



Reference: 405885

April 9th, 2024

Kristen Romilly
Director, Western Canada
Call2Recycle
2590 Granville Street, Suite 201
Vancouver, BC, V6H 3H1

Dear Kirsten Romilly,

Thank you for submitting proposed amendments to the Call2Recycle Canada, Inc. (“Call2Recycle”) British Columbia Extended Producer Responsibility Plan for Batteries (the “plan”) initially on February 28, 2020, in fulfillment of the requirements of Part 2, Section 6 of the [Recycling Regulation](#) (the “regulation”) made under the [Environmental Management Act](#). Further, the most recent revision (2nd Revision) of the plan was submitted on September 14, 2023.

I acknowledge the efforts of Call2Recycle and the ongoing dialogue between Call2Recycle and the Extended Producer Responsibility (EPR) section staff to develop revisions and improvements to the plan to better meet the requirements of the regulation.

Under the Regulation, the director, otherwise known as the Statutory Decision Maker (SDM), has the ability to both amend an approved EPR plan on their own initiative, and to approve amendments to an approved plan that have been proposed by a producer. I have completed my review of the proposed amendments to the plan and identified that, while elements of the proposed amendments meet the criteria set out in Section 5(1) of the regulation, and my previous direction, certain components remain outstanding.

Prior to the issuance of this decision letter, Call2Recycle was provided with feedback on the proposed plan amendment and has had the opportunity to propose further amendments or provide additional information for consideration. While Call2Recycle has addressed several of the identified deficiencies, there are matters that I do not consider to be effectively addressed, which are listed below. Please be advised that in addition to the amendments proposed by Call2Recycle, and approved by me in this letter, I am further amending the plan, pursuant to Section 5(5) of the regulation concerning the following areas:

1. Barriers to Recycling Study

Considering the stable awareness rate over the past five years and the underperforming recovery rate performance, the ministry expects Call2Recycle to demonstrate why more residents are not participating in the program. Call2Recycle must adequately provide for Part 2, Section 5(1)(c)(iii) - (v), which, in part, includes reasonable and free consumer access, consumer awareness, and assessing the program performance.

- i. I am amending Section 11 (Performance Monitoring and Reporting Commitments) of the plan to initiate Call2Recycle's commitment to conduct a Barriers to Recycling study biennially, commencing in 2025. The results must be reported in the corresponding annual reports to provide key insights, details, and list any actionable steps that Call2Recycle will take to alleviate or mitigate the identified barriers. This requirement will be reviewed at each 5-year review period to determine if it is still necessary; considerations will include, but will not be limited to, levels of recovery attained and incidences of recycling.

PERFORMANCE METRIC	TARGET OR REPORTING COMMITMENT	SUBJECT TO AUDIT
Biennial Barriers to Recycling study, commencing in 2025.	Reporting Commitment	N/A

2. End-Fate Study

As the recovery rate performance remains deficient, Call2Recycle must conduct a study to demonstrate the end-fate(s) of products not directly managed by the program (e.g., what percentage of Call2Recycle batteries are managed by other EPR programs, disposed of in landfills, or otherwise improperly disposed of). It is expected that the annual Stewardship Agencies of British Columbia waste audit data pertaining to Call2Recycle's product category will be used as one of the measures to understand product end-fates. It is the ministry's expectation that this data will then be used to better understand and manage the environmental impacts of the program and inform future initiatives, be they awareness, behavioural, or otherwise, that support increased recovery rate performance.

- i. I am requiring Call2Recycle to, no later than nine months after the date of this letter, submit a Terms of Reference outlining the scope and limitations of the End-Fate study, detailing the end-fates of products not directly managed by the program. Upon ministry review of the Terms of Reference document, a date for the submission of the study will be set by the director.

Ministry Expectations

The ministry expects continuous improvement across all future plans and amendments submitted by Call2Recycle, including the following areas of concern:

A. Awareness Target

In light of the high awareness target, the ministry is looking to understand why high awareness does not translate into high recovery performance. Increased effort to engage residents in participation of the program is expected and should encompass a service design study and behavioural analysis to determine how to increase resident participation. The data gained from such studies will inform targeted efforts to engage residents in battery recycling behaviour.

The ministry also expects incremental increases to the awareness target over the next five-year program plan to assist the recovery rate performance. To provide insight into program gaps, the ministry expects that awareness for brand recognition and drop-off locations be measured alongside current awareness metrics.

B. Pilot Program

Call2Recycle's proposed pilot with respect to curbside collection is acknowledged. It is expected that the pilot will be analyzed and described in the respective annual report. Further, should the collection method prove viable, the analysis is expected to inform actionable steps to be included in the 2025 five-year amendment.

C. Recovery Rate Target

Call2Recycle's collection weight has increased each year since the program's inception in 2010, with the exception of 2017. However, the recovery rate has consistently underperformed throughout the duration of the plan. In Call2Recycle's next five-year amendment of the approved plan and future proposed plan iterations, I expect significant improvement in the recovery rate performance and increases in the recovery rate target(s).

D. Operational Cooperation (EPR Agencies)

Call2Recycle has included a commitment to investigate methods to cooperate with other EPR agencies who manage batteries in order to provide for misplaced batteries. In the next five-year plan amendment, I expect to see an explicit list of initiatives in the context of working with other programs, including timelines and milestones to be identified for each initiative, and a commitment to report on progress (and completion) of these initiatives in ongoing annual reporting.

E. Operational Cooperation (Producers)

The plan states “Call2Recycle encourages battery producers to include messages on battery packaging, informing consumers about the option to recycle batteries wherever it is possible.” The ministry appreciates Call2Recycle taking a first step to engage producers. While the ministry does not expect further action to be taken within this five-year plan amendment, staff recommend that Call2Recycle’s next plan submission, in 2025, includes a commitment to report annually on outreach methods and progress with battery producers. This would demonstrate commitment and improvement towards increasing awareness and recovery rate performance.

F. Management of Environmental Impacts

Call2Recycle has indicated that new telemetric containers will be piloted in 2024. If this becomes a permanent aspect of the program, end-of-life management of these containers will need to be included in the next plan iteration.

G. Consultation

Moving forward with consultation, Call2Recycle is expected to include extensive efforts towards informing Indigenous communities and governments of the Call2Recycle program and impacts, including informing the Indigenous Zero Waste Technical Group as a method to reach a broad Indigenous audience.

Reporting Expectations

The ministry expects this approval letter to be forwarded to Call2Recycle’s board of directors as well as its member producers, since each producer is responsible for ensuring its agent fulfills the plan, and compliance proceedings may be taken against a producer if the agent fails to implement the plan.

Recovery Rate Calculation

The plan has updated the recovery rate calculation which is now calculated by dividing the weight collected in the reporting calendar year by the average weight sold in the preceding three calendar years. I accept this calculation method as it is expected to address the variability in battery returns and provide more accurate recovery information.

Third Party Assurance for Non-Financial Information in Annual Reports

Third party assurance for non-financial information in Annual Reports is required through Section 8(2)(h) of the regulation. The assurance report should be completed in accordance with the document entitled, “Third Party Assurance Requirements for Non-Financial Information in Annual Reports” dated October 2018 and revised from time to time, which is enclosed.

Additionally, please be advised, under Part 2, Section 8(2)(h) of the regulation, the director can specify any other information required in the annual report. To ensure the continuity of all performance measures, performance requirements, and targets in the plan, reporting on each of these metrics will be maintained until they are superseded by an approved plan renewal.

Right to appeal

If you disagree with this decision, Division 2 of Part 8 of the *Environmental Management Act* provides for appeal of my decision to the Environmental Appeal Board (EAB). In accordance with the *Act* and with the Environmental Appeal Board Procedures regulation, the EAB must receive notice of the appeal no later than 30 days after the date you receive this decision. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

Thank you for your efforts on this plan amendment and I appreciate Call2Recycle's continued commitment to achieving compliance in this regard. If you have any questions regarding the implementation of the plan, please contact Extended Producer Responsibility via email at: ExtendedProducerResponsibility@gov.bc.ca.

Sincerely,



Douglas Hill, P.Eng.
Executive Director
Authorizations and Remediation Branch
Environmental Protection Division

cc: Sonya Sundberg, Executive Director, Environmental Standards Branch, sonya.sundberg@gov.bc.ca
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British Columbia Extended Producer Responsibility Plan for Batteries

Submission Dates:

February 28, 2020 (original)

February 3, 2022 (1st Revision)

September 14, 2023 (2nd Revision)

Submitted to: British Columbia Ministry of Environment and Climate Change Strategy,
Extended Producer Responsibility Section
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Glossary

Alkaline /Carbon Zinc	A type of primary battery (e.g., AA or AAA, C, D, 9V, and button batteries).
Batteries	Dry-cell rechargeable and primary batteries weighing no more than 5 kilograms each.
Carbon Zinc	A type of primary battery.
Collection Target	Projected quantity of batteries to be collected on an annual basis.
Damaged or Defective Batteries	Batteries that are not intact or are physically damaged.
Environmental Handling Fee (EHF)	A fee per unit sold that is representative of the cost to collect, handle, transport, and responsibly recycle batteries at the end-of -life.
Extended Producer Responsibility (EPR)	An environmental policy wherein the producer is responsible for the reduction of environmental impacts across the life cycle of the product.
Lithium Ion (Li-Ion)	A type of rechargeable battery.
Lithium Primary	A type of primary battery.
Nickel Cadmium (Ni-Cd)	A type of rechargeable battery.
Nickel Metal Hydride (Ni-MH)	A type of rechargeable battery.
Portable Power	A lithium-based, stand-alone rechargeable battery used to supply electrical power to electronic devices external to the device.
Primary Battery	A battery that cannot be recharged by the consumer, commonly known as AA, AAA, 9V, D-cell, and button cell batteries. Primary batteries are also known as single-use batteries.
Private Collection Facilities	A location that actively collects batteries, not open to the public for battery drop-off.
Processing	Manual, mechanical, thermal, or chemical alteration of batteries for the purpose of recycling.
Processor	An entity that engages in end-of-life management of batteries for the purpose of recycling.
Public Collection Facilities	Drop-off locations that are open to the public, even for a minimum amount of time, for collection of batteries. Includes public-facing collection events.
Rechargeable Battery	A type of battery that is capable of being charged again multiple times after its power has been discharged.
Recycling Efficiency Rate	Defined by CSA as the amount of material recycled as a percentage of the amount of targeted material collected (inbound) minus reuse and shrinkage. The measurement of recycling efficiency will differ according to the nature of materials, markets, and processing methods.
Recovery Rate	Part 1(1) of the British Columbia Recycling Regulation defines this as "the amount of product collected divided by the product generated, expressed as a percentage." Call2Recycle uses weights to determine recovery rates. The recovery rate will be calculated by dividing the weight collected in the reporting calendar year by the average weight sold into the province in the preceding three (3) calendar years.
Responsible Recycling Standard or R2	The R2 standard outlines responsible recycling practices for the recycling of electronics globally. The requirements are comprehensive and cover environmental, health and safety, and data security practices. This standard is provided through an accredited third-party to ensure the program practices are conducted in an environmentally

	responsible manner, protective of the health and safety of workers and the public, and that the data on media devices is secure until destroyed.
Small Sealed Lead Acid	A type of rechargeable battery.
Stewardship Agencies of BC (SABC)	A group of EPR agencies who work together on common issues.
Wet Cell Batteries	A battery containing liquid electrolyte such as sulfuric acid, a dangerous corrosive liquid.
Zinc-air	A type of primary battery.

