANADA
BC LAMPS AND LIGHTING EQUIPMENT PROGRAM

STATEMENT OF REVENUES AND EXPENSES

31 DECEMBER 2019

PRODUCT CARE ASSOCIATION OF CANADA
BC LAMPS AND LIGHTING EQUIPMENT PROGRAM
Statement of Revenues and Expenses
For the year ended 31 December 2019

Contents

INDEPENDENT AUDITORS' REPORT

To: BC Ministry of Environment,

Report on the Audit of the Statement of Revenues and Expenses

Opinion

As required the British Columbia Environmental Management Act, Recycling Regulation 8(2)(f)(ii), we have audited the Statement of Revenues and Expenses of the BC Lamps and Lighting Equipment Program (the "Statement") as reported by Product Care Association of Canada (the "Association") for the year ended 31 December 2019 and a summary of significant accounting policies and other explanatory information.

In our opinion, the Statement presents fairly, in all material respects, the revenues and expenses of the BC Lamps and Lighting Equipment Program for the year ended 31 December 2019 in accordance with Canadian accounting standards for not-for-profit organizations.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditors' Responsibilities section of our report. We are independent of the Association in accordance with the ethical requirements that are relevant to our audit of the Statement in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Matter - Restriction on Distribution and Use

This report is prepared on the direction of Product Care Association of Canada's management and the BC Ministry of Environment. As a result, the report may not be suitable for another purpose. Our report is intended solely for Product Care Association of Canada's management and the BC Ministry of Environment and should not be distributed to other parties.

Responsibilities of Management and Those Charged with Governance for the Statement

Management is responsible for the preparation and fair presentation of the Statement in accordance with Canadian accounting standards for not-for-profit organizations and for such internal control as management determines is necessary to enable the preparation of Statement that is free from material misstatement, whether due to fraud or error.

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INDEPENDENT AUDITORS' REPORT - continued

In preparing the Statement, management is responsible for assessing the Association's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Association or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Association's financial reporting process.

Auditors' Responsibilities

Our objectives are to obtain reasonable assurance about whether the Statement as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this Statement.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Statement, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Association's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Association's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the Statement or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Association to cease to continue as a going concern.

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INDEPENDENT AUDITORS' REPORT - continued

- Evaluate the overall presentation, structure and content of the Statement, including the disclosures, and whether the Statement represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Rolfe, Benson LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

Vancouver, Canada
14 April 2020

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PRODUCT CARE ASSOCIATION OF CANADA
BC LAMPS AND LIGHTING EQUIPMENT PROGRAM
Statement of Revenues and Expenses
For the year ended 31 December 2019

		2019		2018
Revenues	$	**5,476,221**	$	5,561,327
Program expenses				
Processing		**3,103,070**		3,106,490
Collection		**691,079**		691,154
Administration (Note 2(c))		**463,055**		485,806
Transportation		**329,414**		309,723
Communications		**192,465**		64,325
		4,779,083		4,657,498
Excess of revenues over expenses for the year	$	**697,138**	$	903,829

Fund transfer - allocation of interim program costs (Note 3)

The accompanying notes are an integral part of this statement of revenues and expenses.

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PRODUCT CARE ASSOCIATION OF CANADA
BC LAMPS AND LIGHTING EQUIPMENT PROGRAM
Notes to the Statement of Revenues and Expenses
For the year ended 31 December 2019

1.   **Basis of Presentation**

The Statement of Revenues and Expenses (the "Statement") only includes the revenues and expenses of the BC Lamps and Lighting Equipment Program (the "Program"), a segment of the operations of Product Care Association of Canada (the "Association").

2.   **Summary of Significant Accounting Policies**

The Statement is prepared in accordance with Canadian accounting standards for not-for-profit organizations. The significant policies are detailed as follows:

(a)   Revenue Recognition

Environmental Handling Fees are received from members of the BC Lamps and Lighting Equipment Program. The Association recognizes these fees as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured. Environmental Handling Fees revenues are recognized as individual members report and remit them as required by the Association's membership agreement which is at the end of the month following the reporting period that the designated program materials were sold by the member.

Members are obligated to remit Environmental Handling Fees for all products sold from earlier of the programs' start date or the date when member started selling obligated products. If, for any reason, a member omits reporting and remitting Environmental Handling Fees associated with sold program products, the Association will recognize those Environmental Handling Fees as revenue when the amounts are determinable by the Association.

