Product Care Association of Canada
BC Lamps and Lighting Equipment Stewardship Program (LightRecycle) 2015 Annual Report

Submitted to:

Director, Extended Producer Responsibility Programs

Ministry of Environment

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1   Executive Summary

This annual report has been prepared by Product Care Association of Canada ("PCA") based on the requirements set in the BC Lamps and Lighting Equipment Stewardship Plan dated March 9, 2012 and approved by the BC Ministry of Environment on April 23, 2012 ("Program Plan"), and pursuant to the requirements of the Recycling Regulation B.C. Reg. 449/2004 ("Regulation").

From July 1, 2010 to July 1, 2012, PCA's British Columbia LightRecycle Program ("Program") included residential-use fluorescent lamps only. On July 1, 2012, the Program expanded to include "all electronic or electrical lighting equipment, parts and bulbs" used in residential and non-residential applications, pursuant to the requirements of the Regulation. [1] This report covers the period of January 1 to December 31, 2015.

Lamps, lighting fixtures and ballasts used in residential and non-residential applications are covered under PCA's Program Plan. These products 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) 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 fixtures)
Program Website	The BC LightRecycle website is www.lightrecycle.ca

A complete list of products accepted and not accepted by the Program is available in the Program's Product Guide on the LightRecycle website: http://www.lightrecycle.ca/member-and-seller-support-centre/member-resources/.

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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 2015 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	• Paid Advertising, Media & Partnerships • Community Events & Collateral • Point of Sale and Point of Return Materials • Company and Program Website • PCA Toll-free Number and RCBC Hotline & Recyclepedia • Consumer Awareness Study: 49% Program Awareness
Part 2, section 8(2)(b)	Collection System and Facilities	The Program's collection system had 439 collection sites. Additional collection services included: • Direct pickup service for PCB containing ballast • Direct pickup service for Large Volume Generators of lamps and pre-crushed lamps • 16 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.

Part 2, section 8(2)(d)	Pollution Prevention Hierarchy and Product / Component Management	• Lamps were broken down into component parts (glass, metal, mercury, phosphor powder) and recovered/recycled:
		  - Glass was used in manufacturing processes and/or used as cullet
		  - Metal was recycled and used in manufacturing processes
		  - Mercury was recovered, and reused in manufacturing processes
		  - Phosphor powder went through a retort process to retrieve available mercury and the remaining powder was landfilled
		• 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 ballasts were collected and managed as hazardous waste and sent for incineration at licensed/permitted facilities

Regulation Provision	Topic	Summary
Part 2, section 8(2)(e)	Product Sold and Collected and Recovery Rate	- Program members reported selling 33,474,779 units of program products - In 2015, the program collected an estimated: - 5,322,452 units of lamps - 395 tonnes of fixtures from residential collection sites - 26,544 kilograms of PCB ballasts - 14,193 kilograms of crushed lamps
Part 2, section 8(2)(e.1)		See Table 10 for estimated collection volumes by Regional Districts
Part 2, section 8(2)(f)	Summary of Revenues and Expenses	- The Program is funded by members based on fees applied to the sale of new program products sold in or into British Columbia - An independent financial audit for the reporting period is appended to the report (Appendix C)

Table 3: 2015 Key Performance Targets

2015 Key Performance Targets			
Regulation, Part 2 section 8(2)(g)			
2015 Priority Stewardship Plan Targets		2015 Performance	Strategies for Improvement
Capture Rate: Fluorescent Tubes	Target: 28-50%	42%	N/A
Capture Rate: CFLs	Target: 32-50%	112%	N/A
HID, UV, Neon lamps (Units)	147,625	191,440	N/A
Residential Fixtures (tonnes)[2]	186 - 200	395 tonnes	N/A
Consumer Awareness	50%	49%	The program is identifying key markets and developing strategies to target improvement for each market respectively
2015 Accessibility Targets: The program conducted an accessibility study in 2014 describing accessibility levels as of December 31, 2013. The study determined the program was accessible to 99% of the population for commercial lamps, 97% of the population for residential fixtures, and 96% of the population for commercial fixture and non PCB ballasts depots respectively. Since this study was conducted, the program has added 39 commercial lamps depots, three (3) commercial fixture and non PCB ballasts depots, and 18 residential fixture			

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[2] The residential fixtures target was converted and rounded from kgs to tonnes to match the data available from Program processors

depots. On that basis, accessibility is as high as, or higher than the previous study. An accessibility study will be conducted for 2016.			
Commercial Lamps	95%	Target Exceeded	N/A
Residential Fixtures	95%	Target Exceeded	N/A
Commercial Fixtures and Non- PCB Ballasts	95%	Target Exceeded	N/A

2   Program Outline

PCA is a federally incorporated, not-for-profit product stewardship association formed in response to stewardship regulations and is governed by a multi-sector industry board of directors.

In 2015, the LightRecycle Program operated in accordance with PCA's Program Plan pursuant to the requirements of the Regulation.

Between January 1, 2015, and Dec 31, 2015, the LightRecycle Program captured end-of-life lamps and lighting equipment products from all sectors (residential, institutional, commercial and industrial) and diverted them from the landfill.

3 Public Education Materials and Strategies

In 2015, LightRecycle engaged in extensive communication efforts to inform British Columbians about the Program. The following list outlines the Program's public education materials and strategies for 2015:

- Paid Advertising, Media & Partnerships
- Community Events & Collateral
- Point of Sale and Point of Return Materials
- Company and Program Website
- PCA Toll-free Number and RCBC Hotline & Recyclepedia

Details of the initiatives undertaken by the LightRecycle Program during 2015 are provided below. See Appendix A for select examples of Program materials and advertising.

- **Paid Advertising, Media & Partnerships** LightRecycle ran a province-wide campaign in British Columbia with top network Global TV. The campaign ran for 26 consecutive weeks beginning in June and wrapping up in December. Global TV commercials had two-tiers: 1) community PSAs - local talent voiced 30-second "info-mercial" style spots educating viewers on special waste recycling and 2) traditional commercial advertising, driving consumers to the Program website. Heavy rotation of 30-second spots aired on prime time during high viewership programming, including what is termed "US Spill" programming, which encompasses some of the most viewed shows on television, issuing from major US networks brought into the province via Global's signals
- LightRecycle pursued a significant, full-year radio advertising campaign on popular BC Newcap Radio station Z95.3 FM. The campaign included brand sells (driving listeners to the website and delivering key messages about the Program), event promotion (supporting LightRecycle community event activities), contesting (digital and on-air contests with grand prizes available to those who engaged with LightRecycle key messaging) and digital take-overs (LightRecycle took over the radio station's homepage)
- LightRecycle advertised with industry trade publication Electrical Line Magazine via 6 X ½ page full-colour advertisements throughout 2015, running every 2 months (January, March, May, July, September, November). Electrical Line Magazine is a bi-monthly electrical trade publication with a qualified national circulation in excess of 19,000, directed to the decision makers at all buying levels, from purchasing agent to end user
- LightRecycle ran additional print advertisement via Business in Vancouver, including a full page ad and contact information ad in the organization's official Property Manager's Sourcebook, a tool for commercial and residential property managers, facilities managers and operations managers seeking suppliers of products and services

- Multi-language Advertising: ReGeneration, with inclusion of LightRecycle program info, advertised on Fairchild Radio (Cantonese and Mandarin) and Spice Radio (Hindi, Punjabi and English), targeting BC's largest ESL populations and regions
- The Program pursued a Western Canadian targeted digital campaign via YP Group. The campaign syndicated Facebook posts, targeted digital display ads, and smart digital display ads (re-serving impressions to pre-qualified audiences)
- Additional digital advertising took place with B2B marketing specialist Multiview, via a targeted campaign that used extensive SEM advertising with a specific focus on lighting industry professionals, contractors, relampers, and building managers
- The Program advertised with the BCEA (British Columbia Electrical Association) with a banner advertisement on the group's homepage, as well as advertising in their digital newsletter, sent to electrical industry professionals
- LightRecycle was a corporate sponsor of national Electrical trade organization, ElectroFed. In addition to branding on ElectroFed collateral materials and at ElectroFed events and conferences, LightRecycle also received full page advertisements in ElectroFed's national magazine, InfoElectro.

Community Events & Collateral

- LightRecycle participated in, and offered collection at, 14 community events across the province, including at the Dragon Boat Festival in Vancouver, the British Columbia Electrical Association (BCEA) Conference in Kelowna, and at the Pacific National Exhibition (PNE), BC's most heavily attended event. The PNE initiative also involved a corporate sponsorship of the popular Prize Home contest, yielding LightRecycle branding on more than 100,000 pieces of direct mail
- Event collateral, such as a branded tent, tablecloth, pop-up banners and other were created to ensure the Program had a strong visual presence at these community events. Additionally, branded prizing and participatory, trivia-based games were employed at all events to ensure audience engagement and program information retention

Point of Sale and Point of Return Materials

- Program posters, rack cards, and signage for both retailer and collection site audiences were replenished upon request, free of charge. A dedicated online re-order form for these materials is hosted on the program website, LightRecycle.ca

Dedicated Program Website

- The Program's official website, www.lightrecycle.ca underwent a complete overhaul in 2015 in order to vastly improve the user experience, better segment the Program's audiences in order to direct them quickly and efficiently to the information they need, and to rank better in search engine queries

- The site, which can toggle between English and French content, included (but was not limited to) the following information:
  - A geography-based collection site finder
  - Collection site hours of operations
  - Program accepted product lists, which were fully revamped to be visually-oriented and easier to navigate
  - Dedicated website sections for Consumers, Program members and Service Partners
  - Information for the Industrial, Commercial and Institutional market segment, including large volume generator product management options
  - Contact information for key Program staff
  - Program FAQs and Annual Reports

- In 2015, there were 44,729 unique visitors to the Program website, up 49% from 2014.
- PCA developed and pushed live via the ReGeneration.ca website and social channels, a short animated video that explains how the Program works.