1. Introduction

Call2Recycle Canada, Inc., which administers the Call2Recycle® program, is a Canadian-owned not-for-profit Extended Producer Responsibility (EPR) agency. Call2Recycle has managed a battery collection and recycling program in British Columbia (BC) under an approved EPR plan since 2010. This EPR plan for dry-cell batteries¹ under five (5) kilograms is being submitted by Call2Recycle Canada, Inc. and replaces the previously approved EPR plan submitted to the BC Ministry of Environment and Climate Change Strategy (the ministry) in 2018. More information about Call2Recycle is available at www.call2recycle.ca.

2. Duty of Producer

Call2Recycle's purpose is to assist producers in meeting their obligation with respect to collecting and recycling batteries in accordance with provincial regulations. Call2Recycle submits this EPR plan on behalf of the producers (Call2Recycle members) in accordance with Section 2(1) of the British Columbia Recycling Regulation (the Regulation), wherein a producer must:

- (a) have an approved plan under Part 2 [Extended Producer Responsibility Plans] and comply with the approved plan, or*
 - (b) comply with Part 3 [Extended Producer Responsibility Program Requirements if No Extended Producer Responsibility Plan]*
- with respect to a product in order to use in a commercial enterprise, sell, offer for sale or distribute the product in British Columbia.*

3. Appointment of an Extended Producer Responsibility Agency

Representing battery producers, Call2Recycle's members include manufacturers, brand-owners, first-importers, and retailers of dry-cell batteries weighing less than five (5) kilograms in BC. Call2Recycle also manages the regulatory requirements of obligated producers in other Canadian provinces.

Call2Recycle's EPR plan is for batteries sold as stand-alone items or sold for replacement purposes – this also includes small portable power banks. Call2Recycle represents the majority of identified obligated producers of primary and rechargeable stand-alone batteries in BC. For a list of all producers who are members of Call2Recycle, please visit www.call2recycle.ca/list-of-stewards/.

Call2Recycle sends producers written notification of their obligation. Once a producer confirms that they are obligated and appoints Call2Recycle as their designated EPR agency for batteries, the producer must enter into a formal membership agreement with Call2Recycle acknowledging that Call2Recycle will manage their obligations under the Regulation. The Membership Agreement is available to the director under the Environmental Management Act upon request.

3.1 Agency Governance

Call2Recycle is incorporated under the *Canada Not-for-Profit Corporation Act and BC Societies Act*, documentation can be found on the website at www.call2recycle.ca/about. Call2Recycle is governed by

¹ Referred to in the previous plan as “consumer batteries” and now referred to as “batteries” in this plan to align with the wording in the Regulation. Please see page 6 for a detailed list of batteries covered under this EPR plan.

a board of directors comprised of producers and independent directors. The board of directors includes representatives from multiple sectors including retail, battery manufacturing (brand-owners), battery distributors, retailers, and independent board members. A list of the Call2Recycle Board of Directors can be found in [Appendix A](#) and is available at <https://www.call2recycle.ca/board-of-directors/>.

All relevant reports, policies, bylaws, and guidelines are available to Call2Recycle's members and can be found at www.call2recycle.ca/resources-support-centre/. In addition to the website, Call2Recycle distributes member-specific newsletters a minimum of twice a year to provide relevant program updates and notifications. Call2Recycle's annual general meeting for members is held in June. The newsletters provide financial information, collection results, marketing activities, and more information. Audited financial statements are available to members in the corporate annual report and the [BC annual report](#) to the director.

3.2 Performance Monitoring and Reporting Commitments

Any changes in Call2Recycle's governance or structure from one year to the next will be disclosed in the annual report.

4. Products Covered under the EPR Plan

The Regulation's Schedule 3 for Electronic and Electrical Product Category includes 2(1)(m) "batteries that could be used in an electronic or electrical product listed in this section, including primary batteries and rechargeable batteries". In accordance with this section of the Regulation, Call2Recycle collects and recycles dry cell primary and rechargeable batteries weighing less than 5 kilograms each that are sold as a stand-alone product or for replacement purposes. This includes batteries generated by consumers, and industrial, commercial, and/or institutional (IC&I) sectors.

4.1 Products Accepted and Excluded under the EPR Plan

Accepted Products:

Alkaline	Portable Power Banks	Silver Oxide
Carbon Zinc	Nickel Cadmium (Ni-Cd)	Small Sealed Lead Acid (SSLA)
Lithium Ion (Li-Ion)	Nickel Metal Hydride (Ni-MH)	Zinc Air
Lithium Primary	Nickel Zinc (Ni-Zn)	Damaged and defective batteries ²

Excluded Products:

- Batteries weighing more than five (5) kg.
- Damaged or defective batteries sold in or with a device covered under another EPR agency's plan.
- Wet cell batteries.
- Automotive batteries

Several programs in BC manage batteries. If a battery is sold in or with a device covered under another producer appointed EPR agency's program plan, the responsibility of the end-of-life management of the

² Batteries that are sold as a stand-alone product or for replacement purposes (including recalled batteries provided that the battery was sold into the province and an Environment Handling Fee has been paid).

battery or batteries resides with the program that manages the device.

These EPR programs include:

- BC AlarmRecycle
- BC LightRecycle
- Electronic Products Recycling Association (EPRA)
- ElectroRecycle
- Thermostat Recovery Program
- Outdoor Power Equipment Institute of Canada (OPEIC)
- Telus

Pursuant to subsection 5(2)(l) and (m) of the regulation, Call2Recycle commits to investigate opportunities with other agencies to manage misplaced products.

4.2 Orphaned/Free Rider Batteries

"Orphaned batteries" refers to batteries produced by a manufacturer that either no longer exists or no longer produces batteries. "Free rider" refers to a battery produced by a manufacturer that is not a registered member of Call2Recycle. Call2Recycle makes every effort to register all obligated entities under the Regulation to eliminate free-rider activity. However, it should be noted that both orphaned and free-rider batteries are accepted by the Call2Recycle program.

5. Stakeholder Consultation

5.1 Consultation Undertaken Prior to EPR Plan Submission

The draft EPR plan and notice of consultation were posted to Call2Recycle's website (call2recycle.ca/british-columbia/) on December 18, 2019 and allowed for a 63 day consultation period ending on February 18, 2020.

Call2Recycle held 3 consultation sessions via webinar on January 14, 16, and 22, 2020. The January 14th session was by invitation to all BC Product Stewardship Council (BCPSC) members and registration was not required. The sessions on January 16th and 20th were open to all stakeholders with registration required. 75 people registered for the sessions on January 16th and 20th. 58 people in total joined the 3 sessions.

The consultation process engaged a cross-section of program stakeholders, including producers/industry, collection facilities, processors, members, local government, associations, and other EPR programs. All consultation materials were made available on Call2Recycle's website at call2recycle.ca/british-columbia/. The content of the webinar mirrored the layout and contents provided in this EPR plan renewal document.

Notice of the consultation and webinars were distributed through the following channels which targeted key stakeholders and producer-members:

- Notification to registered Call2Recycle collection facilities in BC
- Notification to BC producer-members

- Notification via Call2Recycle newsletter to subscribers
- Distribution of the notice of consultation distributed by the Recycling Council of BC (RCBC)
- Distribution of the notice of consultation distributed by the Coast Waste Management Association newsletter
- Distribution of notice of consultation distributed to all members of the BC Product Stewardship Council
- Individual email notification to other identified key stakeholders

During the 1-hour consultation webinar, approximately 30 minutes were allotted for the presentation and 30 minutes were allotted for questions. During the 3 webinars, over 20 questions were asked. Questions that were not answered during the webinar were responded to by email. A summary of comments, including written submissions, is included in [Appendix B](#). The plan has been updated following the consultation to reflect comments and feedback where possible. Where changes were not possible, rationale has been provided and is captured in Appendix B.

5.2 Ongoing stakeholder consultation

Over the course of the plan period, Call2Recycle will continue to engage with stakeholders. The program encourages stakeholders to provide program feedback on an ongoing basis. Some opportunities to provide feedback include annual general meetings for producer-members, collector and member newsletters and program updates, meetings with stakeholders at conferences and events, and visits, meetings with, and phone calls to collection facilities. Call2Recycle will initiate a survey every two years to program participants and key stakeholders to identify program benefits and areas of improvement.

Call2Recycle routinely engages other stakeholder groups including the Retail Council of Canada (RCC) to consult and update their members on pertinent program information and changes. Call2Recycle also commits to engaging with members of the BCPSC on an annual basis to provide program updates and gather feedback on program improvements. Call2Recycle will also meet with other stakeholder groups upon request to capture feedback and address concerns. Dedicated to continuous engagement with stakeholders, the program welcomes ongoing input from all involved parties. A designated feedback email address, bcplan@call2recycle.ca is displayed on the BC landing page of the website. This encourages stakeholders to share their feedback at any time.

6. Collection System and Consumer Accessibility

Call2Recycle offers an extensive network where consumers can drop off batteries for recycling as per section (5(1)(c)(iii) of the Regulation. Call2Recycle collects from 4 sectors including public agencies (health services, schools/post-secondary institutions, local/provincial/federal government), retailers, businesses (including the IC&I sector), and manufacturing.

Any entity that meets the program's collection facility requirements can participate as a drop-off location open to consumers (public collection facility) or collect batteries internally (private collection facility). Public collection facilities are strategically located where consumers are most likely to use them. Below are other considerations when adding public collection facilities:

- **Accessibility** – To ensure an optimal number of collection facilities available based on geography, needs of Indigenous communities, population density, and ease of access.
- **Convenience** – To facilitate ease of drop-off for consumers not only in urban areas but rural and remote communities by providing collection services at non-traditional drop-off locations, or recycling/round-up events.
- **Cost-effectiveness** – It is necessary to manage the program's cost-to-serve for continued growth and success.
- **Environmental health and safety** – Call2Recycle will work with companies wishing to enroll to promote environmental health and safety through battery recycling.
- **Association to batteries** – The likelihood that consumers will associate batteries with the location.

6.1 Collection System

Call2Recycle has a vast network of collection facilities across the province, providing consumers convenient access to drop-off locations for their used batteries. The program uses a qualification process for collection facilities to maximize battery returns. Call2Recycle accepts batteries from the business and IC&I sector. While these collection facilities may or may not be open to the public, they are significant purchasers and users of batteries and collectors of used batteries in BC.

Call2Recycle typically maintains about 1500 Call2Recycle collection facilities in BC. While some of the collection facilities are not open to the public for battery drop-off (offices and other workplaces, hospitals, schools), over 600 collection facilities are available for public drop-off, including:

- Depots
- Landfill or transfer stations
- Retail
- Libraries and community centres
- Municipal offices and city halls
- Collection events³

Call2Recycle is committed to picking up full collection receptacles across the province within five (5) business days of a scheduled pick-up. Call2Recycle tracks battery collections from each collection facility by chemistry. Once shipments are received at the sorting facility, the batteries are sorted, weighed, and recorded. Using this information, Call2Recycle regularly reviews the collection results in all regional districts to identify underperforming collection facilities or under-serviced areas of the province. In the case in underperforming collection facilities (facilities that have a slow rate of returning batteries for recycling), Call2Recycle staff outreach to these facilities (via phone, email, or newsletter) to encourage increased participation. In underserved areas of the province (areas of the province where Call2Recycle's level of accessibility could be improved), Call2Recycle staff pursue additional

³ Collection events are considered public drop-off locations and are included in the total number of public collection locations in the province and used in the accessibility calculation. Some smaller communities do not generate enough used batteries to ship annually or have an appropriate location to host a year-round public drop-off location. Collection events are used to ensure that small, rural, and/or remote communities have access to battery recycling.

opportunities to collect, such as identifying and contacting potential new collection locations to encourage registration for the program.