(b)   Use of Estimates

The preparation of financial statements in accordance with Canadian accounting standards for not-for-profit organizations requires management to make estimates and assumptions that affect the reported amounts of revenues and expenses and disclosure of contingencies included in the statement. Accounts subject to estimates include revenue accruals, expense accruals and overhead allocation. Actual results could differ from those estimates.

(c)   General and Administrative Expenses - Overhead Allocation

A portion of the total general and administrative expenses of the Association, net of expense recoveries, has been allocated to this Program. The allocation of general and administrative expenses to this Program is determined using the percentage of program specific operating expenses as compared to total operating expenses for all the Association's programs. Included in administration expense is $285,656 (2018 - $289,775) of overhead expense which has been allocated to the Program.

PRODUCT CARE ASSOCIATION OF CANADA
BC LAMPS AND LIGHTING EQUIPMENT PROGRAM
Notes to the Statement of Revenues and Expenses
For the year ended 31 December 2019

3.   **Fund Transfer - Allocation of Interim Program Costs**

During the 2015 and 2016 fiscal years at the request of the Ontario Ministry of Environment, expenses were incurred to operate an interim Light Recycling Program for a 12 month period in the Province of Ontario on behalf of the industry. These expenses were recorded as a general and administrative expenses of the Association pending the expected regulation of lighting products in Ontario. During the 2018 fiscal year, the Association's Board of Directors passed a resolution where these expenses would be allocated amongst the other Light Recycle Programs of the Association as the expected regulation to designate lighting products in Ontario had not occurred.

At that time it was determined that these costs were to be allocated over a five year period to each of the Association's Light Recycling Programs proportionally based on the 2017 operating expenses of these Programs. The total amount allocated to the BC Lamps and Lighting Equipment Program for the 5 year period was determined as $530,161. This was to be allocated as a fund transfer decreasing the accumulated surplus (deficit) of the Program in each of the 2018 to 2022 fiscal years in equal amounts. During the 2018 fiscal year, $106,032 was recorded as a fund transfer, with $424,129 remaining to be transferred in future years.

On May 9, 2019, the Ontario Ministry of Environment issued draft extended producer responsibility regulations for electrical and electronic products including lighting products. The proposed effective date of the regulation is January 1, 2021. On this basis, the Association's Board of Directors has determined that additional fund transfers from the BC Lamps and Lighting Equipment Program will not take place during the 2019 fiscal year.

PRODUCT CARE ASSOCIATION OF CANADA -
BC LAMPS AND LIGHTING EQUIPMENT STEWARDSHIP
PROGRAM

INDEPENDENT REASONABLE
ASSURANCE REPORT

31 DECEMBER 2019

INDEPENDENT REASONABLE ASSURANCE REPORT

To the Directors of
Product Care Association of Canada,

Assurance Level and Selected Information

We have been engaged by Product Care Association of Canada (the "Association") to perform a reasonable assurance engagement in respect of the following information (the "Selected Information"), detailed in Appendix 1, and also included within the Association's Annual Report for the BC Lamps and Lighting Equipment Program to the Ministry of Environment and Climate Change Strategy for the year ended 31 December 2019:

- Section 4.1 - Collection Sites and Appendix B - the location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of BC Regulation 449/2004 (the "Recycling Regulation");
- Section 6 - Pollution Prevention Hierarchy and Product/Component Management - the description of how the recovered product was managed in accordance with the pollution prevention hierarchy under Section 8(2)(d) of the Recycling Regulation;
- Section 7.2 - Products Collected - the description of how total amounts of the producer's product collected has been calculated in accordance with Section 8(2)(e) of the Recycling Regulation; and
- Section 9 - Plan Performance – the description of performance for the year in relation to targets in the approved stewardship plan under Section 8(2)(b), (d) and (e) of the Recycling Regulation.

Our reasonable assurance engagement does not constitute a legal determination on the Association's compliance with Sections 8(2)(b), (d) and (e) of the Recycling Regulation.

Responsibilities

Preparation and fair presentation of the Selected Information in accordance with the evaluation criteria as listed in Appendix 1 is the responsibility of the Association's management. Management is also responsible for such internal control as management determines is necessary to enable the preparation of the Selected Information such that it is free from material misstatement. Furthermore management is responsible for preparation of suitable evaluation criteria in accordance with the Recycling Regulation Guidance - Third Party Assurance for Non-Financial Information in Annual Reports – 2019 Reporting Year dated November 2019 as specified by the Director under section 8(2)(h) of the Recycling Regulation of the Province of British Columbia.