PCA Toll-free Number and RCBC Resources

- PCA operated a toll-free number (1-888-772-9772) to answer consumer inquiries.
- Information about LightRecycle was provided on the RCBC website, in the RCBC Recyclepedia, and on the RCBC App which received a combined total of 9,251 inquiries.

Consumer Awareness Study

- The LightRecycle program undertook a consumer awareness study in November 2015 to determine end-user knowledge of the Program, current inventory of Program accepted materials in the household, and attitudes and behaviours towards recycling
- The awareness study was led by an accredited third-party research firm
- The study revealed that 49% of British Columbians are currently aware of the LightRecycle program. The number increases to 54% awareness among British Columbians aged 55+. However, 52% of all respondents cited "recycle them" as the method they would employ to dispose of mercury-containing bulbs

4   Collection System

The BC LightRecycle Program provides a free and convenient collection system for all consumers of Program Products. PCA 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 sites services). These sites include retailers, recycling organizations (both non-profit and for profit), local government recycling centers or transfer stations and other associations or businesses interested in participating in the Program.

The collection system accepts lamps, ballasts and fixtures from residential, institutional, commercial and industrial sectors. All the products which the Program accepts are called Program Products. See Table 4 for a summary of Program Products. There are also products which are not accepted by the program. A complete list of products accepted and not accepted by the Program is available in the Program's Product Guide on the LightRecycle website: http://www.lightrecycle.ca/member-and-seller-support-centre/member-resources/.

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 • Residential light fixtures • Commercial light fixtures • Industrial light fixtures • Large outdoor fixtures
Ballasts and Transformers: • PCB Containing • Non-PCB Containing

4.1   Collection Sites

A collection site is a physical location where consumers can drop off Program Products. 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. LightRecycle 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: LightRecycle 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 (more than 16 units)
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	Collection sites consolidating volumes of Program Products into larger quantities from specific sources only

The Program's system included 439 contracted collection sites, with 19 sites being added in 2015 and 12 sites being removed, representing a net increase of seven (7) sites from 2014. See Appendix B for a full list of collection sites by location and see Table 6 for a list with sites that were added and removed in 2015.

Table 6: Collections Sites Added/Removed in 2015[3]

Depot Name	Depot Location	Change from 2014
Bottle Depot - Glanford	Saanich	Added in 2015
Burns Lake Recycling Return-it Depot	Burns Lake	Added in 2015
Clearwater Eco Depot	Clearwater	Added in 2015
Columbia Bottle Depot - Kirschner	Kelowna	Added in 2015

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[3] The number of collection sites reported in 2014 has been adjusted from 451 to 432.

Depot Name	Depot Location	Change from 2014
Courtenay Return-It Depot	Courtenay	Added in 2015
District of Tumbler Ridge	Tumbler Ridge	Added in 2015
Enderby Return-it Recycling Depot	Enderby	Added in 2015
Island Return It - South Cowichan	Cobble Hill	Added in 2015
Lillooet Landfill	Lillooet	Added in 2015
Louis Creek Eco-Depot	Louis Creek	Added in 2015
Lower Nicola Eco-Depot	Merritt	Added in 2015
Maple Ridge Bottle Depot	Maple Ridge	Added in 2015
Nak'azdli Recycling Depot	Fort St. James	Added in 2015
Regional Recycling - Cloverdale	Surrey	Added in 2015
Rona Langley #61810	Langley	Added in 2015
South Thompson Recycling	Pritchard	Added in 2015
Thorsen Creek Recycling Depot	Bella Coola	Added in 2015
Valemount Recycling Center	Valemount	Added in 2015
Village of New Denver	New Denver	Added in 2015
Bargain Bin	Castlegar	Removed in 2015
City of Terrace Landfill	Terrace	Removed in 2015
HD Supply Canada	Surrey	Removed in 2015
Home Hardware Creston	Creston	Removed in 2015
Light Your World	Kamloops	Removed in 2015
Maglio Building Centre Trail	Trail	Removed in 2015
Rona Abbotsford #61770	Abbotsford	Removed in 2015
Rona Duncan #61020	Duncan	Removed in 2015
Rona Kamloops #61410	Kamloops	Removed in 2015
Rona Mission #61200	Mission	Removed in 2015
Rona Salmon Arm #61330	Salmon Arm	Removed in 2015
Rossland Pro Hardware	Rossland	Removed in 2015

Table 7 provides a list of collection sites by Regional District.

Table 7: Collection Sites by Regional District

Regional District	# of Collection Sites
Alberni-Clayquot	5
Bulkley-Nechako	11
Capital Regional District	42
Cariboo	10
Central Coast	3
Central Kootenay	11
Central Okanagan	16
Columbia Shushwap	6
Comox Valley	7

Regional District	# of Collection Sites
Cowichan Valley	13
East Kootenay	8
Fraser Valley	24
Fraser-Fort George	6
Kitimat Stikine	6
Kootenay Boundary	5
Metro Vancouver	148
Mt Waddington	9
Nanaimo Regional District	16
North Okanagan	12
Northern Rockies	1
Okanagan Similkameen	16
Peace River	9
Powell River	4
Skeena-Queen Charlotte	3
Sointula	0
Squamish Lillooet	11
Strathcona	9
Sunshine Coast	8
Thompson Nicola	20
Total	**439**

4.2   Large Volume Collections

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

The following Program Products are covered under this service:
- Whole lamps
- Drums of pre-crushed lamps
- PCB containing ballasts

4.3   Collection Events

The Program also partners with local governments and not-for-profit organizations to provide temporary collection services at collection events for Program Products.

Table 8 provides a list of locations and dates for collection events in 2015.

Table 8: 2015 Collection Events

Date	Location
2-May-15	Sicamous
2-May-15	Merritt
3-May-15	Ashcroft
12-May-15	District of Mission
23-May-15	Golden
23-May-15	Kitimat
23-May-15	New Hazelton
24-May-15	Terrace
5-Jun-15	Kamloops
12-Sep-15	Castlegar
13-Sep-15	Silverton
13-Sep-15	Creston
26-Sep-15	Golden
26-Sep-15	Nakusp
3-Oct-15	Chilliwack
17-18 Oct 2015	Township of Langley

5   Product Environmental Impact Reduction, Reusability and Recyclability

Lighting product producers are working to reduce the environmental impact of lighting products through innovative product design and technology. For example, new design has resulted in the development of smaller diameter fluorescent tubes now available in the marketplace. These products can provide the same or more light with about 50% less material resources by weight.[4] The amount of mercury contained within fluorescent lights has also been decreasing. Through innovative technology, manufacturers have decreased the amount of mercury in fluorescent lamps by over 80% since 1990.[5]

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, reducing the cumulative environmental impact associated with these products.

The advancement of LED lighting technology is also having a significant impact on the lighting market as a whole. Acceptance of LED technologies is increasing as prices are decreasing. Due to the significantly longer lifespan of LED lights, there is a decrease in sales expected for other traditional lighting technologies such as halogen, incandescent and fluorescent lights. This change will result in a positive environmental impact as fewer lights, including those that contain mercury, will require disposal. These trends will only become visible as the market adapts to the new technology and will be observed by the Program. The shift to more energy efficient and longer lasting lighting technology is clear and has a direct positive impact on the environment.

5.1   GHG Emissions

The estimated greenhouse gas (GHG) impact of the recycling of lighting products was calculated using a GHG emission inventory tool developed specifically for LightRecycle by a third party based on nationally and internationally recognized reference protocols and standards. Furthermore, due to limited available information from downstream processors and the numerous assumptions that had to be made to determine the GHG impact, the final GHG emission numbers are accurate to only one significant digit. The GHG emissions for 2015 were estimated based on these calculations, to be 4000 tonnes of equivalent carbon dioxide (CO_2e). This value is based on 3 tonnes of CO_2e generated per tonne of material managed.

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[4] European Lamp Companies Federation. *Climate, Environment and Health.*   Please refer to http://www.elcfed.org
[5] Personal Communication with representative of the Electrical Equipment Manufacturers Association of Canada.

6   Pollution Prevention Hierarchy and Product / Component Management

The objective of the Program is to minimize the improper disposal of Program Products by providing an effective collection program and ensuring that the collected materials are either recycled or disposed of in an environmentally responsible manner. The BC LightRecycle Program strives to manage collected materials as high on the pollution prevention hierarchy[6] as possible, where economically feasible and viable. The application of the pollution prevention hierarchy and the management of each product varies by Program Product depending on options available and economic feasibility.

The Program maintains an established system for managing Program Products. After collection, Program Products are transported to the Program's primary processors. These processors include three 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 PCA by the Program's primary processors.

Lamp processors are required to conform to the BC LightRecycle Lamp Processor Standard, which defines the minimum requirements to become an approved processor. The Standard sets out environmental, occupational health and safety, and material handling rules to ensure materials are handled appropriately.

Lamps
Whole lamps were processed and broken down into various components under a controlled environment. The component parts were recycled or disposed of as reported by the processors as follows:
- Metal was sent to various downstream metal recyclers for recovery.
- Glass was sent to various concrete manufacturing companies for use in concrete manufacturing or as an aggregate, and to a glass recycling company to become cullet.
- Mercury phosphor powder was either sent to a broker who in turn sent it to a retort facility or sent directly to a downstream processor where it went through a retort process to separate the mercury from the phosphor powder. The mercury was then sold back into the market as a commodity and the phosphor powder was landfilled.