Product Pathways Not Directly Managed by the EPR Program

There may be some instances when used batteries may not flow through Call2Recycle's program. For example, when market-based commodity values for metals are high, collectors may sell their batteries rather than recycle batteries through Call2Recycle. Batteries may also be improperly disposed of in the garbage or through standard/blue-box curbside recycling. Call2Recycle commits to educating BC residents on the safe and proper recycling of batteries through a minimum of 4 campaigns annually to encourage proper recycling behaviour. As a part of Call2Recycle's annual awareness study, battery recycling behavioural trends are surveyed. Study results are used to inform promotion and education campaigns to inform residents of the appropriate way to dispose of and recycle batteries at end of life.

Call2Recycle participates in a waste composition audit facilitated through SABC. Batteries found in the waste stream cannot be solely attributed to Call2Recycle's program given the number of EPR agencies who manage batteries. The program uses information gleaned from the audit to identify areas of improvement. Call2Recycle will report on the result of the SABC facilitated waste audit in the annual report to the director.

6.2 Consumer Accessibility

Since 2010, Call2Recycle has implemented a highly accessible battery collection and recycling program serving British Columbians. Call2Recycle will continue to engage with and encourage residents to drop off their batteries at one of the many designated collection locations. Call2Recycle's goal is to ensure that at least 95 percent of British Columbians reside within 15 kilometers of an active public collection facility. Accessibility is calculated using commonly accepted Geographic Information System (GIS) practices. While coverage in urban areas may exceed the 15 kilometers accessibility standard, continuous improvements will be made to increase accessibility in non-urban communities.

Call2Recycle commits to maintain a minimum of 600 active public collection facilities⁴ throughout the province, aligning with an accessibility target of 95 percent of British Columbians residing within 15 kilometers of an active collection facility. All public collection facilities are listed on Call2Recycle's [website](#). An active collection facility must meet at least one of the following criteria: has enrolled in the program during the calendar year; has shipped batteries (a minimum of 1 box or 1 bulk shipment) during the calendar year; or has ordered a replacement box within the calendar year. Some Call2Recycle registered facilities may ship infrequently resulting in facilities appearing to be inactive based on the active collection facility criteria. The criteria established for collection facilities to remain active may impact accessibility due to reduced shipping frequency. Call2Recycle's program material is relatively small, and it may take more than a year to collect enough batteries to warrant a shipment, particularly in rural and remote communities. A collection facility may be active one year and inactive the next year.

⁴ The number of active public collection facilities may fluctuate each year. An enrolled collection facility may be participating while not meeting the criteria to be defined as an active collection facility for the calendar year. Occasionally, Call2Recycle consolidates collection facilities located closely together in high density areas to maximize efficiencies; this does not impact accessibility but can impact the number of active public collection facilities available in the province.

Call2Recycle commits to free and reasonable access to collection facilities. To ensure an optimal number of collection facilities available based on geography, population density, the needs of a community, and ease of access are considered. The program will work to increase coverage in underserved or remote areas of the province by seeking opportunities to enroll permanent collection facilities to provide year-round recycling for batteries. Call2Recycle will work with local governments, Indigenous communities, or other stakeholders on collection events if permanent collection facilities are not possible. As a member of the SABC, Call2Recycle participates in the collaborative process with the BCPSC in which local governments provide information to EPR agencies on underserved communities and identified opportunities to collect. To date, Call2Recycle has not had any requests for additional service through this process but will continue to participate and proactively work with the BCPSC and its members to improve accessibility in underserved areas of the province.

6.3 Collection Targets and Recovery Rates

The 75 percent (%) recovery rate as set out in the Regulation is challenging when applied to batteries for many reasons:

- 1) Weight of battery: Certain battery chemistries sold into the market decline year over year. For example, heavier battery chemistries, such as nickel cadmium, are being replaced by lighter lithium ion batteries. Changes to battery weights may impact the overall battery weight collected versus what is currently sold into the market.
- 2) Life of a battery: Battery life is increasing, reducing the need to replace batteries frequently.
- 3) Type of battery: Products currently requiring primary batteries in some instances may be replaced by those that run on rechargeable batteries.
- 4) Purchase habits: Batteries are generally purchased in large or multiple quantities and have a multi-year shelf life. There is generally not an immediate one-to-one relationship between battery purchase and usage. In times of crisis (natural disaster, pandemic), battery sales often increase dramatically. Consumers often purchase batteries in large quantities in case of emergency but may not use them immediately which impacts when they become available for collection.
- 5) Hoarding habits: Consumers may keep spent batteries for a long time before they recycle them. Since consumer-type batteries are typically small, they can easily be stored at home, thus consumers have no immediate urge to recycle them.
- 6) Multiple programs: Batteries are managed by multiple EPR programs (see page 6). This poses a challenge because Call2Recycle program batteries may end up in the collection streams of other programs and vice versa. Call2Recycle is the only program in BC required to report recovery rates for batteries. Batteries are not only components of devices but are also regulated products under the Regulation, including batteries sold in or with other regulated products. In the absence of a standard requirement for all programs responsible for the collection and management of batteries to report on associated collection rates, in the form of a recovery rate, there is no ability to measure a true provincial recovery rate for batteries. Call2Recycle recommends a level-playing field for reporting standards for all programs managing batteries and is willing to work with the ministry and other EPR agencies to find a solution to determine provincial diversion rates for batteries.

Call2Recycle will report on recovery rates as a performance target in annual reports. Battery weight sold into BC is based on the number of batteries by size and type (primary or rechargeable) reported by Call2Recycle's BC members. Battery units are converted to weight based on industry standards. To better address the variability in battery lifespan and availability for collection, the recovery rate will be calculated by dividing the weight collected in the reporting calendar year by the average weight sold into the province in the preceding 3 calendar years. For example, in 2023 the recovery rate will be calculated by dividing the weight collected that year (2023) divided by the average weight sold into the market in 2020, 2021, and 2022 (the preceding 3 years) and expressed as a percentage.

To address faltering recovery rates in previous years, Call2Recycle increased compensation rates to contracted bulk collectors in BC in 2023 to incentivize the generation of additional collection volume (see section 8.2 for more information on collector compensation). With the new compensation structure in place, Call2Recycle has generated additional interest from new bulk collection partners wishing to participate in the program, resulting in new bulk collection sites and additional sources of collection volumes. Call2Recycle will continue to conduct public education campaigns focusing on raising awareness of where batteries can be dropped off, which will generate additional consumer traffic at collection sites and increase collection volume. In 2024, Call2Recycle intends to collaborate with an interested municipality to pilot a battery curbside collection program. The results will be used to advise on the future viability of collecting program material in this manner.

6.4 Performance Targets and Reporting Commitments

Performance Targets:

- Accessibility rate using Call2Recycle's accessibility metric of percentage (%) of the population residing within 15 kilometers of an active public collection facility. Call2Recycle commits to maintaining a minimum of 95% accessibility rate.
- A minimum of 600 active public collection facilities.
- Recovery Rate of 52% in 2024.

Reporting Commitments:

In the annual report to the director, Call2Recycle will report on the following:

- The total weight of primary and rechargeable batteries (both by type and as an aggregated total) collected during the reporting year.
- Number of active collection facilities in the province by sector.
- Number of active public and private collection facilities.
- Number of active collection facilities in each regional district.
- Total kilograms collected in each regional district, including collections per capita.
- Location of collection facilities.
- Changes in the number of collection facilities from the previous report.
- Total kilograms of batteries sold into BC during a calendar year.
- Result of the SABC facilitated waste composition audit with respect to batteries.
- Dates, location, and results of collection events (if applicable).

All information in this section is consistent with the requirements for the assurance on non-financial information, including program specific definitions and applicable criteria.

7. Consumer Awareness

Call2Recycle's promotion and education initiatives are designed to inform consumers of the benefit of battery recycling and where and how to safely do so as per section 5(1)(c)(iv) of the Regulation.

7.1 Consumer Awareness Approach

Consumer awareness is critical to the success of any EPR program, and as such, Call2Recycle deploys a multi-pronged promotions and education approach to increase the level of awareness and incidences of consumer battery recycling. Efforts include both traditional and digital strategies, including:

- Call2Recycle website
- Social media
- Customer service call centre
- RCBC Recycling hotline and Recyclepedia
- Point-of-sale signage and handouts available to all retailers (available on call2recycle.ca)
- Sponsorships and collaborations with like-minded associations
- Advertising (Print/Online/Radio/Television)
- Media relations outreach

To gauge the effectiveness in positively moving the 'recycling' needle, Call2Recycle commits to conducting an annual provincial consumer awareness survey⁵. The survey sample size will reflect the BC population according to census information. The survey helps Call2Recycle quantify levels and trends in consumer awareness (i.e., level of awareness that batteries can be recycled) and behaviours and the effectiveness of its outreach campaigns to increase battery recycling incidence among target audiences. Call2Recycle commits to reporting the results of its annual consumer awareness survey in support of its goal to maintain an awareness level of 87 percent (%) or higher⁶. The program will also disclose the question's wording to measure awareness in the annual report. Call2Recycle will evaluate whether changes to the awareness target will be made in the next program plan due in March 2025. As part of the consumer awareness survey, Call2Recycle also measures the percentage of British Columbians who recycled batteries each year (incidence). The behaviour target for 2024 will be 54%.

To help raise awareness, drive participation, and maximize collections with BC residents, Call2Recycle will offer collection network participants opportunities to participate in various education and promotion campaigns. Call2Recycle will communicate at least semi-annually to member producers and collection site partners on public education and awareness updates via its newsletter and Public Relations outreach through a minimum of 2 press release distributions. Call2Recycle is dedicated to enhancing awareness about battery recyclability. As part of this commitment, Call2Recycle encourages

⁵Call2Recycle contracts with reputable market research companies to conduct consumer awareness studies.

⁶ Call2Recycle also participates in the SABC consumer awareness survey; however, for the purpose of the annual report to the director, the results from Call2Recycle's initiated study will be used.

battery producers to include messages on battery packaging, informing consumers about the option to recycle batteries wherever it is possible.

Objectives for consumer awareness campaigns are as follow:

1) Educate and Motivate:

Inform BC residents:

- a. That batteries can and should be recycled,
- b. Why it's important to recycle batteries,
- c. How and where to safely recycle batteries; and
- d. Share the environmental and economic benefits of battery recycling.

2) Move to action: Demonstrate the ease of accessibility to battery drop-off sites and provide options to help the public identify convenient collection locations via online and telephone locators.

7.2 Target Audiences

Target Audiences will include:

BC Residents	Collection Network	Stakeholders
<ul style="list-style-type: none"> • Consumers • Businesses 	<ul style="list-style-type: none"> • Public Sites (open to the public for battery drop-off) including, local government, retailers, and depots. • Private Sites (not open to the public for battery drop-off) including, offices, hospitals, and schools. 	<ul style="list-style-type: none"> • Local Government • Indigenous Communities • Call2Recycle Members/Obligated Producers • Industry and Trade Associations • Non-Governmental Organizations • Media • Influencers

Strategies for engaging the target audiences may include but are not limited to:

- Annual public awareness and education campaigns (e.g., National Battery Day, Daylight Saving Time, Earth Week, Canadian Environment Week and Waste Reduction Week)
- Targeted awareness programs
- Promotional Events
- Program material available at point of sale⁷
- Outreaching to businesses that generate large quantities of batteries through their internal operations to ensure they are aware that they can participate in the battery recycling program
- Engaging with school-aged children to provide education about the importance of battery

⁷ Point of sale materials are available to all members. It is at the discretion of the member whether to supply them to consumers. Materials include information on fees and accepted products.

recycling

- Ongoing communication with all active and inactive collection facilities (in-person, over the phone, and in writing)
- Newsletters to collectors and members
- Sponsorships of local conferences (e.g., RCBC and CWMA)

Call2Recycle commits to working with other programs to increase awareness and encourage recycling behaviour. Initiatives include:

- Maintaining membership with the SABC, a group of producer appointed EPR agencies seeking synergies and common solutions whenever possible.
- Participation in programs such as the First Nations Recycling Initiative (FNRI), a program supported by several producer appointed EPR agencies in BC. Stewarded materials, including batteries, are recycled through collaboration between EPR agencies and Indigenous communities. Call2Recycle is committed to engaging in projects like the FNRI that work with Indigenous communities to raise recycling awareness and foster the collection of EPR products.