Our responsibility is to express an opinion on the Selected Information based on the procedures we have performed and the evidence we have obtained.

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Evaluation Criteria

The evaluation criteria presented in Appendix 1 are an integral part of the Selected Information and address the relevance, completeness, reliability, neutrality and understandability of the Selected Information.

Applicable Quality Control Requirements

We apply Canadian Standard on Quality Control 1 and, accordingly, maintain a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Scope of the Reasonable Assurance Engagement

We carried out our reasonable assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000) published by the International Federation of Accountants. This Standard requires that we comply with independence requirements and plan and perform the engagement to obtain reasonable assurance about whether the Selected Information is free of material misstatement.

A reasonable assurance engagement includes examining, on a test basis, evidence supporting the amounts and disclosures within the Selected Information. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement in the Selected Information due to omissions, misrepresentations and errors. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the Selected Information in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of the entity's internal control. A reasonable assurance engagement also includes assessing the evaluation criteria used and significant estimates made by management, as well as evaluating the overall presentation of the Selected Information. The main elements of our work were:

- Gain an understanding of the data collection, monitoring and reporting processes through inquiries of management;
- Testing the processes, documents and records on a sample basis;
- Re-calculating quantitative data on a sample basis as it pertains to the Selected Information; and
- Evaluating the presentation of the Selected Information in the Annual Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Inherent Limitations

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the Selected Information and the methods used for determining and calculating such information. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgments. Furthermore, the nature and methods used to determine such information, as well the evaluation criteria and the precision thereof, may change over time. It is important to read our report in the context of evaluation criteria.

Conclusion

In our opinion, the Selected Information within Product Care Association of Canada's Annual Report for the BC Lamps and Lighting Equipment Program for the year ended 31 December 2019 presents fairly, in all material respects, in accordance with the evaluation criteria listed in Appendix 1:

- The location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of the Recycling Regulation;
- The description of how the recovered product was managed in accordance with the pollution prevention hierarchy under Section 8(2)(d) of the Recycling Regulation;
- The description of how total amounts of the producer's product collected has been calculated in accordance with Section 8(2)(e) of the Recycling Regulation; and
- The description of performance for the year in relation to targets in the approved stewardship plan under Section 8(2)(b), (d) and (e) of the Recycling Regulation.

Emphasis of Matter

Without qualifying our opinion, the following should be noted regarding the information in the Annual Report:

1. The Association does not present a recovery rate in the Annual Report. As such, the total amount of producer's products sold as presented on Table 13 - Units Reported Sold by Product Category in 2019 of the Annual Report has not been included in the Selected Information in accordance with the Recycling Regulation Guidance - Third Party Assurance for Non-Financial Information in Annual Reports – 2019 Reporting Year dated November 2019 as issued by the British Columbia Ministry of Environment and Climate Change Strategy.

Other Matter

Our report has been prepared solely for the purposes of management's stewardship under the Recycling Regulation and is not intended to be and should not be used for any other purpose. Our duties in relation to this report are owed solely to the Association, and accordingly, we do not accept any responsibility for loss occasioned to any other party acting or refraining from acting based on this report.

Rolfe, Benson LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

Vancouver, Canada
26 June 2020

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Appendix 1

Evaluation Criteria

Collection facilities

Specific disclosures in the annual stewardship report from Section 4.1 - Collection Sites and Appendix B - List of Contracted Collection Sites as of December 31ˢᵗ 2019 for which evaluation criteria were developed	
Disclosure per Annual Report	**Reference**
Total number of collection facilities - 449	Appendix B - List of Contracted Collection Sites as of December 31ˢᵗ 2019
"A collection site is a physical location where consumers can drop off Program Products at no charge. Collection sites can offer one or more collection services based on various factors. Services offered by collection sites are generally advertised to the public. In some cases, collection sites are not advertised where the location does not collect from the general public. Product Care enters into separate contracts with collection sites for each collection service offered and as a result, there is no one-to-one relationship between the number of sites and the number of services offered."	
"The Program's collection system included 449 contracted collection sites, with 14 advertised sites added in 2019 and seven (7) advertised sites removed, representing a net increase of seven (7) sites from 2018."	