Crushed Lamps
Crushed lamps were sent to a smelter that operates a thermal treatment process for recycling where during the smelting process:

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[6] The pollution prevention hierarchy is explained on pages 12 and 13 of the BC Recycling Regulation Guide available here: http://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/recycle/recycle_reg_guide2012.pdf

- Metal and glass were converted into ferrous granules and used as a commodity in cement manufacturing.
- Mercury was recovered and transformed into mercurous chloride and sold as a commodity.

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 (CESA) stewardship program to collect residential fixtures along with small appliances and power tools at contracted collection sites that also serve as CESA depots. They were shipped to two independent processors where they were comingled with other electronics and broken down into their respective components. Table 9 provides a breakdown of downstream processes.

Table 9: Breakdown of Downstream Processes

Material Commodity	Downstream Process[7]
Ferrous Steel	Consolidate/Shred/Sort/Process
Plastics	Shred, extrude and pelletize
Aluminum	Consolidate/Shred
Wire and Cables and String lights	Sort/Smelt
Copper	Consolidate/Shred/Smelt
Glass	Wash and grind/Crush
Circuit Boards	Smelt
Refuse	Landfill
Rechargeable Batteries	Consolidate
Paper Based Materials	Recycle
Non Rechargeable Batteries	Consolidate

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. Given the value of the metal commodity, the Program assumes that the material is recycled, but some non-metal material would need to be disposed of. 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 Ballasts

PCB ballasts were collected and managed as hazardous waste and incinerated at high temperature in a PCB licensed incinerator. PCBs are regulated from transportation to disposal by the BC Ministry of the Environment and equivalent agencies.

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

Table 10 provides an overview of the processing pathways and final disposition of materials derived from Program Products.

Table 10: Material Management and Flow

Material	Sub-Component	Processing Pathway	Final Disposition
Lamps (all technologies)	Phosphor Powder	Primary processors sent mercury and phosphor powder to a broker, who in turn sent it to a retort facility or directly to a mercury processor where the mercury was separated from the phosphor powder.	Phosphor power was landfilled.
	Mercury	See discussion under Phosphor Powder above.	Mercury was commoditized.
	Metal	Primary processors sent all metals to various downstream metal recyclers.	Metals were sold as a commodity into the scrap metal market.
	Glass	Primary processors sent to various concrete manufacturers or glass recyclers.	Used as an aggregate in concrete or as cullet.
Crushed Lamps	Metal, and Glass	Primary processors managed all materials to final disposition.	Used as a commodity in the manufacturing of cement.
	Mercury and Phosphor Powder	Primary processor managed all materials to final disposition.	Transformed into mercurous chloride and sold as a commodity.
Residential Fixtures	Ferrous Steel	Managed through the (CESA) collection and recycling system.	Consolidate/Shred/Sort/Process
	Plastics		Shred, extrude and pelletize
	Aluminum		Consolidate/Shred
	Wire and Cables and String lights		Sort/Smelt
	Copper		Consolidate/Shred/Smelt
	Glass		Wash and grind/Crush
	Circuit Boards		Smelt
	Refuse		Landfill
	Rechargeable and Non Rechargeable Batteries		Consolidate
	Paper Based Materials		Recycle
Commercial Fixtures and Non-PCB Ballasts	NA	Managed through the existing market driven scrap metal recycling system.	
PCB Ballasts	NA	Hazardous Waste Management Company sent to PCB licensed incinerator.	Incineration.

7 Product Sold, Products Collected and Recovery Rate

7.1 Products Sold

In 2015, members of the BC LightRecycle Program reported 33,474,779 units sold[8] of LightRecycle Program Products in BC. Table 11 shows the number of units reported sold by Product Category in 2015.

Table 11: Units Reported Sold by Product Category in 2015[9]

Product Category	Units Reported Sold
1. Fluorescent Tubes measuring ≤ 2 feet	218,382
2. Fluorescent Tubes measuring > 2 feet and ≤ 4 feet	3,286,353
3. Fluorescent Tubes measuring > 4 feet	290,384
4. Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps	3,879,812
5. Light Emitting Diodes (LED)	4,271,885
6. High Intensity Discharge (HID) and Other	460,018
7. Incandescent / Halogen	12,037,395
8. Miniature Bulb Package	402,886
9. Designated Small Fixtures/Decorative Light Strings	4,041,208
10. Fixture Category A	4,069,898
11. Fixture Category B	92,732
12. Large Outdoor Fixtures	37,221
13. Ballasts/Transformers (not integrated into lamps or fixtures)	386,605
Total[6]	**33,474,779**

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[8] From time to time members submit retroactive unit sales information which can include sales data related to prior years. Data reported represents units sold during 2015 and may include out of period sales.

[9] In August 2015, the Program moved UV and induction tubes from categories 1, 2 and 3 to category 6.

7.2   Products Collected

In 2015, the BC LightRecycle Program collected approximately 5,322,452 units of lamps, 395 tonnes[10] of fixtures through residential collections, 26,544 kg[11] of PCB ballasts and 14,193 kg of crushed lamps. Table 12 provides a summary of the collection data. Collection quantities for the different Program Products are based on annual reports and/or estimated based on quantities processed by the Program's processors between January 1 and December 31, 2015, as reported by the Program's processors. The reported quantities may include Program Products received in the 2014 fiscal year but processed in the 2015 fiscal year and may exclude units collected in the 2015 fiscal year that were not processed as of December 31, 2015.

Table 12: Estimated Quantity of Products Collected in 2015

Program Product	Estimated Quantity Collected
Whole Lamps	5,322,452 units
Residential Fixtures	395 tonnes[10]
PCB Containing Ballasts	26,544 kg[11]
Crushed Lamps	14,193 kg

Table 13 presents a breakdown of the estimated number of units of each lamp Product Category collected by the Program in 2015.

Table 13: Lamp Units Collected by Product Category

Lamp Product Category	Units Collected
1. Fluorescent Tubes (All sizes and shapes)	2,523,568[12]
2. Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps	994,881
3. Light Emitting Diodes (LED)	63,292
4. High Intensity Discharge (HID) and Other	208,438[13]
5. Incandescent / Halogen	1,532,273[14]
Total Units Collected	**5,322,452**

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[10] Due to the comingling of collections and processing and the complexity of the recycling system, it is not possible for the Program to be able to specifically identify the proportion of materials attributed to LightRecycle and the Program has limited ability to verify accuracy of the reported information to a precise degree of certainty.

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

[12] This number includes: 0-2', 2-4', 4-8', and U and O shaped tubes.

[13] This number includes: Sodium lamps, HPS lamps (High Pressure Sodium), Metal Halide lamps, Mercury Vapour lamps, Induction tubes, UVC lamps and tubes, and Neon and Poly-coated tubes. Neon and 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.

[14] This number includes projector bulbs and miniature bulbs. The program's lamps processors began reporting miniature bulbs separately at different times in 2015. Miniature bulbs were previously reported by technology.

Table 14 sets out the estimated number of lamp Program Product units collected by individual regional districts. The estimated quantities were calculated by multiplying an average of units per box type (see Table 15) by total boxes received by type based on the total boxes and lamps received and reported by the lamp Program processors.

Table 14: Estimated Units of Lamps Collected by Regional District in 2015

Regional District	Estimate of Lamp Units
Alberni Clayoquot	21,813
Bulkley Nechako	13,666
Capital Regional District	332,151
Cariboo	58,132
Central Coast	-
Central Kootenay	32,171
Central Okanagan	195,075
Columbia Shuswap	50,555
Comox Valley	20,784
Cowichan Valley	64,402
East Kootenay	100,803
Fraser Fort George	25,391
Fraser Valley	368,123
Kitimat Stikine	14,702
Kootenay Boundary	30,776
Metro Vancouver	3,362,409
Mt. Waddington	9,375
Nanaimo Regional District	120,160
North Okanagan	199,267
Northern Rockies	547
Okanagan Similkameen	61,503
Peace River	7,714
Powell River Regional District	36,552
Skeena-Queen Charlotte	1,914
Squamish Lillooet	63,370
Strathcona	8,522
Sunshine Coast	36,129
Thompson Nicola	86,447
Total	**5,322,452**

Table 15: Average Units per Box Type 2015

Box Type	Average Units per box
Residential CFL and mixed bulbs	117
Residential four foot tubes	27
Residential eight foot tubes	13
Commercial CFL and mixed bulbs	273
Commercial four and eight foot tubes	145

Due to the variability in the number of Program units actually collected within a box, the total number of units by regional district only represents an estimate of collected volumes and does not necessarily reflect the actual number of units collected by regional district.

Commercial fixtures and non-PCB ballasts were collected and managed outside the program through the existing market driven scrap metal recycling system.

The Program Plan committed to develop additional absolute collection rate targets for other Program Product Categories in 2014. Targets were developed in consultation with industry and Program members, as well as subjected to review through a formal public consultation process. The targets were submitted to the Ministry of Environment in 2015. Table 16 provides a summary of the targets and the Program's performance. All 2015 collection targets were exceeded by the Program.

Table 16: Collection Rate Targets and Performance

Collection Rate Targets	2015 Target	2015 Collections	Program's Performance
HID, UV, Neon lamps (Units)	147,625	191,440	Target Exceeded
Residential Fixtures (tonnes)[15]	186- 200	395	Target Exceeded

7.3   Capture Rates

The Program Plan sets capture rate targets for fluorescent tubes and CFLs rather than recovery rates. The capture rate compares the quantity of products collected in a year to the quantity of products estimated to be "available for collection" in that year.

The methodology used to determine the units "available for collection" for fluorescent tubes and CFLs (as provided in Table 17) applied the best available data as of 2012 when the Program Plan was developed and is subject to change.