7.3 Overcoming Barriers to Recycling

Call2Recycle recognizes that there are opportunities to increase battery recycling behaviour. To encourage consumers to recycle used batteries safely, Call2Recycle focuses on education regarding why, how, and where to recycle their batteries. To gain more clarity and certainty regarding the effectiveness and impact of our consumer key messages, Call2Recycle initiated a messaging and creative testing project in August 2019. The project aimed to identify the message theme that would most motivate someone to recycle their batteries. British Columbians were surveyed via Google Survey. Following the survey, Call2Recycle hosted focus groups with British Columbians to determine public preference for supporting messages or headlines that relate back to the leading message. Participants were also asked to identify the most preferred and impactful supporting creative to illustrate and deliver the related message. Feedback was consistent and clear and has informed Call2Recycle's public awareness and education campaigns.

Through market research, the program has identified segments of the population that are most likely to use batteries and, therefore, have the greatest need to recycle batteries at end-of-life. To encourage consumers to recycle used batteries rather than dispose of them in the garbage, promotion and education outreach are geared to target demographics. This approach is balanced with overall awareness-building promotion and education initiatives across the province. Call2Recycle continues investigating alternative approaches to highlight program convenience and increase participation. Call2Recycle's public education campaign in 2023 included a significant emphasis on retail partner logos and proximity to drop-off locations on TV, online and outdoor advertising to raise awareness of where batteries could be dropped off. Through the annual marketing plan, Call2Recycle commits to continuing to raise awareness about battery recycling and promote the network of convenient locations across the province where batteries can be dropped off.

7.4 Performance Monitoring and Reporting Commitments

Call2Recycle will report on the following metrics in the annual report to the director.

Performance Targets:

- Maintain an awareness level of 87% or higher.
- Report the percentage of British Columbians who recycled batteries as reported in the annual consumer awareness study, with a 55% target in 2024.

Reporting commitments:

- The question asked to measure awareness in the annual consumer awareness study.
- The percentage of British Columbians who recycled batteries as reported in the annual consumer awareness study.
- The number and type of marketing and awareness activities executed within the calendar year.
- Number of resulting searches on the web based Call2Recycle collection facility locator.
- Call2Recycle commits to a biennial barriers to recycling study with results reported in the corresponding annual report.

8. Management of Program Costs

8.1 Program Funding and Reserves

Call2Recycle's funding mechanism is based on a "fee per unit sold" model called Environmental Handling Fees or EHF's. The fees are set through a budgeting process and then reviewed and approved by Call2Recycle Canada's board of directors. Based on the number of units of batteries sold into BC, members report quantities at pre-set periods using an online system.

EHF's are calculated based on the actual cost to collect and responsibly manage batteries at end-of-life in BC and used to fund the program (including but not limited to promotion and education, collection, transportation, processing, and administration). Call2Recycle will ensure accurate member remittances through a system that includes periodic audits to verify compliance and completeness of reporting of EHF's. Each producer-member determines whether to charge the EHF as a visible line item on the receipts or to internalize EHF's into the cost of the product.

The organization maintains a reserve fund, where Call2Recycle Canada's board of directors determines reserve amounts. This fund ensures the stability of the current program and the organization's ability to deliver on any future financial obligations that may arise, including wind-down costs if necessary.

8.2 Collector Compensation

In accordance with section (5)(1)(c)(i) of the Regulation, on behalf of producers, Call2Recycle commits to collecting and paying for the costs associated with collecting and managing batteries covered under this EPR plan. This includes batteries that were previously or are currently sold, distributed, or offered for sale in BC.

Call2Recycle offers compensation to public-facing collection facilities collecting batteries in bulk quantities. A bulk quantity is defined as a shipment of more than 250 kilograms of batteries (approximately the weight of one full drum) contained in drums or Call2Recycle-provided containers

(e.g., Call2Recycle boxes) consolidated on a pallet. Qualifying collection facilities must enter into an agreement with Call2Recycle to receive compensation.

Call2Recycle engaged MNP, a Canadian national accounting, tax, and business firm, in 2019 and 2022 to review the cost compensation provided to contracted collectors. The objective of the 2019 study was to determine whether contracted compensated collectors are paid fairly for their efforts in collecting and handling Call2Recycle program material. As part of public consultation of this EPR plan in 2020, the compensation methodology was presented for comment as were the MNP findings. The 2022 study, which employed the same methodology developed for the 2019 study, was initiated by Call2Recycle in recognition of an opportunity to increase participation and enhance the data set used to determine if contracted collectors are compensated fairly. Participation did increase, allowing for the analysis of more data points.

Call2Recycle invited a representative sample of compensated collectors to participate in compensation studies. Locations that collected and shipped large volumes were selected given that these collectors spend the most time handling program materials. The results yielded from their participation also benefited those compensated collectors who manage smaller volumes of program material. Collectors in the province's rural and urban areas were invited to participate to address cost variables.

To assess fair compensation, the study compared the revenue collectors received from Call2Recycle to the costs associated with managing Call2Recycle's products. Call2Recycle provided MNP with the existing compensation rates, the average weight per container, the average weight per shipment, and the program requirements. Participating depots provided MNP with cost inputs related to both direct and overhead costs. Direct labour costs were evaluated using both the time and motion study conducted as part of the 2019 study and time estimates provided by collectors in 2022. Both approaches to labour costs were compared to ensure compensation adequately accounted for time spent managing materials.

The calculation for collector compensation includes Direct Costs and Overhead Costs.

Direct Costs	Overhead Costs
Direct Labour <ul style="list-style-type: none"> • Handling labour • Salaries • Benefits • Employer Costs Building <ul style="list-style-type: none"> • Mortgage/Rent • Renovations • Utilities • Repairs and Maintenance • Insurance 	Labour and Miscellaneous <ul style="list-style-type: none"> • Overhead labour • Salary • Benefits • Employer Costs • Office Expenses • Telephone • Other Admin Equipment <ul style="list-style-type: none"> • Material Expense • Depreciation • Equipment Rental • Repairs and Maintenance

For collection facilities that opt to use drums, the cost of purchasing drums was included in the compensation calculation⁸. Collection facilities using Call2Recycle-provided containers receive the materials at no cost. Call2Recycle commits to covering transportation costs related to the shipping of program-provided containers to and from collectors.

Call2Recycle evaluated existing compensation rates against identified costs using the study findings to determine fair compensation. The total cost per kilogram was calculated as follows:

$$\frac{(\Sigma \text{ Direct Labour Costs} + \text{Overhead Cost})}{\text{Reported Weight}}$$

As a result of both the 2019 and 2022 studies, Call2Recycle increased compensation to all collectors who have agreements with the program. Both compensation rate increases were higher than MNP's recommended rate increase. With a baseline established, Call2Recycle commits to reviewing compensation rates every two (2) years to address any substantive material changes in the market, including variables such as inflation, operation costs, and market trends within the battery category. Compensation reviews will be conducted through data collection via surveys, site visits, and interviews/phone calls with compensated collectors.

8.3 Financial Reporting

Call2Recycle complies with all annual reporting requirements as stipulated by the Regulation. The organization's finances, including financial statements specific to the BC program, are audited annually by an independent third-party auditor following generally accepted accounting principles and industry practices. The results are made public and provided in the provincial and corporate annual reports.

8.4 Performance Monitoring and Reporting Commitments

Call2Recycle remains committed to operating a transparent program. Independently audited financial statements will be produced annually and will detail revenues and expenditures for associated EHF's collected from the sales of batteries in BC during the calendar year. The audited financial statements will also be available in the BC annual report to the director and the corporate annual report, which is shared with producer-members and publicly available on the Call2Recycle website.

9. Management of Environmental Impacts

The Call2Recycle program efficiently and cost-effectively recycles batteries of all types, and no battery collected through the program that can be recycled goes to landfill. Reclaimed materials from the batteries can be used in the manufacturing of products, including new batteries, cookware, appliances, and hardware. Call2Recycle is committed to reducing the program's environmental impact including selecting local sorting and processing partners when possible, working with transportation partners committed to reducing emissions, and using reusable and/or recyclable collection receptacles.

Local Sorting and Partners: In addition to the sorting facility in Trail, BC. Call2Recycle expanded its sorting network in 2023 with the onboarding of a second sorting facility in BC located in Metro

⁸ Drum costs are based on a provincial average and have been included in the compensation formula.

Vancouver. The additional sorting partner decreases the transportation distance and related emissions generated from batteries collected in the lower mainland and Vancouver Island must travel to be sorted, and in the case of certain battery chemistries, processed.

Most of the batteries collected in BC stay in BC for processing thereby creating economic value and reducing emissions. By supporting local processing, Call2Recycle is committed to helping build a circular economy in the province.

Transportation Partners: Call2Recycle works with transportation partners that are committed to reducing their emissions. For example, Purolator, Call2Recycle's largest transportation partner, is currently investing \$100 million in fleet decarbonization and is committed to reducing their GHG emissions via various other pathways including fleet emissions reduction, renewable electricity increase, waste reduction, building and value chain emission reduction, and fuel efficiency. Call2Recycle is committed to continuing to onboard qualified BC-based suppliers to help reduce transportation emissions.

A direct pick-up service in the greater Vancouver area is currently being piloted. This service offering eliminates one leg of freight related to box fulfillment to collection sites, as the dedicated service provider can replenish the containers during the same trip they are collected, streamlining the process.

Collection Receptacles: Call2Recycle continues to evaluate the collection receptacles provided by the program to decrease the program's environmental impact. To date, the program has introduced a reusable flame-retardant box liner made from recycled material and has sourced FCS certified boxes in Canada. The boxes are recycled once they have fulfilled their useful life as a battery collection receptacle. In 2024, Call2Recycle will be piloting a new reusable container with telemetric capabilities. This container will reduce the number of single use boxes required by the program and the telemetric functionality is designed to ensure all containers being transported are full, thereby minimizing the transportation of partially full containers.

9.1 Pollution Prevention Hierarchy

Call2Recycle abides by the pollution prevention hierarchy (PPH) as required by the Recycling Regulation, Part 2, Section 5(3). The PPH —reduce, reuse, and recycle— can be more difficult to apply to batteries than to other materials and products.

Approximately 75 percent of the batteries managed by Call2Recycle program are primary batteries, otherwise known as single use. Primary batteries are not reusable or able to be reconditioned or refurbished. Once dropped off for recycling these batteries have typically exhausted their useful life. Primary batteries are often used when it is inappropriate or cost prohibitive to use rechargeable batteries and in times of emergency when recharging batteries may not be possible or practical. The best option along the PPH for single-use batteries is recycling which allows usable materials to be reclaimed through processing and used for other purposes.

Rechargeable batteries constitute the remaining 25 percent of the collected batteries under the program, with the majority being lithium-based batteries. According to best practice and manufacturer

guidelines, refurbished lithium batteries must be tested to UL 1642 standards. Call2Recycle is unable to assure the adherence of lithium battery refurbishers to this standard. With a priority on public safety, Call2Recycle currently does not endorse the practice of battery refurbishment at this time. Instead, the program maintains its emphasis on recycling batteries in a safe and environmentally friendly manner. Similarly, there are no official guidelines regarding the refurbishment of other rechargeable batteries; therefore, Call2Recycle does not support these activities due to safety concerns and lack of standards. Call2Recycle is committed to thought leadership on the viability of repurposing rechargeable batteries in a safe and compliant manner and is committed to exploring partnership opportunities with organization such as fire departments to better understand the viability of the battery reuse and reconditioning market.