The following evaluation criteria were applied to the assessment of the location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of the Recycling Regulation:

- "Collection facilities" are depots that have a signed contract with the Association for the collection of program materials during the reporting period: 1 January – 31 December 2019, a physical location that is available to collect program materials, and the staff of the facility has an adequate understanding of the program.
- The Association maintains a listing of all collection facilities for the program, including the location of the collection facility, the total of which agrees to the number of collection facilities as disclosed in the Annual Report.
- Large volume generators (LVG's) and collection events are excluded from the number of collection facilities.
- The change in number of collection facilities is calculated by comparing the current number of collection facilities, a sum of all the collection facilities that have a signed contract within a given reporting year and those that closed within the same reporting year, to the number of collection facilities reported in the prior reporting year.

Pollution Prevention Hierarchy

Specific disclosures in the annual stewardship report from Section 6 - Pollution Prevention Hierarchy and Product/Component Management for which evaluation criteria were developed	
Disclosure per Annual Report	**Reference**
"After collection, Program Products are transported to the Program's primary processors. These processors include one for processing whole lamps, two for fixtures, one for crushed lamps and one for PCB containing ballasts. At the processors, Program Products are broken down into their respective component materials and either processed on site or sent to a downstream processor for further processing. Information about how material was managed by the Program's primary processors was based on information provided to Product Care by the Program's primary processors."	
Material: Lamps Sub-Component: Phosphor Powder contaminated with Mercury End fate: Securely landfilled Sub-Component: Mercury End fate: Securely landfilled Sub-Component: Metal End fate: Recycled - metal commodity Sub-Component: Glass End fate: Recycled as sand blasting material	Table 12: Material Treatments
Material: Crushed Lamps Sub-Component: Metal End fate: Same as whole lamps Sub-Component: Glass End fate: Recycled as aggregate in concrete Sub-Component: Mercury and Phosphor Powder End fate: Same as whole lamps	Table 12: Material Treatments
Material: Residential Fixtures "Residential fixtures contain materials similar to small appliances (e.g., metal, glass, plastics, etc.). As a result, the Program partnered with the Canadian Electrical Stewardship Association's (CESA) program (ElectroRecycle) to collect residential fixtures along with small appliances and power tools at CESA-contracted collection sites. They were shipped to two independent processors where they were comingled with other electronics and broken down into their respective components to be recycled and/or recovered."	
Sub-Component: Ferrous Steel End fate: Recycled – Production, Processing, Non-processing Sub-Component: Plastics End fate: Recycled – Processing, Non-processing Sub-Component: Aluminum End fate: Recycled – Production, Processing, Non-processing	Table 12: Material Treatments

Sub-Component: Wire and Cables and String lights End fate: Recycled – Refining, Non-processing Sub-Component: Copper End fate: Recycled – Processing, Refining Sub-Component: Glass End fate: Recycled – Non-processing Sub-Component: Circuit Boards End fate: Recycled – Refining Sub-Component: Rechargeable and Non Rechargeable Batteries End fate: Recycled – Processing, Non-processing,	
Material: Commercial Fixtures and Non-PCB Ballasts "Commercial fixtures and non-PCB ballasts were collected and managed outside the Program through the existing market-driven scrap metal recycling system. A description of this recycling system provided by a Canadian Association of Recycling Industries (CARI) spokesman explains that the collected materials are sent to a downstream scrap metal recycling processor, where the main materials recovered are metals. According to industry representatives, all metal is extracted and recycled and the remaining shredder residue is sent to landfill for use as landfill cover. Since it is a market-driven system, the Program has no ability to verify or report on the volume and portion of the material recycled and or disposed of through this system."	
Sub-Component: NA End fate: Managed through the existing scrap metal recycling system	Table 12: Material Treatments
Material: PCB Ballasts "PCBs are strictly regulated from transportation to disposal by the BC Ministry of Environment and Climate Change Strategy, Environment Canada, and Transport Canada. The Program contracted with a hazardous waste management company to collect, transport and manage PCB containing ballasts. Through the hazardous waste management company, the PCB ballasts were incinerated at high temperature in a PCB licensed incinerator."	
Sub-Component: NA End fate: Incineration	Table 12: Material Treatments

The following evaluation criteria were applied to the assessment of how the recovered product is managed in accordance with the pollution prevention hierarchy in accordance with Section 8(2)(d) of the Recycling Regulation:

- The Association maintains a listing of all products shipped to the primary processor which is supported by shipping documents or processor invoices.
- The primary processor provides an invoice indicating the amount of product processed and in some cases a certificate of processing/reclamation.
- The primary processor provides information on product management in an annual questionnaire or an annual report to the Association. Questionnaire responses were received from all processors used by the program (excluding the processors of residential fixtures).
- The primary processors for residential fixtures have been approved by the Recycler Qualification Office ("RQO") and the final disposition reported in the Annual Report agrees to the audit report issued by the RQO.