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[15] The residential fixtures target was converted from kgs to tonnes to match the data available from Program processors

Table 17: Capture Rates – Fluorescent Tubes and CFLs

Product	Units Available to Collect	Units Collected	Capture Rate Target	Actual Capture Rate
Fluorescent Tube Units	5,850,715	2,540,566	28-50%	43%
CFL Units	869,549	994,881	32-50%	114%

8   Summary of Revenues and Expenditures

The Program is funded by members based on fees applied to the sale of new program products in or into British Columbia. The fee may have been passed on by the members to their customers, either as a visible fee or by incorporating the cost directly into the price of the product.

On April 1, 2015, the Program changed the fees for categories 10-13. The fee rates were lowered to better reflect sales volumes and program expenses for the aforementioned categories. This change was made after consultation with the BC LightRecycle Industry Advisory Committee and approved by PCA's Board of Directors.

All fees were used for Program purposes and directly funded the promotion, collection, transportation and recycling of collected products. Table 18 provides a list of the recycling fee rates charged per unit for Program product categories in 2015.

Table 18: Program Product Fee Rate Schedule

Product Category	Fee Category	EHF Before April 1, 2015	EHF on April 1, 2015
Lamps	1. Fluorescent/Induction/UV Tubes measuring ≤ 2 feet	$0.20	$0.20
	2. Fluorescent/Induction/UV Tubes measuring > 2 feet and ≤ 4 feet	$0.40	$0.40
	3. Fluorescent/Induction/UV Tubes measuring > 4 feet	$0.80	$0.80
	4. Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps	$0.15	$0.15
	5. Light Emitting Diodes (LED)	$0.15	$0.15
	6. High Intensity Discharge (HID) and Other	$1.10	$1.10
	7. Incandescent / Halogen	$0.05	$0.05
	8. Miniature Bulb Package	$0.10	$0.10
Fixtures	9. Designated Small Fixtures / Decorative Light Strings	$0.15	$0.15
	10. Fixture Category A	$0.85	**$0.15**
	11. Fixture Category B	$1.40	**$0.15**
	12. Large Outdoor Fixtures	$2.50	**$0.15**
Ballasts	13. Ballasts/Transformers (not integrated into lamps or fixtures)	$1.00	**$0.15**

9   Plan Performance

Table 19 sets out the Program's key performance targets and outcomes for 2015.

Table 19: Key Performance Targets and Outcomes for 2015

Comparison of Key Performance Targets			
Regulation, Part 2 section 8(2)(g)			
2015 Priority Stewardship Plan Targets		2015 Performance	Strategies for Improvement
Capture Rate: Fluorescent Tubes	Target: 28-50%	42%	N/A
Capture Rate: CFLs	Target: 32-50%	112%	N/A
HID, UV, Neon lamps (Units)	147,625	191,440	N/A
Residential Fixtures (tonnes) [16]	186 - 200	395 tonnes	N/A
Consumer Awareness	50%	49%	The program is identifying key markets and developing strategies to target improvement for each market respectively
2015 Accessibility Targets: The program conducted an accessibility study in 2014 describing accessibility levels as of December 31, 2013. The study determined the program was accessible to 99% of the population for commercial lamps, 97% of the population for residential fixtures, and 96% of the population for commercial fixture and non PCB ballasts depots respectively. Since this study was conducted, the program has added 39 commercial lamps depots, three (3) commercial fixture and non PCB ballasts depots, and 18 residential fixture depots. On that basis, accessibility is as high as, or higher than the previous study. An accessibility study will be conducted for 2016.			
Commercial Lamps	95%	Target Exceeded	N/A
Residential Fixtures	95%	Target Exceeded	N/A
Commercial Fixtures and Non- PCB Ballasts	95%	Target Exceeded	N/A

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[16] The residential fixtures target was converted from kgs to tonnes to match the data available from Program processors

Appendix A - Advertising and Communication Materials

Advertising

Print Ad: Electrical Line Magazine

Print Ad: Business in Vancouver Property Manager's Guide

Print Ad: InfoElectro

Event Materials

LightRecycle Tent, Tablecloth and Pop-up Banners

LightRecycle Tent at PNE

New Point of Sale and Point of Return Materials

Rack Card – 5 x 8

Retail Poster – Available in 11x17 and 18x24 (Large Format)

Lamp Collection Site Poster – 11x17

Consumer Awareness Poster – 11x17

Consumer Awareness Poster with Space for
Directions to Closest Collection Site – 11x17

Lamp Collection Site Sign – 24 x 24

Fixture Collection Site Sign – 24 x 24

Roadside Lamp Collection Site Sign – 24 x 24

Lamp and Fixture Collection Site Sign – 24 x 24

Websites

There are two websites which are connected to the LightRecycle Program. The first is Regeneration, which is Product Care Association's consumer facing web portal. It contains basic information about the Program. The second is LightRecycle, which is the Program's main website.

Parent Website (www.regeneration.ca)

Program Website (www.lightrecycle.ca)

Appendix B - List of Contracted Collection Sites

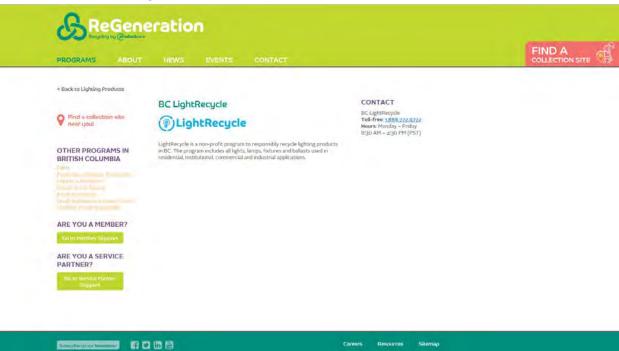| #	Depot Name	City	Regional District
1	7 Mile Landfill and Recycling Center	Port McNeil	Mt. Waddington
2	Abbotsford Bottle Depot	Abbotsford	Fraser Valley
3	Abbotsford Community Services Recycling	Abbotsford	Fraser Valley
4	Abbotsford Transfer Station	Abbotsford	Fraser Valley
5	ABC Recycling - Burnaby	Burnaby	Metro Vancouver
6	ABC Recycling - Campbell River	Campbell River	Strathcona
7	ABC Recycling - Fort St. John	Fort St. John	Peace River
8	ABC Recycling - Kelowna	Kelowna	Central Okanagan
9	ABC Recycling - Prince George	Prince George	Fraser Fort George
10	ABC Recycling - Surrey	Surrey	Metro Vancouver
11	ABC Recycling - Terrace	Terrace	Kitimat Stikine
12	Action Steel Sales	Penticton	Okanagan Similkameen
13	Agassiz Bottle Depot	Agassiz	Fraser Valley
14	Aim Lighting & Electric	Delta	Metro Vancouver
15	Albertson's Home Center	Parksville	Nanaimo Regional District
16	Aldergrove Bottle Depot	Aldergrove	Metro Vancouver
17	Allied Salvage & Metals	Richmond	Metro Vancouver
18	Allied Scrap Metal Squamish	Squamish	Squamish Lillooet
19	Alpine Disposal & Recycling	Victoria	Capital Regional District
20	Applecross Home Hardware	Nanaimo	Nanaimo Regional District
21	Armstrong Bottle Depot	Armstrong	North Okanagan
22	Asset Investment Recovery	Victoria	Capital Regional District
23	Augusta Recyclers	Powell River	Powell River Regional District
24	Bay Street Castle	Victoria	Capital Regional District
25	Bella Bella Eco-Depot	Bella Bella	Central Coast
26	Bella Coola Recycling Depot	Hagensborg	Central Coast
27	Bill's Bottle Depot	Salmon Arm	Columbia Shuswap
28	Bings Creek Solid Waste	Duncan	Cowichan Valley
29	Blight's Home Hardware	Vancouver	Metro Vancouver
30	Border Town Recycling Group	Stewart	Kitimat Stikine
31	Bottle Depot - Glanford	Saanich	Capital Regional District
32	Bottle Depot - Queens	Victoria	Capital Regional District
33	Boucherie Bottle Depot & Self Storage	West Kelowna	Central Okanagan
34	Brentwood Auto & Metal Retailers	Saanichton	Capital Regional District
35	Bridgeview Return-It Bottle Depot	Surrey	Metro Vancouver