9.2 Downstream Process and Program Certifications and Permits

Call2Recycle is certified under the Responsible Recycling (R2) Standard, the electronics recycling industry's leading recycling certification. The R2 Standard provides a common set of processes, safety measures, and documentation requirements for businesses that repair and recycle used electronics. The Standard lays out the proper procedures for recycling electronics with a key focus on protecting the environment and worker health and safety. The R2 Standard is based on continuous improvement, requiring Call2Recycle to improve processes and procedures around the environment, health, and safety through internal process and documentation. Organizations certified under the R2 Standard must maintain a Quality, Environmental and Occupational Health and Safety Management System. To meet these requirements, Call2Recycle is certified to ISO 9001, 14001 and 45001.

Call2Recycle maintains a diverse group of approved downstream vendors or third-party logistic providers used to transport, sort, and process program material. All contracted partners have gone through an initial and recurring annual auditing process consistent with the requirements found in the provisions of the R2 Standard. Call2Recycle's vendor due diligence is among the most stringent in North America.

The program specifies material flow for all downstream vendors through to end-of-life. A robust information system tracks focus materials (materials that require greater care during processing) as they move through the prescribed downstream vendor network. These safeguards help affirm Call2Recycle's commitment to proper downstream management of battery collections, including not exporting to developing countries or sending materials to local landfills.

Call2Recycle is committed to an open, fair, and transparent process to select the best service providers based on the provider's technology, process employed, and cost to process.

Some highlights of Call2Recycle's program are presented below:

- As program manager, Call2Recycle specifies the program material flow for all our downstream vendors through to end-of-life.
- A robust information system tracks program material as it moves through the program's downstream vendor network through to end-of-life.

Call2Recycle maintains the following certifications and permits:

Certifications:

- R2 – Responsible Recycling Standard
- ISO 9001 – Quality Management System Standard
- ISO 14001 – Environmental Management Systems Standard
- ISO 45001 – Occupational Health and Safety Management System Standard

Permits:

- Permit of Equivalent Level of Environmental Safety (PELES) – allows Call2Recycle to move batteries intended for recycling between provinces across Canada.
- Transport Canada Equivalency Certificate - authorizes Call2Recycle and its program participants to handle, offer for transport or transport products accepted for recycling within the program parameters.
- Certificate for Damaged, Defective, or Recalled (DDR) Batteries - authorizes Call2Recycle and its program participants to handle and transport DDR products accepted for recycling within the program parameters.

Call2Recycle regularly monitors the landscape to keep abreast of the activities, regulations, and new capabilities within processing facilities both locally and nationally, if available. The program also commits to annual reviews of processors to ensure they can demonstrate an ability to adapt to Call2Recycle's program growth and volume increases in recyclable materials.

In accordance with the requirements of the third-party assurance of non-financial information, Call2Recycle will report annually on product end-fates and battery recycling efficiency rates (RER) by chemistry. A third-party auditor will review any changes to the RER or product end fate disclosed in the annual report.

Targets for RER are not necessarily a suitable measure of a program's overall performance. These targets are contingent on individual processors and can shift with changes to or advancements in their technology. Call2Recycle is actively exploring other more meaningful measures to replace RER targets. Any alternatives will be presented in the next EPR program plan for batteries. Call2Recycle commits to report annually on the recycling efficiency rate target performance by battery chemistry for each chemistry type Call2recycle manages including but not limited to:

Alkaline, Carbon Zinc, Zinc Air	75% - 95%
Lithium	50% - 65%
Nickel Cadmium (Ni-Cd)	65% - 80%
Nickel Metal Hydride (Ni-MH)	70% - 85%
Lithium Ion (Li-Ion)	70% - 95%
Small Sealed Lead Acid (SSLA)	70% - 95%

Any material not recovered is due to the absence or limitations of technology or has been consumed during the recycling process. Call2Recycle will disclose the percentage of unrecovered materials and the

management method for the outputs that are not recovered for use in secondary markets in the annual report.

9.3 Safety

Safety is a core tenet of the Call2Recycle program and is reflected in every aspect of its daily operations. Call2Recycle is committed to the safety of the employees, collection sites, transporters, members, sorters, and processors involved in the used battery collection and recycling process. When certain types of batteries reach end-of-life, they may still retain a residual charge that presents a safety risk if the batteries are not handled properly. To advance the program's commitment to safety, Call2Recycle uses a patented flame-retardant liner insert in all boxes distributed in Canada. This innovation offers an additional layer of protection should a thermal event occur during the battery journey – from collection to transportation to sorting and processing. When used in conjunction with Call2Recycle's program guidelines, the liner helps prevent flames from escaping from the battery box should an event occur. Collection boxes are UN4GY-rated and have been approved by Transport Canada.

Call2Recycle is continually improving its safety policies and best practices to ensure that batteries are safely collected, transported, and recycled. The program continues to invest in innovative solutions that help mitigate risks and will ensure that any program-provided collection receptacles introduced in the future will meet all regulatory requirements and ensure the safe storage and transportation of batteries. Call2Recycle also initiates year-round public awareness campaigns on how to safely store used batteries before dropping them off for recycling.

9.4 Performance Monitoring and Reporting Commitments

In the annual report to the director, Call2Recycle will report on product end fate by chemistry type and RER by chemistry type as per the requirements of the non-financial assurance including program-specific definitions and program applicable criteria. Call2Recycle commits to maintaining certification under the R2 standard or an equivalent standard.

10. Dispute Resolution

A contract is in place for collection facilities that enter into an agreement for cost reimbursement associated with collection of batteries in bulk quantities, which outlines the dispute resolution process. The same approach will be followed for collection facilities that do not have a formal agreement with Call2Recycle. As a first step, once the issue has been raised in writing, representatives from Call2Recycle and the other party will attempt to resolve the issue within 30 days or a mutually agreed upon timeframe. If the parties cannot come to a resolution within the given timeframe, the two parties will jointly select a third party to arbitrate and settle the dispute with his/her decision. The dispute resolution procedure also applies to members and vendors, including transporters, processors, and sorters.

Any arbitration would be consistent with the *BC Arbitration Act* RSBC 1996. Call2Recycle will operate in good faith with its partners and will try to resolve a dispute without arbitration. Arbitration will only be used if both parties cannot come to a reasonable solution.

11. Summary of Performance Monitoring and Reporting Commitments

PERFORMANCE METRIC ⁹	TARGET OR REPORTING COMMITMENT	SUBJECT TO AUDIT
COLLECTION SYSTEM AND ACCESSIBILITY		
Maintain a minimum of a 95 percent accessibility rate using the accessibility metric of percentage (%) of the population residing within 15 kilometers of a public collection facility.	Target	N/A
Maintain a minimum of 600 active public collection facilities.	Target	Yes
Recovery Rate: The amount of product collected divided by the product generated, expressed as a percentage Call2Recycle uses weights to determine recovery rates. The recovery rate is calculated by dividing the weight collected in the reporting calendar year by the average weight sold into the province in the preceding three (3) calendar years. <ul style="list-style-type: none"> • 2024: 52% 	Target	Yes
The total weight of primary and rechargeable batteries (both by type and as an aggregated total) collected during the reporting year.	Reporting Commitment	Yes
Number of active public and private collection facilities.	Reporting Commitment	Yes
Number of active collection facilities in the province by sector.	Reporting Commitment	Yes
Number of collection facilities in each regional district.	Reporting Commitment	Yes
Total kilograms collected in each regional district including collections per capita.	Reporting Commitment	Yes
Location of collection facilities and the changes in the number of collection facilities from previous report.	Reporting Commitment	Yes
Total kilograms of batteries sold into BC during a calendar year.	Reporting Commitment	Yes
Result of the SABC facilitated waste composition audit with respect to program batteries.	Reporting Commitment	N/A
Dates, location, and results of collection events (if applicable).	Reporting Commitment	N/A

⁹ All performance metrics will be reported annually.

PERFORMANCE METRIC ¹⁰	TARGET OR REPORTING COMMITMENT	SUBJECT TO AUDIT
CONSUMER AWARENESS		
Maintain an awareness level of 87 percent (%) or higher.	Target	N/A
The question asked to measure awareness in the annual consumer awareness study.	Reporting Commitment	N/A
The percentage of British Columbians who recycled batteries as reported in the annual consumer awareness study. 2024: 55%	Target	N/A
The number and type of promotion and education activities within the calendar year.	Reporting Commitment	N/A
Number of resulting BC searches on the Call2Recycle web-based collection facility locator.	Reporting Commitment	N/A
Biennial barriers to recycling study,	Reporting Commitment	N/A
MANAGEMENT OF PROGRAM COSTS		
Audited Financial Statements. Detail revenues and expenditures for fees collected from the sales of batteries in the calendar year in BC.	Reporting Commitment	Yes
MANAGEMENT OF ENVIRONMENTAL IMPACTS (END FATE)		
Maintain certification under the R2 standard or an equivalent standard. <i>Auditor may verify the information to comply with NFA reporting Requirements</i>	Reporting Commitment	N/A
Management of product end fate.	Reporting Commitment	Yes
Recycling efficiency rate by type: <ul style="list-style-type: none"> • Alkaline, Carbon Zinc, Zinc Air : 75% - 95% • Lithium Primary: 50% - 65% • Nickel Cadmium (Ni-Cd): 65% - 80% • Nickel Metal Hydride (Ni-MH) 70% - 85% • Lithium Ion (Li-Ion) 70% - 95% • Small Sealed Lead Acid: 70% - 95% 	Target	Yes
AGENCY GOVERNANCE		
Any changes in Call2Recycle's governance or structure from one year to the next.	Reporting Commitment	N/A

¹⁰ All performance metrics will be reported annually.

Appendix A: Board of Directors as of September 2023

Joe Borsellino - Chateau Manis Electronics Inc.

Norman Clubb (Chairperson) - Independent

Annalise Czerny – Independent

Peter Daley - Dollarama Inc.

Julie Dickson Olmstead- Save on Foods

Tammy Giroux - Independent

David Houston- Panasonic Canada Inc.

Raman Johal – London Drugs Ltd.

James McPhedran – Independent

Alan Moyer - Independent

Tim Reuss – Canadian Automotive Dealers Association

Kevin Rejent -Energizer

Martin Tammik – Live to Play Sports

Harriet Velazquez - Independent

David Ward – Metro Ontario Inc.

Call2Recycle keeps an updated list of board of directors which is available at call2recycle.ca/board-of-directors/

Appendix B: Consultation Summary

The following stakeholder groups were consulted during the EPR agency's planning process:

- Producers/Industry
- Local governments
- Service Providers
- Collection Facilities/Program Participant
- Associations
- Stewardship Agencies

A summary of questions and comments during the consultation periods along with Call2Recycle's responses are included below and on the following pages. If the same question was asked more than once, it is only represented one time in the summary on the next pages.