- Shipments of hazardous waste generated from the processing of lamps flow through a multi-step processing environment. Shipments to the primary processor are supported by a bill of lading that does not include information on the expected disposition of these products by the secondary processor. Shipments from the primary processor to the secondary processor are supported by the applicable government manifest which includes co-mingled materials from other sources and information on the expected disposition as completed by the consignee after receiving the shipment.
- Shipments of hazardous waste generated from crushed lamps and PCB ballasts are tracked on a hazardous waste manifest indicating the expected disposition.
- The Association performs periodic site inspections of the processors' facilities (excluding the processors of residential fixtures). Site inspection criteria have been developed to confirm the responses in the questionnaire provided by these primary processors. Site inspections are to be performed on a rotating 3 year schedule.

Product collected

Specific disclosures in the annual stewardship report from Section 7.2 - Products Collected for which evaluation criteria were developed	
Disclosure per Annual Report	**Reference**
"Collection quantities for the different Program Products are based on annual processor reports and/or estimated based on quantities processed by the Program's processors between January 1 and December 31, 2019, as reported by the Program's processors. The reported quantities may include Program Products received in the 2018 fiscal year, but processed in the 2019 fiscal year and may exclude units collected in the 2019 fiscal year that were not processed as of December 31, 2019."	
Product collected Whole Lamps – 7,241,776 units Residential Fixtures – 722 tonnes PCB Containing Ballasts – 7,351 kg Crushed Lamps – 9,617 kg	Table 14: Estimated Quantity of Products Collected in 2019
"Residential light fixtures are collected together with CESA products. The Program and CESA use a sampling protocol to determine the proportion of CESA products and lighting fixtures. The Program utilizes the sampling results to approximate the tonnage of residential light fixtures."	
Product Collected – Lamps Fluorescent Tubes (All sizes and shapes) – 2,859,979 units Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps – 1,254,566 units Light Emitting Diodes (LED) – 252,885 units High Intensity Discharge (HID) and Other – 195,671 units Incandescent / Halogen – 2,678,675 units	Table 15: Whole Lamp Units Collected by Product Category

"This number (fluorescent tubes) includes 0-2', 2-4', 4-8', and U and O shaped tubes and Poly-coated tubes. Poly-coated tubes are reported from the processor in length of feet. The length is then divided by 4 and rounded to nearest whole number to obtain reported units."

"This number (high intensity discharge and other) includes Sodium lamps, HPS lamps (High Pressure Sodium), Metal Halide lamps, Mercury Vapour lamps, Induction tubes, UVC lamps and tubes, and Neon tubes. Neon tubes are reported from the processor in length of feet. The length is then divided by 4 and rounded to nearest whole number to obtain reported units."

"This number (incandescent / halogen) includes projector bulbs and miniature bulbs."

The following evaluation criteria were applied to the assessment of the description of how total amounts of the producer's product collected has been calculated in accordance with Section 8(2)(e) of the Recycling Regulation:

Product Collected
- The Association maintains a listing of product collected by product category for the fiscal year which agrees to the amounts disclosed in the Annual Report.
- Each shipment of product collected is supported by documentation provided by the processor which indicates the total units collected and the type of program materials collected.
- Residential fixtures are co-mingled with other end of life electronic materials during collection. The processors perform periodic sampling activities to determine the estimated percentage of program materials belonging to the program. The weights of residential fixtures related to the program are calculated by multiplying the total weight of co-mingled materials by the estimated percentage of LightRecycle program materials.

Performance targets

Specific disclosures in the annual stewardship report from Section 9 - Plan Performance for which evaluation criteria were developed

No targets relating to Section 8(2)(b), (d) and (e) of the Recycling Regulation were presented in the 2019 Annual Report.

The following evaluation criteria were applied to the assessment of the description of performance for the year in relation to targets in the approved stewardship plan under Section 8(2)(b), (d) and (e) of the Recycling Regulation:

- All stewardship plan targets relating to Section 8(2)(b), (d) and (e) of the Recycling Regulation have been identified and reported on by management in the Annual Report.
- The description of progress against targets to date is supported by records of progress maintained by the Association.