36	Bulkley Valley Bottle Depot	Smithers	Bulkley Nechako
37	Burgess Plumbing Heating & Electrical	Williams Lake	Cariboo
38	Burns Lake Home Hardware	Burns Lake	Bulkley Nechako
39	Burns Lake Recycling Return-it Depot	Burns Lake	Bulkley Nechako
40	Burnside Home Hardware	Victoria	Capital Regional District
41	Campbell Mountain Sanitary Landfill	Penticton	Okanagan Similkameen
42	Campbell River Waste Management Centre	Campbell River	Strathcona
43	Canadian Tire #351 Penticton	Penticton	Okanagan Similkameen
44	Canadian Tire #355 Kamloops	Kamloops	Thompson Nicola
45	Canadian Tire #362 Nanaimo	Nanaimo	Nanaimo Regional District
46	Canadian Tire #368 Victoria	Victoria	Capital Regional District
47	Canadian Tire #389 Vancouver Cambie	Vancouver	Metro Vancouver
48	Canadian Tire #433 Chilliwack	Chilliwack	Fraser Valley
49	Canadian Tire #434 Abbotsford	Abbotsford	Fraser Valley
50	Canadian Tire #437 Campbell River	Campbell River	Strathcona
51	Canadian Tire #438 Williams Lake	Williams Lake	Cariboo
52	Canadian Tire #443 Surrey	Surrey	Metro Vancouver
53	Canadian Tire #480 Powell River	Powell River	Powell River Regional District
54	Canadian Tire #487 Quesnel	Quesnel	Cariboo
55	Canadian Tire #488 Port Alberni	Port Alberni	Alberni Clayoquot
56	Canadian Tire #489 Surrey	Surrey	Metro Vancouver
57	Canadian Tire #601 North Vancouver	North Vancouver	Metro Vancouver
58	Canadian Tire #603 Burnaby	Burnaby	Metro Vancouver
59	Canadian Tire #604 Vancouver	Vancouver	Metro Vancouver
60	Canadian Tire #608 Coquitlam	Coquitlam	Metro Vancouver
61	Canadian Tire #609 Port Coquitlam	Port Coquitlam	Metro Vancouver
62	Canadian Tire #610 Richmond	Richmond	Metro Vancouver
63	Canadian Tire #636 Sechelt	Sechelt	Sunshine Coast
64	Canadian Tire #678 Surrey	Surrey	Metro Vancouver
65	Capital Salvage	Vancouver	Metro Vancouver
66	Carney's Waste Systems	Squamish	Squamish Lillooet
67	Ccon Steel	Abbotsford	Fraser Valley
68	Central Builders' Supply Prince George	Prince George	Fraser Fort George
69	Central Hardware	Enderby	North Okanagan
70	Central Saanich Home Hardware	Saanichton	Capital Regional District
71	Century Home Hardware	100 Mile House	Cariboo
72	Chase Home Hardware Building Centre	Chase	Thompson Nicola
73	Chasers Bottle Depot	Vernon	North Okanagan
74	Chetwynd Home Hardware	Chetwynd	Peace River
75	Chetwynd Recycling & Bottle Depot	Chetwynd	Peace River
76	Chilliwack Bottle Depot	Chilliwack	Fraser Valley

77	Clearwater Eco Depot	Clearwater	Thompson Nicola
78	CM Recycling	Quesnel	Cariboo
79	Collingwood Bottle Exchange	Burnaby	Metro Vancouver
80	Columbia Bottle Depot - Dease	Kelowna	Central Okanagan
81	Columbia Bottle Depot - Kirschner	Kelowna	Central Okanagan
82	Columbia Bottle Depot - St. Paul	Kelowna	Central Okanagan
83	Columbia Recycle	Kimberly	East Kootenay
84	Comox Valley Auto + Metal Recyclers	Courtenay	Comox Valley
85	Comox Valley Waste Management Centre	Cumberland	Comox Valley
86	Coquitlam Return-It Depot	Coquitlam	Metro Vancouver
87	Cormorant Island recycling Facility	Alert Bay	Mt. Waddington
88	Cortes Island Waste Management Centre	Cortes Island	Strathcona
89	Courtenay Return-It Depot	Courtenay	Comox Valley
90	Cranbrook Bottle Depot	Cranbrook	East Kootenay
91	D.C. Campbell Recycling Dawson Creek	Dawson Creek	Peace River
92	Davis Trading & Supply	Vancouver	Metro Vancouver
93	District of Oak Bay	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	Eco-Depot Recycling Centre	Fort St. John	Peace River
101	Edmonds Recycling	Langley	Metro Vancouver
102	Edmonds Return-It Depot	Burnaby	Metro Vancouver
103	Enderby Return-it Recycling Depot	Enderby	North Okanagan
104	Ernie's Used Auto Parts	Castlegar	Central Kootenay
105	Fernie Bottle Depot	Fernie	East Kootenay
106	Fernie Home Building Center	Fernie	East Kootenay
107	Fisher Road Recycling	Cobble Hill	Cowichan Valley
108	Fleetwood Bottle Return Depot	Surrey	Metro Vancouver
109	Fraser Lake Bottle Depot	Fraser Lake	Bulkley Nechako
110	Fraser Valley Metal Exchange	Maple Ridge	Metro Vancouver
111	Fraser Valley Return-It	Langley	Metro Vancouver
112	Gabriola Island Recycling	Gabriola Island	Nanaimo Regional District
113	Galiano Island Recycling Resources	Galiano Island	Capital Regional District
114	Galiano Trading	Galiano Island	Capital Regional District
115	Gandy's Home Hardware	Vancouver	Metro Vancouver
116	General Grant's North Shore Bottle Depot	Kamloops	Thompson Nicola
117	General Grant's Sahali	Kamloops	Thompson Nicola
118	Gibsons Building Supplies	Gibsons	Sunshine Coast

119	Gibsons Recycling Depot	Gibsons	Sunshine Coast
120	Go Green Bottle Depot	Vancouver	Metro Vancouver
121	Gold Trail Recycling	100 mile House	Cariboo
122	Grand Forks Bottle Depot	Grand Forks	Kootenay Boundary
123	Grand Forks Home Hardware	Grand Forks	Kootenay Boundary
124	Guildford Bottle Depot	Surrey	Metro Vancouver
125	Haney Bottle Depot	Maple Ridge	Metro Vancouver
126	Haney Builders Supplies	Maple Ridge	Metro Vancouver
127	Happy Stan's Recycling	Port Coquitlam	Metro Vancouver
128	Hartland Landfill Recycling Depot	Victoria	Capital Regional District
129	Hazelton Bottle Depot	New Hazelton	Kitimat Stikine
130	Hewer Home Hardware	Vancouver	Metro Vancouver
131	High Point Electric	Surrey	Metro Vancouver
132	Highway 4 Auto Salvage	Coombs	Bulkley Nechako
133	Hipperson Home Hardware	Nelson	Central Kootenay
134	Home Building Centre - Salmon Arm	Salmon Arm	Columbia Shuswap
135	Home Building Centre - Vernon	Vernon	North Okanagan
136	Home Hardware - Cranbrook	Cranbrook	East Kootenay
137	Home Hardware - Penticton	Penticton	Okanagan Similkameen
138	Home Hardware - Princeton	Princeton	Okanagan Similkameen
139	Home Hardware - Revelstoke	Revelstoke	Columbia Shuswap
140	Home Hardware - Sidney	Sidney	Capital Regional District
141	Home Hardware - Williams Lake	Williams Lake	Cariboo
142	Home Hardware Building Center - Courtenay	Courtenay	Comox Valley
143	Home Hardware Building Centre - Merritt	Merritt	Thompson Nicola
144	Hope Bottle Depot	Hope	Fraser Valley
145	Hornby Island Waste Management Centre	Hornby Island	Comox Valley
146	Houston Bottle Depot	Houston	Bulkley Nechako
147	Interior Freight and Bottle Depot	Vernon	North Okanagan
148	Invermere Home Hardware	Invermere	East Kootenay
149	Ironwood Bottle Depot	Richmond	Metro Vancouver
150	Island Return It - Campbell River	Campbell River	Strathcona
151	Island Return It - Duncan	Duncan	Cowichan Valley
152	Island Return It - Esquimalt	Esquimalt	Capital Regional District
153	Island Return It - Sidney	Sidney	Capital Regional District
154	Island Return It - South Cowichan	Cobble Hill	Cowichan Valley
155	Island Solid Waste Management - Port Clements	Port Clements	Skeena-Queen Charlotte
156	Island Solid Waste Management - Queen Charlotte	Queen Charlotte	Skeena-Queen Charlotte
157	J&C Bottle Depot	Penticton	Okanagan Similkameen
158	Junction Bottle Depot	Ladysmith	Cowichan Valley
159	Kamloops Home Hardware	Kamloops	Thompson Nicola

160	Kaslo Building Supplies	Kaslo	Central Kootenay
161	Keremeos Sanitary Landfill	Keremeos	Okanagan Similkameen
162	Kerrisdale Lumber	Vancouver	Metro Vancouver
163	Kitchener Bottle Depot	Burnaby	Metro Vancouver
164	Knox Mountain Metals	Kelowna	Central Okanagan
165	KUTE Kitimat Recycling Depot	Kitimat	Kitimat Stikine
166	Ladner Bottle Depot	Delta	Metro Vancouver
167	Ladner Village Hardware	Ladner	Metro Vancouver
168	Lake Cowichan Home Hardware	Lake Cowichan	Cowichan Valley
169	Langley Bottle Depot	Langley	Metro Vancouver
170	Lee's Bottle Depot	Burnaby	Metro Vancouver
171	Lillooet Landfill	Lillooet	Squamish Lillooet
172	Logan Lake Bottle Depot	Logan Lake	Thompson Nicola
173	London Drugs #02	Vancouver	Metro Vancouver
174	London Drugs #03	New Westminster	Metro Vancouver
175	London Drugs #04	Vancouver	Metro Vancouver
176	London Drugs #05	North Vancouver	Metro Vancouver
177	London Drugs #06	Burnaby	Metro Vancouver
178	London Drugs #07	Vancouver	Metro Vancouver
179	London Drugs #08	Surrey	Metro Vancouver
180	London Drugs #09	Surrey	Metro Vancouver
181	London Drugs #10	Vancouver	Metro Vancouver
182	London Drugs #11	Richmond	Metro Vancouver
183	London Drugs #12	Kelowna	Central Okanagan
184	London Drugs #14	Victoria	Capital Regional District
185	London Drugs #15	Coquitlam	Metro Vancouver
186	London Drugs #16	Abbotsford	Fraser Valley
187	London Drugs #17	Delta	Metro Vancouver
188	London Drugs #18	Langley	Metro Vancouver
189	London Drugs #19	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
193	London Drugs #35	Kamloops	Thompson Nicola
194	London Drugs #36	Nanaimo	Nanaimo Regional District
195	London Drugs #37	Delta	Metro Vancouver
196	London Drugs #39	Vernon	North Okanagan
197	London Drugs #41	Chilliwack	Fraser Valley
198	London Drugs #42	White Rock	Metro Vancouver
199	London Drugs #44	West Vancouver	Metro Vancouver
200	London Drugs #46	Victoria	Capital Regional District