Question	Call2Recycle Response	Type
<p>Question from a Collection Facility: There are significant safety concerns (flammability, overheating, etc.) for our staff removing lithium batteries from End-of-Life (EOL) power tools, toys, computers, cell phones, etc. Therefore, the proposed compensation must accommodate this concern along with the labour hours required to safely remove, handle, and store these batteries. Additionally, the compensation also has to incorporate the hours spent to package the batteries and complete the shipping paperwork.</p>	<p>The Call2Recycle program in BC is for stand-alone primary and rechargeable batteries (see pages 5-6). The program does not accept batteries that are removed from devices covered by other programs. In fact, batteries should not be removed from devices when the device is at end-of-life and should be recycled with the product. Programs who manage the devices you listed are responsible for the end-of-life management of the batteries contained within them. Therefore, the labour piece regarding removal of batteries from power tools, toys, computers, and cellphones is out of the scope of the Call2Recycle program. I would encourage you to contact the programs responsible for managing those devices to address your recycling needs. Call2Recycle's compensation methodology includes the cost to manage, package, and time for shipment paperwork for the product material within the scope of the Call2Recycle program. Updated rates will be released in March or April 2020.</p>	<p>Accepted Products</p>
<p>Question from a Collection Facility: Given the significant safety concerns with lithium batteries, we have a strict policy of ensuring they are removed from power tools, toys, etc. This is part of our rigorous Source Control program. Additionally, as long as they are less than the 5kg threshold, please advise why they should not be accepted by Call2Recycle?</p>	<p>In 2016, The BC Ministry of Environment released a guidance to stewardship agencies regarding the management of batteries. The guidance outlined that programs that manage products containing batteries are responsible for the end-of-life management of the batteries that are sold in or with products covered by the Recycling Regulation. Given that Call2Recycle does not manage products containing batteries, the scope of what is covered under our program plan includes both primary and rechargeable batteries sold as stand-alone items and for replacement purposes. Call2Recycle does not collect any fees from the sale of batteries sold in or with devices, therefore collecting batteries that fall outside of the scope of our program poses a financial challenge if significant volumes of unfunded batteries enter the Call2Recycle collection system.</p>	<p>Accepted Products</p>

Question	Call2Recycle Response	Type
<p>Question from Regional District: Under the bullet point for "Accessibility" please change to read "To ensure an optimal number of collection facilities available based on geography, needs of Indigenous Communities, population density and ease of access." This will acknowledge that other accessibility barriers exist for Indigenous Communities. You could have two collection facilities neighbouring a First Nation reserve, for example, that is never used by the FN community. Then within the plan talk about how you have reached out to Indigenous Communities to improve that all programs managing batteries should have the accessibility by working with RD's, the AANDC, other stewards through the BC First Nations Recycling Initiative.</p>	<p>The EPR plan has been updated to reflect requested changes.</p>	<p>Accessibility</p>
<p>Question from Regional District: The FVRD suggests that Call2Recycle Canada establishes an Industry Advisory Committee (IAC) as some stewards have already done. The IAC can act as a forum to provide feedback about performance and any program developments and be consulted.</p>	<p>Call2Recycle will commit to engaging with members of the BC Product Stewardship Council annually to provide program updates and to seek feedback on the program. Call2Recycle will also meet with other stakeholder groups upon request to seek program feedback.</p>	<p>Advisory</p>
<p>Question from Regional District: Under performance metrics could you please account for why some metrics are audited and others not subject to auditing. For example, should we just take it for granted that you maintain a 95 % accessibility rate according accessibility metric requirements.</p>	<p>Call2Recycle complies with the Recycling Regulation Guidance on Third Party Assurance for Non-Financial Information for annual reports. The Guidance does not require assurance for qualitative commitments including awareness and accessibility; however, the plan has been updated to include accessibility as a measure subject to audit.</p>	<p>Audited Targets</p>
<p>Question from Regional District: I personally have not seen Call2Recycle advertisements and campaigns. Can you please tell me more about some of your previous initiatives?</p>	<p>Call2Recycle runs a variety of public awareness campaigns throughout the year. Here are a number of initiatives that occurred in 2019: National Battery Day in February, Spring Daylight Savings in March, June and July summer awareness campaign, a Fall daylight saving campaign in November, and a Holiday Campaign (where 40,100 brochures containing information on the Battery Journey and where to recycle batteries) were distributed in the Langley region.). These public education and awareness campaigns incorporate both traditional and non-traditional channels to reach a wide range of audiences. For example, for 2019 National Battery Day (February 18), Call2Recycle was interviewed on City TV Vancouver Breakfast TV Television as well as featured on ad spots on top radio stations. Call2Recycle also ran a social media campaign with West Coast Mommy (a family blogger) that reached 100,000 consumers. Call2Recycle ads were seen throughout the year on Global, City TV and CTV2 and social media and digital media reached millions of people in BC.</p>	<p>Awareness</p>
<p>Question from a Stakeholder Group: Does the consumer awareness study measure awareness on a national basis or does it measure awareness in BC?</p>	<p>The awareness study measures awareness levels among BC residents.</p>	<p>Awareness</p>

Question	Call2Recycle Response	Type
<p>Question from Regional District: Consumer awareness/accessibility: It is important that the claim of consumer awareness levels also include the context of the question asked. I look forward to seeing the methodology of the survey included in the Annual Report.</p>	<p>Thank you.</p>	<p>Awareness</p>
<p>Question from Regional District: While it's great to have a social media presence and websites, probably the best place to get information is 'where consumers have the question'. Retail outlets: conversations with well-educated sales staff is the best source. Every retailer that sells batteries should be aggressive collectors – and they would be if they were compensated for their effort.</p> <p>There needs to be accessible point of purchase displays clearly describing what to do with the battery the consumer is replacing. This is where consumers actually have the question. (Note: Because the collection program has no incentives to the collector, the OFFER to retailers of a point of purchase display likely will not work. Retailers devote shelf space to information that creates revenue.) Information could be included on the packaging or on the product.</p> <p>A significant amount of communication takes place between RDKB landfill staff and site visitors regarding stewardship recycling programs in BC. This education point is the final chance. Every question we get at the LANDFILL is testament to the failure of all other education techniques employed by the stewards.</p>	<p>Retailers collect approximately a quarter of all batteries collected in the province and contribute to the program accessibility that Call2Recycle offers throughout the province. Retailers are also significant stakeholders and members of Call2Recycle and voluntarily participate in the program. Call2Recycle offers point of sale materials to all members, including retailers, and it is at the discretion of retailers whether to display those materials. Since many retailers sell multiple product streams and are members of multiple stewardship agencies, oftentimes, it is not feasible to display materials related to all product categories.</p> <p>With respect to packaging, battery producers sell products across Canada throughout North America. Not all jurisdictions have regulations in place mandating battery recycling; therefore, it would be very challenging for producers to change packaging specifically for some markets and not others.</p> <p>For these reasons, promotion and public education is a cornerstone of Call2Recycle's program to ensure that battery recycling is continually top of mind. In 2019, the program undertook a review of its consumer-facing messaging using research and BC-consumer focus groups to better understand what resonates with British Columbians and what would encourage and increase battery recycling behaviour. The 2020 campaigns have been designed with these results in mind and the program will continue to investigate opportunities to engage with British Columbians regarding the importance of battery recycling.</p>	<p>Awareness</p>
<p>Question from Regional District: Can you please clarify where and when batteries are sorted by chemistry and at what stage is the generator data recorded?</p>	<p>When batteries are received at the sorting facility, they are sorted and weighed by chemistry. It is at that point that the generator data is recorded.</p>	<p>Collection System</p>
<p>Question from Local Government: What is a public agency (section 6, paragraph 1) and what is the difference between a public agency and public collection facility?</p>	<p>Public agencies include health services, schools/universities, local/provincial/federal government. Public collection facilities are defined as those that are open to residents to drop-off batteries. Public agencies may or may not be available to the public for battery drop-off. The EPR plan has been updated for clarification.</p>	<p>Collection System</p>

Question	Call2Recycle Response	Type
<p>Question from a Collection Facility: If I receive a damaged battery, what should I do?</p>	<p>If you receive a damaged or defective lithium-ion battery place it in a non-flammable material such as sand or kitty litter or sand as soon as possible. If the battery was returned independent of a device, please call Call2Recycle's customer service team to request a free specialized kit. Transport Canada prevents damaged and defective lithium batteries from being placed and transported in a regular Call2Recycle collection receptacle. If the damaged or defective battery is embedded in or attached to a product, please contact the stewardship program responsible for managing the product for assistance.</p>	<p>Collection System</p>
<p>Question from a Regional District: 6.1 Collection System, Page 7: "As an added service offering, Call2Recycle also accepts batteries from businesses and the IC&I sectors." This statement implies that business/ICI collection is not a core part of the Call2Recycle program. Is this the case? Please explain further how business/ICI collection fits within the Call2Recycle program.</p>	<p>Thank you for your comment. The IC&I sectors are a core part of the Call2Recycle program and the wording in the plan has been revised.</p>	<p>Collection System</p>
<p>Question from a Collection Facility: What When will we know about the increased handling fees? From our knowledge, the increase was scheduled to happen in 2019 but was delayed due to the MNP study.</p>	<p>Due to the MNP study on compensation, the rate increase was delayed ensuring that all contributing factors associated with compensation (to qualifying collectors) would be factored into any rate increase. Any increases to compensation amounts will be announced in March or early April 2020.</p>	<p>Compensation</p>
<p>Question from a Collection Facility: What stewards did you partner with for the MNP study? Why was there such a low response to the MNP study?</p>	<p>Call2Recycle joined the study initiated by CESA. Four other stewardship agencies also participated in the study. Call2Recycle was hoping for more participation to provide a more complete data set for analysis; however, it is our understanding that several depots discussed the advantages and disadvantages of participating in the study and chose to abstain.</p>	<p>Compensation</p>
<p>Question from a Collection Facility: What was the make up of the responses for the MNP study? Not for profit, return to retail, independent depots?</p>	<p>All participants were from the bottle depot network as these stakeholders make up the majority of compensated collectors.</p>	<p>Compensation</p>
<p>Question from a Collection Facility: How many depots participated in the MNP cost study that collect batteries? What other stewards did you partner with for the MNP cost study?</p>	<p>Three (3) depots who collected batteries participated in the data collection process and two (2) participated in the time and motion study.</p>	<p>Compensation</p>

Question	Call2Recycle Response	Type
<p>Question from a Collection Facility: In the presentation it was noted that "Study results showed that there was a positive gross margin contribution, but there was a gap in the contribution margin." Can you please provide more details of the study's interpretation of gross margin vs contribution margin?</p>	<p>The gross margin was calculated by: Revenue (compensation from the program) – Direct Cost (labour + forklift cost +space). The Contribution margin was calculated by: Gross Margin – (Overhead* + Equipment) *MNP also included manager labour/admin time in the overhead calculation.</p> <p>When looking at basic program operations as related to gross margin, there was a positive contribution. This demonstrates that the previous compensation provided addressed basic handling of the product. When reviewing the contribution margin, the study indicated a shortfall attributed to overhead. Considering that the program cost incurred by compensated collectors includes overhead expenses, it has been determined to increase the rate to address this shortfall. While the sample size was small, MNP did suggest a larger sample size could provide further insight into the compensation rate.</p>	<p>Compensation</p>
<p>Question from a Stakeholder Group: Will a copy of the cost study be made available to anyone who requests one?</p>	<p>Please email kromilly@call2recycle.ca for a copy of the study. Financial information will not be included to ensure participant confidentiality.</p>	<p>Compensation</p>
<p>Question from a Collection Facility: The current compensation rate is not sufficient to cover our costs. Currently, it costs each of our metal recycling facilities \$110 dollars to purchase poly drums which cannot be returned to us, as the batteries are sent to an authorized facility for further processing (i.e. KC Recycling and/or Retrieval). This does not include other variables noted in item#1 above.</p>	<p>Call2Recycle offers all bulk collectors Call2Recycle boxes in bulk quantities, which alleviates the need to purchase drums. In addition, Call2Recycle is currently investigating other collection receptacles that would replace boxes in bulk quantities and drums. These receptacles are reusable and would be provided to collectors at no cost. Additional details will be provided as they become available. Please note that KC Recycling is not an approved Call2Recycle processor.</p>	<p>Compensation</p>
<p>Question from a Regional District: 8.3 Collector Compensation: Page 15: "Multiple factors are considered when calculating compensation for contracted collectors to accept and manage Call2Recycle program materials including: Labour including handling time." If Call2Recycle decides to segregate batteries at the point of collection, instead of at the point of processing, additional time for sorting batteries by chemical composition will need to be factored into the amount of labour for collectors.</p>	<p>Separating batteries by type is not required. Current transportation permits allow for the comingling of all program batteries within approved program collection receptacles. Call2Recycle does not anticipate that sorting by battery type at the collection level will become a program requirement. Should that change, labour time attributed to sorting will be factored into the compensation calculation.</p>	<p>Compensation</p>
<p>Question from a Collection Facility: When is the ministry supposed to fully approve C2R's stewardship plan? Is it before or after you're planning on announcing the increased handling fee?</p>	<p>The plan submission deadline is March 1, 2020. Approval timeline is at the discretion of the ministry. The rate increase requires some changes to our system, so at this time Call2Recycle cannot commit to a firm date but are working toward an implementation of early 2nd quarter/early spring 2020.</p>	<p>Compensation</p>