201	London Drugs #47	Maple Ridge	Metro Vancouver
202	London Drugs #50	Vancouver	Metro Vancouver
203	London Drugs #51	Prince George	Fraser Fort George
204	London Drugs #52	Richmond	Metro Vancouver
205	London Drugs #53	Vancouver	Metro Vancouver
206	London Drugs #54	Victoria	Capital Regional District
207	London Drugs #55	Mission	Fraser Valley
208	London Drugs #56	Burnaby	Metro Vancouver
209	London Drugs #61	Gibsons	Sunshine Coast
210	London Drugs #67	Courtenay	Comox Valley
211	London Drugs #70	Penticton	Okanagan Similkameen
212	London Drugs #71	Burnaby	Metro Vancouver
213	London Drugs #72	Nanaimo	Nanaimo Regional District
214	London Drugs #73	Campbell River	Strathcona
215	London Drugs #74	Vancouver	Metro Vancouver
216	London Drugs #75	Surrey	Metro Vancouver
217	London Drugs #76	Westbank	Central Okanagan
218	London Drugs #77	Duncan	Cowichan Valley
219	London Drugs #78	Vancouver	Metro Vancouver
220	London Drugs #80	Squamish	Squamish Lillooet
221	London Drugs #81	Surrey	Metro Vancouver
222	London Drugs #82	Vancouver	Metro Vancouver
223	London Drugs #85	Abbotsford	Fraser Valley
224	Lone Butte Supply	100 Mile House	Cariboo
225	Lorne Street Bottle Depot	Kamloops	Thompson Nicola
226	Lougheed Return-It Depot	Coquitlam	Metro Vancouver
227	Louis Creek Eco-Depot	Louis Creek	Thompson Nicola
228	Lower Nicola Eco-Depot	Merritt	Thompson Nicola
229	Macleods True Value Hardware	Fort St. James	Bulkley Nechako
230	Mac's Traders	Langley	Metro Vancouver
231	Maple Ridge Bottle Depot	Maple Ridge	Metro Vancouver
232	Maple Ridge Lighting	Maple Ridge	Metro Vancouver
233	Mayne Island Building Center	Mayne Island	Capital Regional District
234	Meade Creek Recycling Drop-off Depot	Lake Cowichan	Cowichan Valley
235	Merritt Return-It Depot	Merritt	Thompson Nicola
236	Metrotown Bottle Return It Center	Burnaby	Metro Vancouver
237	Mission Flats Landfill	Kamloops	Thompson Nicola
238	Mission Recycling	Mission	Fraser Valley
239	Mission Recycling Centre & Bottle Depot	Mission	Fraser Valley
240	Mouatt's Home Hardware	Salt Spring Island	Capital Regional District
241	MountainHigh Lighting	Castlegar	Central Kootenay
242	Nak'azdli Recycling Depot	Fort St. James	Bulkley Nechako

243	Nanaimo Recycling Exchange Society	Nanaimo	Nanaimo Regional District
244	Nelson Home Hardware Building Centre	Nelson	Central Kootenay
245	Nelson Leafs Recycling Centre	Nelson	Central Kootenay
246	New & Nearly New	Kimberly	East Kootenay
247	New Life Furniture and Recycling	Creston	Central Kootenay
248	New Westminster Recycle Depot	New Westminster	Metro Vancouver
249	Newton Bottle Depot	Surrey	Metro Vancouver
250	Norbert Salvage & Recycle	Bridesville	Kootenay Boundary
251	North Shore Bottle Depot	North Vancouver	Metro Vancouver
252	North Vancouver Bottle & Return-It Depot	North Vancouver	Metro Vancouver
253	North Vancouver Transfer Station	North Vancouver	Metro Vancouver
254	Oak Bay Home Hardware	Victoria	Capital Regional District
255	OK Bottle Depot	Richmond	Metro Vancouver
256	Okanagan Falls Landfill	Okanagan Falls	Okanagan Similkameen
257	Oliver Sanitary Landfill	Oliver	Okanagan Similkameen
258	Osoyoos Bottle Depot	Osoyoos	Okanagan Similkameen
259	Osoyoos Home Hardware	Osoyoos	Okanagan Similkameen
260	Panorama Village Return-It Depot	Surrey	Metro Vancouver
261	Parksville Bottle & Recycling Depot	Parksville	Nanaimo Regional District
262	Parksville Home Building Centre	Parksville	Nanaimo Regional District
263	Parksville Home Hardware	Parksville	Nanaimo Regional District
264	Parsons Scrap Metals	Surrey	Metro Vancouver
265	Pearson's Home Hardware	North Vancouver	Metro Vancouver
266	Peerless Road Recycling	Ladysmith	Cowichan Valley
267	Pemberton Recycling Centre	Pemberton	Squamish Lillooet
268	Pender Island Home Building Centre	Pender Island	Capital Regional District
269	Pender Island Recycling Society	Pender Island	Capital Regional District
270	PG Recycling	Prince George	Fraser Fort George
271	Pitt Meadows Bottle & Return-It Depot	Pitt Meadows	Metro Vancouver
272	Planet Earth Recycling	Westbank	Central Okanagan
273	Port McNeil Recycling Depot	Port McNeil	Mt. Waddington
274	Port Moody One-Stop Market & Bottle Depot	Port Moody	Metro Vancouver
275	Powell Street Return-it Bottle Depot	Vancouver	Metro Vancouver
276	Powerhouse Recycled Auto & Truck Parts	Cumberland	Comox Valley
277	Puds Auto Wrecking & Towing	Osoyoos	Okanagan Similkameen
278	Quality Glass	Ashcroft	Thompson Nicola
279	Queensborough Landing Return-It	New Westminster	Metro Vancouver
280	R Home Supply Centre	Dawson Creek	Peace River
281	R&T Bottle Depot	Abbotsford	Fraser Valley
282	Refuse Resource Recovery	Victoria	Capital Regional District

283	Regional Recycling - Abbotsford	Abbotsford	Fraser Valley
284	Regional Recycling - Burnaby	Burnaby	Metro Vancouver
285	Regional Recycling - Cloverdale	Surrey	Metro Vancouver
286	Regional Recycling - Hayes	Nanaimo	Nanaimo Regional District
287	Regional Recycling - Nanaimo	Nanaimo	Nanaimo Regional District
288	Regional Recycling - Prince Rupert	Prince Rupert	Skeena-Queen Charlotte
289	Regional Recycling - Richmond	Richmond	Metro Vancouver
290	Regional Recycling - Vancouver	Vancouver	Metro Vancouver
291	Regional Recycling - Whistler	Whistler	Squamish Lillooet
292	Revelstoke Bottle Depot	Revelstoke	Columbia Shuswap
293	Richmond Recycling Depot	Richmond	Metro Vancouver
294	Ridge Meadows Recycling Society	Maple Ridge	Metro Vancouver
295	Rona Abbotsford #61220	Abbotsford	Fraser Valley
296	Rona Alert Bay #1215	Alert Bay	Mt. Waddington
297	Rona Burnaby #61270	Burnaby	Metro Vancouver
298	Rona Chilliwack #61390	Chilliwack	Fraser Valley
299	Rona Clearwater #06410	Clearwater	Thompson Nicola
300	Rona Cobble Hill #61040	Cobble Hill	Cowichan Valley
301	Rona Coquitlam #61260	Coquitlam	Metro Vancouver
302	Rona Coquitlam #61290	Coquitlam	Metro Vancouver
303	Rona Delta #12422	Delta	Metro Vancouver
304	Rona Hope #61350	Hope	Fraser Valley
305	Rona Kamloops #61310	Kamloops	Thompson Nicola
306	Rona Kelowna #61700	Kelowna	Central Okanagan
307	Rona Langley #61810	Langley	Metro Vancouver
308	Rona Madeira Park #9551 & #61420	Madeira Park	Sunshine Coast
309	Rona Maple Ridge #61190	Maple Ridge	Metro Vancouver
310	Rona Nanaimo #61030	Nanaimo	Nanaimo Regional District
311	Rona New Westminster #6158	New Westminster	Metro Vancouver
312	Rona North Vancouver #61740	North Vancouver	Metro Vancouver
313	Rona North Vancouver #8140	North Vancouver	Metro Vancouver
314	Rona Pemberton Valley Hardware #08522	Pemberton	Squamish Lillooet
315	Rona Penticton #61480	Penticton	Okanagan Similkameen
316	Rona Port McNeil #1195	Port McNeil	Mt. Waddington
317	Rona Powell River #2791	Powell River	Powell River Regional District
318	Rona Quesnel #61320	Quesnel	Cariboo
319	Rona Richmond #8040	Richmond	Metro Vancouver
320	Rona Squamish #61450	Squamish	Squamish Lillooet
321	Rona Surrey #61240	Surrey	Metro Vancouver
322	Rona Surrey #61720	Surrey	Metro Vancouver

323	Rona Surrey-Newton #61250	Surrey	Metro Vancouver
324	Rona Vancouver #61280	Vancouver	Metro Vancouver
325	Rona Vancouver #61760	Vancouver	Metro Vancouver
326	Rona Vanderhoof #11690	Vanderhoof	Bulkley Nechako
327	Rona Vernon #61300	Vernon	North Okanagan
328	Rona Victoria #61710	Victoria	Capital Regional District
329	Rona Whistler #61460	Whistler	Squamish Lillooet
330	Rona Williams Lake #61340	Williams Lake	Cariboo
331	Ross Bay Home Hardware	Victoria	Capital Regional District
332	Rypac Metal Recycling	Surrey	Metro Vancouver
333	Salish Soils	Sechelt	Sunshine Coast
334	Salt Spring Island Recycling Depot	Salt Spring Island	Capital Regional District
335	Salvation Army - Brentwood Thrift Store	Brentwood	Capital Regional District
336	Salvation Army - E 12th Ave Thrift Store	Vancouver	Metro Vancouver
337	Salvation Army - Hillside Thrift Store	Victoria	Capital Regional District
338	Salvation Army - Langley Thrift Store	Langley	Metro Vancouver
339	Salvation Army - Mill Bay Thrift Store	Mill Bay	Cowichan Valley
340	Salvation Army - North Vancouver Thrift Store	North Vancouver	Metro Vancouver
341	Salvation Army - Port Coquitlam Thrift Store	Port Coquitlam	Metro Vancouver
342	Salvation Army - Prince George	Prince George	Fraser Fort George
343	Salvation Army - Sooke Thrift Store	Sooke	Capital Regional District
344	Salvation Army - View Royal Thrift Store	View Royal	Capital Regional District
345	Sandy's Auto Parts	Langford	Capital Regional District
346	Sapperton Return-It Depot	New Westminster	Metro Vancouver
347	Sardis Bottle Depot	Chilliwack	Fraser Valley
348	Schnitzer Steel Pacific - Campbell River	Duncan	Strathcona
349	Schnitzer Steel Pacific - Cassidy	Cassidy	Nanaimo Regional District
350	Schnitzer Steel Pacific - Duncan	Duncan	Cowichan Valley
351	Schnitzer Steel Pacific - Victoria	Victoria	Capital Regional District
352	Scotch Creek Bottle Depot	Scotch Creek	Columbia Shuswap
353	Scotch Creek Home Building Center	Scotch Creek	Columbia Shuswap
354	Scott Road Bottle Depot	Surrey	Metro Vancouver
355	Scrap King Autowrecking & Towing	Salmo	Central Kootenay
356	Sechelt P/U Recyclers	Sechelt	Sunshine Coast
357	Semiahmoo Bottle Depot	Surrey	Metro Vancouver
358	Shepherds Home Hardware	Armstrong	North Okanagan
359	Simpson Home Hardware	West Vancouver	Metro Vancouver
360	Skyway Distributors	Cranbrook	East Kootenay
361	Smithers Home Hardware	Smithers	Bulkley Nechako
362	Smithers Lumber Yard	Smithers	Bulkley Nechako
363	Smokey Creek Salvage	South Slocan	Central Kootenay

364	Sointula Recycling Depot	Sointula	Mt. Waddington
365	Sooke Home Hardware	Sooke	Capital Regional District
366	South Thompson Recycling	Pritchard	Thompson Nicola
367	South Vancouver Bottle Depot	Vancouver	Metro Vancouver
368	Southridge Building Supplies	Surrey	Metro Vancouver
369	Steveston Return-It Depot	Richmond	Metro Vancouver
370	Summerland Landfill	Summerland	Central Okanagan
371	Sun Coast Waste Eco Depot	Port Alberni	Alberni Clayoquot
372	Sun Dial Lighting Vernon	Vernon	North Okanagan
373	Sunset Coast Bottle Depot	Powell River	Powell River Regional District
374	Surrey Central Return-It	Surrey	Metro Vancouver
375	Surrey Transfer Station	Surrey	Metro Vancouver
376	T-2 Market Oliver	Oliver	Okanagan Similkameen
377	Terrace Bottle Depot	Terrace	Kitimat Stikine
378	The Battery Doctors	Kelowna	Central Okanagan
379	The Hut Bottle Depot	Princeton	Okanagan Similkameen
380	The Lampost	Kamloops	Thompson Nicola
381	The Re-Use-It Centre Whistler	Whistler	Squamish Lillooet
382	Thorsen Creek Recycling Depot	Bella Coola	Central Coast
383	Tofino Co-op Hardware	Tofino	Alberni Clayoquot
384	Trail Bay Hardware #51784	Sechelt	Sunshine Coast
385	Trail Bottle Depot	Trail	Kootenay Boundary
386	Tri Port Recycling	Port Hardy	Mt. Waddington
387	Tsawwassen Home Building Centre	Delta	Metro Vancouver
388	Tsawwassen Return it Center - D&G	Delta	Metro Vancouver
389	Ucluelet Bottle Depot	Ucluelet	Alberni Clayoquot
390	Unadvertised	Chilliwack	Fraser Valley
391	Unadvertised	Kelowna	Central Okanagan
392	Unadvertised	Langford	Capital Regional District
393	Unadvertised	Maple Ridge	Metro Vancouver
394	Unadvertised	Nanaimo	Nanaimo Regional District
395	Unadvertised	Saanich	Capital Regional District
396	Unadvertised	Surrey	Metro Vancouver
397	Unadvertised	Vancouver	Metro Vancouver
398	Unadvertised	Victoria	Capital Regional District
399	Unadvertised	Delta	Metro Vancouver
400	Unadvertised	Victoria	Capital Regional District
401	Unadvertised	North Vancouver	Metro Vancouver
402	Unadvertised	Abbotsford	Fraser Valley
403	Unadvertised	Kelowna	Central Okanagan
404	Unadvertised	Trail	Kootenay Boundary

405	Unadvertised	Burnaby	Metro Vancouver
406	Unadvertised	Delta	Metro Vancouver
407	Unadvertised	New Westminster	Metro Vancouver
408	Unadvertised	Burnaby	Metro Vancouver
409	Unadvertised	Coquitlam	Metro Vancouver
410	Unadvertised	Surrey	Metro Vancouver
411	Unadvertised	Victoria	Capital Regional District
412	Unadvertised	Langley	Metro Vancouver
413	Unadvertised	Coquitlam	Metro Vancouver
414	Unadvertised	Winlaw	Central Kootenay
415	Unadvertised	Burnaby	Metro Vancouver
416	Unadvertised	Burnaby	Metro Vancouver
417	Unadvertised	Dawson Creek	Peace River
418	Unadvertised	Fort St. John	Peace River
419	Urban Impact Recycling	Richmond	Metro Vancouver
420	Valemount Recycling Center	Valemount	Fraser Fort George
421	Vancouver Central Return-It Depot	Vancouver	Metro Vancouver
422	Vancouver West Bottle Depot	Vancouver	Metro Vancouver
423	Venture Bottle Depot - Lumby	Lumby	North Okanagan
424	Venture Training Vernon	Vernon	North Okanagan
425	Village of Gold River	Gold River	Strathcona
426	Village of New Denver	New Denver	Central Kootenay
427	Walnut Grove Bottle Depot	Langley	Metro Vancouver
428	Wastech Services	Coquitlam	Metro Vancouver
429	Wells Gray Home Hardware	Clearwater	Thompson Nicola
430	West Coast Metal Recycling	Langley	Metro Vancouver
431	Westbank Home Hardware	Westbank	Central Okanagan
432	Westcoast Hardware	Port Alberni	Alberni Clayoquot
433	Whistler Home Hardware	Whistler	Squamish Lillooet
434	Wide Sky Disposal	Fort Nelson	Northern Rockies
435	Willow Point Bottle Depot	Campbell River	Strathcona
436	Willowbrook Recycling Depot	Langley	Metro Vancouver
437	Wilway Lumber	Abbotsford	Fraser Valley
438	Winfield Return It Centre	Lake Country	Central Okanagan
439	Woss Recycling Depot	Woss	Mt. Waddington

Appendix C - Audited Financial Statement

PRODUCT CARE ASSOCIATION
BC LIGHTRECYCLE PROGRAM

STATEMENT OF REVENUES AND EXPENSES

31 DECEMBER 2015

PRODUCT CARE ASSOCIATION
BC LIGHTRECYCLE PROGRAM
Statement of Revenues and Expenses
For the year ended 31 December 2015

Contents

ROLFE, BENSON LLP
CHARTERED PROFESSIONAL ACCOUNTANTS

INDEPENDENT AUDITORS' REPORT

To: BC Ministry of Environment,

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 LightRecycle Program (the "Statement") as reported by Product Care Association for the year ended 31 December 2015 and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Statement

Management is responsible for the preparation 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 the Statement that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the Statement based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Statement is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Statement. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the Statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the Statement 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the Statement.

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

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INDEPENDENT AUDITORS' REPORT - continued

Opinion

In our opinion, the Statement presents fairly, in all material respects, the revenues and expenses of the BC LightRecycle Program as reported by Product Care Association for the year ended 31 December 2015 in accordance with Canadian accounting standards for not-for-profit organizations.

Restriction on Distribution

This report is prepared on the direction of Product Care Association'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's management and the BC Ministry of Environment and should not be distributed to other parties.

Rolfe, Benson LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

Vancouver, Canada
1 April 2016

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PRODUCT CARE ASSOCIATION
BC LIGHTRECYCLE PROGRAM
Statement of Revenues and Expenses
For the year ended 31 December 2015

		2015
Revenues	$	6,052,759
Program expenses		
Processing		2,353,857
Collection		382,926
Transportation		299,102
Depot supplies		175,980
		3,211,865
General and administrative expenses		
Communications		399,396
Management		155,581
Administration		50,718
Overhead allocation (Note 2(c))		268,731
		874,426
Total expenses		4,086,291
Excess of revenues over expenses for the year	$	1,966,468

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

PRODUCT CARE ASSOCIATION
BC LIGHTRECYCLE PROGRAM
Notes to the Statement of Revenues and Expenses
For the year ended 31 December 2015

1. **Basis of Presentation**

The Statement of Revenues and Expenses (the "Statement") only includes the revenues and expenses of the BC LightRecycle Program, a segment of the operations of Product Care Association (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

Eco-fees are received from members of the BC LightRecycle 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. Eco-fee revenues are recognized as individual members report and remit them as required by applicable provincial environmental legislation.

(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 assets, liabilities, revenues and expenses and disclosure of contingencies at the date of the balance sheet. Accounts subject to significant 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.