Question	Call2Recycle Response	Type
<p>Question from Regional District: The proposed stewardship plan may wish to incentivise collectors – especially retailers. The present and proposed model relies on the goodwill of non-profit organizations (libraries, municipal halls, schools who should be compensated for their good deeds) to do the work of the Steward. This is still an entry-level stewardship model. This is not sustainable. Also note that batteries – especially lithium batteries are potential fire hazards. There is no reason why schools, municipal halls and libraries are appropriate collection locations. The lack of financial compensation in the supply chain is likely the prime reason for a recovery rate target stuck at 45%. Retail collection partners exist to make a profit. They need to be financially compensated for the effort of hosting a stewardship depot.</p>	<p>There are multiple benefits for retailers to participate in the program. In 2013 and 2018, Call2Recycle engaged a third-party research firm to explore consumer recycling behaviour, with an emphasis on consumer recycling at retail. The studies found that battery recyclers value retailer participation in battery take-back and plan recycling into their shopping trip. If recycling is made convenient for them, they 'drop and shop', meaning they recycle their batteries and then stay to shop. This positively impacts store traffic and the bottom line.</p> <p>The study findings have consistently shown that those engaged with battery recycling link the value of doing so with an environmental benefit. Battery collectors (collection facilities) are seen as playing a positive social and environmental role in their communities when battery recycling is offered. The plan has been updated to include the above details.</p> <p>Organizations such as libraries, municipal halls, and schools participate on a voluntary basis as they wish to do the right thing for the environment. There is no obligation for those entities to participate; however, most view their participation in the program as an opportunity to demonstrate environmental responsibility. Call2Recycle works to ensure they have the tools to do it safely.</p> <p>Safety is a core tenet of the Call2Recycle program and is reflected in every aspect of its daily operations. Call2Recycle is continually improving its safety policies and best practices to ensure that batteries are safely collected, transported, and recycled. It continues to invest in innovative solutions that help mitigate risks. For example, in 2018, Call2Recycle introduced a patented, flame-retardant liner that is affixed to all boxes distributed in Canada. Made from recycled materials, the box liner offers an additional layer of protection should a thermal event occur during the battery journey – from collection to transportation to sorting and processing.</p> <p>With consumers heavy reliance on batteries, Call2Recycle continues to increase its education efforts around safe battery practices to reduce avoidable safety incidents.</p>	<p>Compensation</p>

Question	Call2Recycle Response	Type
<p>Question from Regional District: It is mentioned that a survey is sometimes initiated to identify program benefits and areas of improvements. Q) When was the last time a survey was conducted? And (Q) What were the results of the survey and did it help inform this draft?</p>	<p>The last survey was conducted in 2019 and feedback was used to inform this EPR plan. Call2Recycle is planning to conduct another survey in the next 12-18 months to seek feedback from program participants.</p>	<p>General</p>
<p>Question from a Regional District: Point 3.1 Agency Governance: Paragraph 2 mentions that all policies and bylaws can be found under the Resource Support Centre on the website. The RDFFG would like to see the inclusion of the EPA Plan to this webpage as it cannot be easily found on the website and is a critical document for Regional District's when dealing with waste diversion.</p>	<p>Call2Recycle will investigate options to make approved plans more easily located on the website.</p>	<p>General</p>
<p>Question from a Regional District: The British Columbia Extended Producer Responsibility Plan for Batteries includes a number of typos and awkward sentences which are noted in the attached PDF document.</p>	<p>Noted and the plan has been updated to reflect suggested changes.</p>	<p>General</p>
<p>Question from a Collection Facility: Please provide a list of your downstream processors.</p>	<p>Our processor chart is available at www.call2recycle.ca/flow-chart/</p>	<p>General</p>
<p>Question from Regional District: feel that single use batteries should have higher fees than rechargeable do the disposable nature causing a greater environmental impact & increased handling.</p>	<p>Fees are calculated based on the actual cost to collect, transport, and recycle the batteries by type and by unit including program administration. With single-use battery processing capabilities in British Columbia. Call2Recycle can maintain lower fees as a direct correlation to costs. It's a positive aspect of the program that Call2Recycle contracts with processors in British Columbia (single-use batteries do not need to be transported out of province - reducing cost and environmental impacts and contribution to the local economy). Call2Recycle cannot artificially increase the fees. The program adheres to best practice guidelines that the fees should directly correlate to costs associated with managing batteries at end-of-life.</p> <p>Regarding environmental impact, while recycling of all batteries is important, rechargeable batteries may pose a greater environmental risk than single-use batteries due to the materials used to manufacture them and their potential of leaching harmful chemicals. Single-use batteries, particularly alkaline which makes up 98% of all single-use batteries collected by Call2Recycle in BC, require minimal handling. Terminal protection is not required and can simply be placed in Call2Recycle's collection receptacles. Call2Recycle encourages British Columbians to recycle all their batteries. Our 2020 promotion and education strategy are focused on addressing 3 main points 1) Batteries can be recycled 2) Why batteries should be recycled 3) Where to recycle batteries. We remain committed to increasing battery recycling habits in the province.</p>	<p>Program Funding</p>

Question	Call2Recycle Response	Type
<p>Question from Regional District: It is quoted that it's "solely the decision of the individual member whether to charge the EHF as a visible line item on the receipts at the time of sale or to internalize the EHF into the cost of the product." (Q) Could this not be changed so that its mandatory for a visible line to charge the EHF so that people can question it and find out what it is used for. This will help further with consumer awareness and promotion?</p>	<p>The regulation does not speak to visibility of fees; therefore, the program cannot mandate whether or not fees are visible at point of purchase.</p>	<p>Program Funding</p>
<p>Question from Contracted Sorter/Processor: Has the BC government agreed to your reduced recovery rate targets versus their mandated target of 75% and if so, are they updating their EPR mandated targets?</p>	<p>Call2Recycle works with the BC Ministry of Environment to agree upon appropriate collection targets. As outlined in the EPR plan, a 75% recovery rate may not be achievable at this time; however, Call2Recycle will continue to work to increase collections year over year.</p>	<p>Recovery Rate</p>
<p>Question from Regional District: Currently the MOE has asked Stewards going through a stewardship plan update to account and report out on the number of batteries. All other stewards have been advised to develop a mechanism as to how they are going to do it. While this staggered approach will mean eventually every other steward will have to report out on the number and type of batteries, the FVRD recommends that the MOE takes any future opportunity to speed up this requirement. For example, if changes are made to the Recycling Regulation. * By other stewards reporting out on the number of batteries the FVRD expects that the Recovery Rate will increase as a % more than the current quoted targets set out in the draft. In light of this the numbers should be reviewed as to whether a high recovery rate will be achieved.</p>	<p>Thank you for your comment.</p>	<p>Recovery Rate</p>
<p>Question from Regional District: 6.2 Collection Targets & Recovery Rates: Section 6.2 describes some perceived barriers to achieving a 75% return rate. The elephant in the room is that the default for most consumers is to throw batteries in the garbage. The whole point of a stewardship program is to disrupt exactly this default. The Section describes consumer behaviour as hoarding, but I think this is actually a response to confusion. Residents know that batteries are recyclable. The just waiting to be told where and how. That is what this Stewardship plan needs to address/incentivise. The plan needs a concrete strategy to enhance consumer education, motivation, and behaviour. Social media is not enough. Advertising about recycling could be done in conjunction with sales advertising. The problem of only a 45% return rate goes beyond, batteries in appliances, accounting procedures, rolling averages and changes in battery weight.</p>	<p>Call2Recycle initiated a messaging and creative testing project in August 2019 to evaluate the effectiveness of its key messaging to consumers. The project aimed to identify the message theme that would most motivate someone to recycle their batteries. British Columbians were surveyed via Google Survey and following the survey, Call2Recycle hosted focus groups, including one in BC, to determine public preference for supporting messages or headlines that relate back to the leading message. Participants were also asked to identify the most preferred and impactful supporting creative to illustrate and deliver the related message. Feedback was consistent and clear and has informed Call2Recycle public awareness and education campaigns for 2020. The revised messaging is intended to reduce confusion and encourage British Columbians to recycle batteries and ultimately increase recovery rates.</p>	<p>Recovery Rate</p>

Question	Call2Recycle Response	Type
<p>Question from Regional District: Recovery Rate: The Plan sets a recovery rate target of 45% (increasing to 53%). This is disappointing. The Recycling Regulation calls for a target of 75%. The point of this process is to come up with a plan that will achieve 75%.</p>	<p>The program has experienced continuous improvement with respect to recovery rates since the program was first approved in 2010; however, it takes time to build to the 75% target.</p> <p>For instance, in Europe, where EPR for batteries has been in place longer than in British Columbia, there was recognition that it takes time to reach a high recovery rate. In fact, as noted in the plan, the EU battery directive called for 45% Recovery Rate at the end of 10 years.</p> <p>The most successful battery collection programs in the world – notably Belgium, Switzerland, and Netherlands – have not attained a (verifiable) 75% collection rate, and those countries are geographically smaller, have a more homogenous population and have had highly structured, mandated programs for over 20 years. Batteries are ubiquitous, embedded in products, and often disposed with their host products, making it more complex to enjoy the same collection rates expected of aluminum cans and bottles. Instead, this plan embraces continuous improvement of collection performance as more insight is gleaned about how to capture these batteries at end of life.</p> <p>Call2Recycle continues to see collections increase year over year, with collections in 2019 increasing 14% over 2018 and almost 5 million kilograms of batteries collected and responsibly recycling in BC since 2010. In fact, as of the end of 2019, collections had increased almost 500% as compared to 2010.</p>	Recovery Rate
<p>Question from Regional District: The Plan mentions that many batteries are included with appliances when these products are recycled and, although being recycled, are not counted in the recovery stats. We would like to see a concrete plan to engage with these stewards on accounting for recovery rates.</p>	<p>Call2Recycle does not have the ability to determine reporting requirements for other programs. These discussions occur between individual programs and the Ministry. Call2Recycle is committed to working with other programs and the Ministry on ensuring a level-playing with respect to reporting on battery diversion in the province.</p>	Recovery Rate
<p>Question from Regional District: The "level playing field" for reporting by other stewardship agencies who may also be managing consumer batteries is a key piece for Call2Recycle to pursue with MOE in order to establish better data to base collection amounts on.</p>	<p>Thank you. Additional wording has been added under section 6.4</p>	Recovery Rate

Question	Call2Recycle Response	Type
<p>Question from Regional District: 6.2 The current and target recovery rates do not meet the 75% required by the Recycling Regulation, and although there are many valid reasons listed in this section, this is still a shortfall of the Plan. Batteries are being disposed of in household garbage and in household recyclables (curbside and depot), this must be addressed. In 2019 Recycle BC attributed the cause of four different fires at recycling facilities managing their material to lithium batteries. Landfill fires are often traced back to lithium batteries as well. The Cariboo Regional District completed a waste audit in 2019 and consumer batteries were found in many of the 100 kg samples, see sample photos below. Perhaps increased education funding could be used to partner with Recycle BC and Local Governments to benefit everyone involved.</p>	<p>While it is unfortunate that batteries are still being thrown in the garbage, Call2Recycle is continuing to build awareness around why batteries should be recycled and convenient locations where they can be dropped off. This is especially important amongst 'wishful recyclers' who place batteries into their curbside bin or with other recyclables thinking that they'll be handled but are unknowingly creating more harm than good. To combat that behavior, Call2Recycle will continue engaging 'wishful recyclers' and increasing educational outreach efforts to help consumers become responsible and safe recyclers. Battery safety remains a key component of Call2Recycle's program and will continue to be a cornerstone of our educational campaigns.</p> <p>It must also be noted that many programs manage batteries in British Columbia, and that not all batteries that end up in landfill can be attributed to Call2Recycle. Lithium-Ion batteries are commonly found in electronic and electrical devices.</p>	Recovery Rate
<p>Question from a Collection Facility: What is the current recovery rate of batteries for 2018 / 2019?</p>	<p>The 2019 Recovery Rate is not yet available as the numbers are being finalized. Post an auditor's review of collection and sales data, final figures will be released in the provincial annual report.</p> <p>The 2018 Recovery Rate was 37%. Unfortunately, Call2Recycle missed the target by approximately 12,000 kilograms. While Call2Recycle had collected the batteries, unfortunately, the batteries were not sorted by the end of 2018 and therefore, could not be counted/applied toward our 2018 overall collection target.</p>	Recovery Rate
<p>Question from a Regional District: Call2Recycle has demonstrated significant progress in recovering greater amounts of batteries over the past few years, however further efforts are required to divert batteries from being disposed in the garbage. In particular, Metro Vancouver encourages Call2Recycle to be more ambitious in setting annual recovery rate targets to make further progress in keeping batteries out of the garbage.</p>	<p>Call2Recycle continues to increase collections year over year. In 2019, collections increased 14% over the previous year. Call2Recycle will continue to proactively collect more batteries in the province with the ultimate intent of increasing recovery rates. The proposed recovery rate targets are ambitious when compared to other jurisdictions both in Canada and Europe; however, Call2Recycle believes there is always opportunity for continuous improvement, which is why the proposed recovery rate target increases each year.</p>	Recovery Rate

Question	Call2Recycle Response	Type
<p>Question from a Regional District: The EPR Plan states that "if a battery is sold in or with a device covered under a stewardship/EPR program, the responsibility of the end-of-life management of the battery or batteries resides with the program that manages the device' and then later the EPA plan states under 6.2 Collection Targets and Recovery Rates 6) that "Call2Recycle is the only program required to report on recovery rates for batteries in BC . . . Call2Recycle recommends a level-playing field for reporting standards for all programs managing batteries." The RDIFFG would like to see Call2Recycle make it a priority to try and collaborate with other EPR programs that deal with batteries for collaboration on collection and reporting to ensure accurate recovery numbers. The set recovery rates for the EPR plan are not meeting the requirement in the Recycling Regulation that is set at 75 percent. They are especially disappointing when the recovery rate for batteries does not include waste electrical and electronic equipment and there is no mechanism in place to ensure collaboration between programs operating in the Province to account for all batteries.</p>	<p>Call2Recycle does not have the ability to determine reporting requirements for other programs. These discussions occur between individual programs and the Ministry. Call2Recycle is committed to working with other programs and the Ministry on ensuring a level-playing with respect to reporting on overall battery diversion in the province.</p>	<p>Recovery Rate</p>
<p>Question from a Regional District: 6.2 Collection Targets and Recovery Rates, Page 8: "5) Hoarding habits: Consumers may keep spent batteries for a long time before they recycle them. Since consumer-type batteries are typically small, they can easily be stored at home, thus consumers have no immediate urge to recycle them." Certainly, the compact size of most batteries allow consumers to defer recycling by storing spent batteries within homes and businesses. What options has Call2Recycle considered to create incentives for consumers to forgo 'hoarding' and recycle spent batteries? A deposit-refund system may not be applicable, but something like 'Return-It to Win It' may be a suitable model to accelerate returns of spent batteries.</p>	<p>In our experience over the past 10 years, incentivized return programs (contest, coupons, promotions, etc.) have not resulted in the increase in collections that Call2Recycle had anticipated. Therefore, the program continues to investigate new ways to engage residents to encourage them to recycle their batteries. Call2Recycle will also continue to investigate other types of incentives that may better resonate with target markets (those who use the most batteries and therefore have the greatest need to recycle batteries at end-of-life).</p>	<p>Recovery Rate</p>
<p>Question from a Regional District: 6.2 Collection Targets and Recovery Rates, Page 8: "6) Multiple programs: ... In the absence of a standard requirement for all programs responsible for the collection and management of batteries to report on associated collection rates, in the form of a recovery rate, there is no ability to measure a true provincial recovery rate for batteries. Call2Recycle recommends a level-playing field for reporting standards for all programs managing batteries." This statement requires further explanation. Presumably, manufacturers of products with integrated batteries report on the recovery of the products as a whole and not the component pieces. It is unclear how the current situation creates an un-level playing field for Call2Recycle in managing household battery collection and reporting.</p>	<p>Batteries, unlike other components in devices, are specifically covered under the regulation in section 2.1. (m) "batteries that could be used in an electronic or electrical product listed in this section, including primary batteries and rechargeable batteries". As batteries are not only components of devices, but regulated products, all program managing batteries should have the same or similar reporting requirements including but not limited to, collection rates or recovery rate, product end-fate, and product pathways as agreed upon by the BC Ministry of Environment.</p>	<p>Recovery Rate</p>

Question	Call2Recycle Response	Type
<p>Question from a Regional District: 6.2 Collection Targets and Recover Rates, Page 9: "Recovery Rate to 2022: 45% recovery rate in 2020, 47% recovery rate in 2021, 50% recovery rate in 2022, 51% recovery rate in 2023, and 54% recovery rate in 2024%. ... Call2Recycle also considers awareness and accessibility as meaningful performance indicators." Given that the awareness level (87% or higher stated in Section 7 Consumer Awareness on page 12) and accessibility level (at least 95% of BC residents reside within 15 km of an active collection facility, stated in Section 6.3 Consumer Accessibility on page 10) are quite high, accessibility and awareness alone may not be sufficient drivers for recycling batteries. Please describe options that Call2Recycle has planned to further encourage and incentivize battery recycling.</p>	<p>Through recent research and focus groups, Call2Recycle has gained additional insights on key approaches to increase battery recycling behaviour. Our targeted awareness campaign beginning in 2020 is aimed at addressing some of the insights gleaned from consumer feedback. Call2Recycle will continue to inform consumers that 1) batteries can and should be safely recycled, and 2) where to recycle batteries. Call2Recycle is also actively working on solutions to make battery recycling more convenient. All initiatives are intended to increase battery recycling in the province.</p>	Recovery Rate
<p>Question from Regional District: Collection Model: We can appreciate the challenges that come with assessing and managing disjointed supply chains. There are many ways in which consumers acquire batteries and different ways in which they are 'discarded'. However, like other jurisdictions cited in the Plan, a volunteer-based collection system (the Call2Recycle model) will probably only ever achieve 45-50%. The battery brand holders may have to look at other models with improved incentives for the collection partners. Call2Recycle may wish to incentivize consumer behaviour with a deposit/refund program. For example, Encorp Pacific achieves return rates above 80% for their deposit/refund stewardship model.</p>	<p>Refund/ Deposit System: Deposit systems work well for consumable products and products with short lifespans. It is challenging to apply a deposit or refund to products with longer lifespans, like batteries. If a battery is purchased in 2020, it may not be used and available for collection for 10 years.</p> <p>A deposit/refund system requires significant infrastructure to manage it, which would result in higher program costs, and ultimately higher Environmental Handling Fees. Call2Recycle aims to instill fundamental changes in behavior that don't depend on financial incentives. Call2Recycle continues to investigate supplemental approaches to motivate consumers to recycle batteries at end of life, including promotional offers.</p>	Recovery Rate
<p>Question from Regional District: What Has Call2Recycle participated in waste and recycling stream composition studies to determine the quantity of target batteries entering these streams? If not, would you be open to participation?</p>	<p>Yes, Call2Recycle participates in waste characterization studies as initiated through the SABC. Results are included in the provincial annual report.</p>	Waste Characterization

Appendix C: Pollution Prevention Hierarchy

Call2Recycle abides by the pollution prevention hierarchy (PPH) as required by the Recycling Regulation, Part 2, Section 5(3).

Section 5(1) of the Recycling Regulation provides that:

- (c) the plan adequately provides for*
(viii) the management of the product in adherence to the order of preference in the pollution prevention hierarchy.

Pursuant to Part 2, Section 5(3)(a)-(g) in descending order of preference, Call2Recycle manages its products as follows:

PPH Order of Preference	Call2Recycle's Product Management under the PPH
<i>(a) reduce the environmental impact of producing the product by eliminating toxic components and increasing energy and resource efficiency;</i>	Call2Recycle encourages producers to manufacture batteries that have high efficiency, are energy-dense, and have a longer lifespan. This reduces the number of units introduced into the market.
<i>(b) redesign the product to improve reusability or recyclability;</i>	Call2Recycle encourages battery producers to design batteries in a manner that improves reusability and recyclability.
<i>(c) eliminate or reduce the generation of unused portions of a product that is consumable;</i>	This level of the PPH does not apply to program materials managed by Call2Recycle, as batteries are not consumable products.
<i>(d) reuse the product;</i>	<p>Rechargeable batteries, by design, can be reused until they can no longer hold a reliable charge.</p> <p>In the context of battery refurbishment as a form of reuse, lithium-based rechargeable batteries are those most commonly eligible for refurbishment. Best practices and manufacturer recommendations stipulate that refurbished lithium batteries should undergo testing in accordance with UL 1642 standards. Call2Recycle is unable to guarantee compliance with these standards by lithium battery refurbishers. Given the importance of public safety, Call2Recycle does not currently endorse the practice of battery refurbishment at this time.</p> <p>Similarly, there are no official guidelines regarding refurbishing other rechargeable batteries; therefore, Call2Recycle does not support these activities due to safety risks and a lack of standards.</p>

<p><i>(e) recycle the product;</i></p>	<p>The single-use batteries collected as part of the program are recycled, as by design, they cannot be reused. Rechargeable batteries enter Call2Recycle’s stream at end of life. Batteries that are collected as part of the program are recycled.</p> <p>Call2Recycle facilitates connections between interested battery processors and battery manufacturers, promoting the reuse of reclaimed materials from recycled batteries to produce new ones.</p> <p>Other materials recovered through the recycling process (e.g. metals) are sold as commodities for use in the manufacturing of new products.</p>
<p><i>(f) recover material or energy from the product;</i></p>	<p>Any component of the battery that cannot be recycled will be managed via waste to energy.</p>
<p><i>(g) otherwise, dispose of the waste from the product in compliance with the Act.</i></p>	<p>In rare instances where Call2Recycle downstream processors have exhausted all the above options, any residual material will be disposed of in compliance with the act.</p>