ROLFE, BENSON LLP
CHARTERED PROFESSIONAL ACCOUNTANTS

Appendix D - 2015 Third Party Assurance Statement for Non-Financial Information

PRODUCT CARE ASSOCIATION OF CANADA

BC LIGHTRECYCLE PROGRAM

INDEPENDENT REASONABLE ASSURANCE
REPORT

31 DECEMBER 2015

ROLFE, BENSON LLP | CHARTERED PROFESSIONAL ACCOUNTANTS

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INDEPENDENT REASONABLE ASSURANCE REPORT

To Directors of
Product Care Association of Canada,

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 LightRecycle Program to the Ministry of Environment for the for the year ended 31 December 2015:

- Section 4 Collection System 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 Product 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 Third Party Assurance Requirements for Non-Financial Information in Annual Reports – 2015 Reporting Year dated February 2016 ("Assurance requirements") 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.

Scope of the Assurance Procedures

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;
- Ensuring the Selected Information is presented consistently 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 LightRecycle Program for the year ended 31 December 2015 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 Selected Information in Section 6 Pollution Prevention Hierarchy and Product/Component Management includes information related to the disposition of program materials. The Association has identified that a key assurance process in verifying product management for this waste stream is to perform due diligence activities such as periodic inspections of certain processors. During the 2015 fiscal year, these activities were performed for 3 of the 5 processors. As such, there is uncertainty surrounding the Selected Information contained in Section 6 Pollution Prevention Hierarchy.
2. The Selected Information in Section 6 Pollution Prevention Hierarchy and Product/Component Management includes information related to the disposition of hazardous waste from the processing of lamps. The product management of hazardous waste is a multi-step process and shipments to secondary processors are tracked on government manifests. Materials are comingled at the primary processor before being shipped to a secondary processor. No hazardous waste manifests indicating the expected disposition of products for shipments from the primary to secondary processors were obtained. As such, there is uncertainty surrounding the Selected Information contained in Section 6 Pollution Prevention Hierarchy as it pertains to hazardous waste from the processing of lamps.
3. 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 11 - Units Reported Sold by Product Category in 2015 on page 18 of the Annual Report has not been included in the Selected Information in accordance with the Third Party Assurance Requirements for Non-Financial Information in Annual Reports - 2015 Reporting Year dated February 2016 as issued by the British Columbia Ministry of Environment.
4. Section 9 Plan Performance of the Annual Report contain performance targets for capture rates which is not included in the scope of our reasonable assurance engagement for Section 8(2)(e) of the Recycling Regulation, and as such, this is not included in the Selected Information.

ROLFE, BENSON LLP

CHARTERED PROFESSIONAL ACCOUNTANTS

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
29 June 2016

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Appendix 1

Evaluation Criteria

Collection facilities

Specific disclosures in the annual stewardship report for which evaluation criteria were developed	
Disclosure per Annual Report	**Reference**
"A collection site is a physical location where consumers can drop off Program Products. 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. LightRecycle 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."	Section 4.1 Collection Sites - on page 10
"The Program's system included 439 contracted collection sites, with 19 sites being added in 2015 and 12 sites being removed, representing a net increase of seven (7) sites from 2014." "The number of collection sites reported in 2014 has been adjusted from 451 to 432."	Section 4.1 Collection Sites - on page 10 and footnote 3 on page 10 and Appendix B - List of Contracted Collection Sites on pages 33 - 43.

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 2015, 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 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 three 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 PCA by the Program's primary processors."	Section 6 Pollution Prevention Hierarchy and Product/Component Management - on page 15
Material: Lamps Sub-Component: Phosphor Powder End fate: Phosphor powder was landfilled. Sub-Component: Mercury End fate: Mercury was commoditized. Sub-Component: Metal End fate: Metals were sold as a commodity into the scrap metal market. Sub-Component: Glass End fate: Used as an aggregate in concrete or as cullet.	Section 6 Pollution Prevention Hierarchy and Product/Component Management - Table 10: Material Management and Flow on page 17
Material: Crushed Lamps Sub-Component: Metal and Glass End fate: Used as a commodity in the manufacturing of cement. Sub-Component: Mercury and Phosphor Powder End fate: Transformed into mercurous chloride and sold as a commodity.	Section 6 Pollution Prevention Hierarchy and Product/Component Management - Table 10: Material Management and Flow on page 17
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 (CESA) stewardship program to collect residential fixtures along with small appliances and power tools at contracted collection sites that also serve as CESA depots. They were shipped to two independent processors where they were comingled with other electronics and broken down into their respective components. Table 9 provides a	Section 6 Pollution Prevention Hierarchy and Product/Component Management on page 16 and footnote 7 on page 16

breakdown of downstream processes."	
"Downstream Processes are based on the descriptions provided by the Recycler Qualification Office (RQO) and EPSC Electronic Recycling Standard verified Processors detailing the end disposition of product managed."	
Sub-Component: Ferrous Steel End fate: Consolidate/Shred/Sort/Process	Section 6 Pollution Prevention Hierarchy and Product/Component Management - Table 9: Breakdown of Downstream Processes on page 16 and Table 10: Material Management and Flow on page 17
Sub-Component: Plastics End fate: Shred, extrude and pelletize	
Sub-Component: Aluminum End fate: Consolidate/Shred	
Sub-Component: Wire and Cables and String lights End fate: Sort/Smelt	
Sub-Component: Copper End fate: Consolidate/Shred/Smelt	
Sub-Component: Glass End fate: Wash and grind/Crush	
Sub-Component: Circuit Boards End fate: Smelt	
Sub-Component: Refuse End fate: Landfill	
Sub-Component: Rechargeable Batteries End fate: Consolidate	
Sub-Component: Paper Based Materials End fate: Recycle	
Sub-Component: Non Rechargeable Batteries End fate: Consolidate	
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. Given the value of the metal commodity, the Program assumes that the material is recycled, but some non-metal material would need to be disposed of. Since it is a market driven system, the Program has no ability to verify or	Section 6 Pollution Prevention Hierarchy and Product/Component Management on page 16

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	Section 6 Pollution Prevention Hierarchy and Product/Component Management - Table 10: Material Management and Flow on page 17
Material: PCB Ballasts "PCB ballasts were collected and managed as hazardous waste and incinerated at high temperature in a PCB licensed incinerator. PCBs are heavily regulated from transportation to disposal by the BC Ministry of the Environment and equivalent agencies." Sub-Component: NA End fate: Incineration	Section 6 Pollution Prevention Hierarchy and Product/Component Management on page 16 Section 6 Pollution Prevention Hierarchy and Product/Component Management - Table 10: Material Management and Flow on page 17

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 5 of the 7 processors used by the program.
- 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. Sample hazardous waste manifests indicating the expected disposition of these products for shipments from the primary to secondary processors were not obtained.
- 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 were performed for 3 of the 5 processors during the 2015 fiscal year.

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Product collected

Specific disclosures in the annual stewardship report for which evaluation criteria were developed	
Disclosure per Annual Report	**Reference**
"Collection quantities for the different Program Products are based on annual reports and/or estimated based on quantities processed by the Program's processors between January 1 and December 31, 2015, as reported by the Program's processors. The reported quantities may include Program Products received in the 2014 fiscal year but processed in the 2015 fiscal year and may exclude units collected in the 2015 fiscal year that were not processed as of December 31, 2015."	Section 7 Product Sold, Products Collected and Recovery Rate on page 19
Product collected Whole Lamps – 5,322,452 units Residential Fixtures – 395 tonnes PCB Containing Ballasts – 26,544 kg Crushed Lamps – 14,193 kg "Due to the comingling of collections and processing (residential fixtures) and the complexity of the recycling system, it is not possible for the Program to be able to specifically identify the proportion of materials attributed to LightRecycle and the Program has limited ability to verify accuracy of the reported information to a precise degree of certainty." "This weight (PCB ballasts) includes the weight of the drum."	Section 7 Product Sold, Products Collected and Recovery Rate - Table 12: Estimated Quantity of Products Collected in 2015 on page 19 and footnote 10 and 11
Product Collected – Absolute Collection Data: Lamps Fluorescent Tubes (All sizes and shapes) – 2,523,568 units Compact Fluorescent Lights (CFL)/ Screw-In Induction Lamps – 994,881 units Light Emitting Diodes (LED) – 63,292 units High Intensity Discharge (HID) and Other – 208,438 units Incandescent / Halogen – 1,532,273 units "This number (fluorescent tubes) includes: 0-2', 2-4', 4-8', and U and O shaped tubes."	Section 7 Product Sold, Products Collected and Recovery Rate - Table 13: Lamp Units Collected by Product Category on page 19 and footnotes 12, 13 and 14

"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 and Poly-coated tubes. Neon and 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 (incandescent/halogen) includes projector bulbs and miniature bulbs. The program's lamps processors began reporting miniature bulbs separately at different times in 2015. Miniature bulbs were previously reported by technology."

The following evaluation criteria were applied to the assessment of the description of how total amounts of the producer's product sold and 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 for which evaluation criteria were developed	
Disclosure per Annual Report **Collection Rate Targets** Target: HID, UV, Neon lamps (units collected) 2015 Assertion – Target Exceeded	**Reference** Section 7 Product Sold, Products Collected and Recovery Rate - Table 16: Collection Rate Targets and Performance on page 21 and Section 9 Plan Performance - Table 19: Key Performance Targets and Outcomes for 2015 on page 24
Target: Residential Fixtures (tonnes collected) 2015 Assertion – Target Exceeded	Section 7 Product Sold, Products Collected and Recovery Rate - Table 16: Collection Rate Targets and Performance on page 21 and Section 9 Plan Performance - Table 19: Key Performance Targets and Outcomes for 2015 on page 24

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.