

Battery Stewardship Program Plan for Prince Edward Island

2024 - 2028

Submitted by:

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Executive Summary

Call2Recycle Canada, Inc., (Call2Recycle) which administers the battery program (the program), is a Canadian-owned not-for-profit product stewardship organization. The stewardship program has been operating in Canada since 1997 collecting and recycling primary and rechargeable batteries nationally. In July 2015, Call2Recycle signed a Memorandum of Understanding (MOU) with the Government of Prince Edward Island.

In October 2018, amendments to the PEI Environmental Protection Act Materials Stewardship and Recycling Regulations were introduced and included household batteries. Call2Recycle's 2019-2023 Program Plan was approved and officially launched in April 2019. The program has experienced steady growth through awareness raising events, media and advertising efforts, and the participation of our dedicated network of collection site operators encouraging their employees, customers, and communities to recycle their batteries.

Call2Recycle has employed a strategic and coordinated national marketing campaign intended to reach consumers who do not recycle their batteries when disposing of them, or who stockpile large quantities of used batteries without recycling them. Using an integrated marketing approach that employed seasonal awareness campaigns, radio and online advertising, social media, retailer engagement, contests, local battery drives and key partnerships with organizations such as Earth Rangers, Call2Recycle encourages battery consumers of all ages to act responsibly by recycling their used batteries.

Continuous improvement is fundamental to the future success of the Call2Recycle program. As such, ongoing investment in research and development to enhance our collection and recycling infrastructure. Performance measures and targets herein will be achieved through enhanced public awareness initiatives, increasing accessibility, leveraging partnerships with producers and collection organizations, transparent operational management, and continued collaboration with the Province toward our shared goals. Each year a report will be provided to the Government of Prince Edward Island to review activities and performance.

Since 1997, all these initiatives have resulted in over 250,000 kilograms collected in Prince Edward Island. Since the approval of the Program Plan, collection sites increased from 33 to 124 locations in 2022, resulting in PEI having one of the best collection per capita in Canada. The program will continue to investigate and utilize new technologies and go-to-market strategies to advance battery collections and recycling in the Province.

1. Plan Submission

Call2Recycle's proposal for An All-Battery Collection and Recycling Plan for Prince Edward Island was approved for the five (5)-year period of 2019-2023. In keeping with the request of the Government of Prince Edward Island, Call2Recycle Canada, Inc. has developed this five-year battery recycling plan and is submitting it for consideration to the Environment, Energy and Climate Action for the years inclusive of 2024 through 2028.

2. Call2Recycle Overview

Call2Recycle Canada, Inc., which administers the battery program (the program), is a Canadian-owned not-for-profit Extended Producer Responsibility (EPR) agency. The program was established to fulfill the product stewardship obligations for retailers and distributors of products, battery manufacturers, and manufacturers whose products contain batteries.

Since 1997, Call2Recycle has operated a robust battery collection and recycling program across North America, and today works on behalf of battery and product manufacturers, distributors, and retailers. The program collects and recycles dry-cell batteries weighing less than five (5) kilograms from local governments, businesses, and consumers. Call2Recycle Canada is governed by a Canadian Board of Directors. Since inception, the program has diverted more than 40 million kilograms of batteries from the solid waste stream and established over 10,000 collection sites across Canada.

Our network of public and private collection sites, sorters, and processors ensures optimal efficiency, cost-effectiveness, and continued growth along with promoting ease and practicality of the program. Call2Recycle's national reach minimizes confusion among consumers and reduces administrative red tape and redundancies for larger collection site operators.

To be effective contributors to the circular economy, Call2Recycle routinely adopts best practices gleaned from national and international research to increase collections. Promoting environmental sustainability across the country, the program is the first program of its kind to receive the Responsible Recycling Practices Standard (R2) certification.

3. Program Details

3.1 Applicable Products

Batteries included:

- Rechargeable and primary (single-use) battery chemistries;
- batteries, regardless if the battery is supplied as stand-alone product or embedded in a product¹;
- dry-cell batteries, weighing less than five (5) kilograms each; and,
- batteries generated by both consumers and by private businesses or other organizations.

Battery chemistries included (See Appendix A: Glossary for detailed definitions):

- Alkaline/Carbon Zinc (AA, AAA, 9V etc.)
- Lithium Ion (Li-Ion)²
- Lithium Primary
- Nickel Cadmium (Ni-Cd)
- Nickel Metal Hydride (Ni-MH)
- Nickel Zinc (Ni-Zn)
- Silver Oxide
- Small Sealed Lead Acid (SSLA/Pb)
- Zinc Air
- Damaged and Defective batteries

Batteries sold in or with a product including:

- Garden tools
- Construction/renovation tools
- Smoke and CO alarms
- Portable flashlights and spotlights
- E-toys
- E-bikes, E-Skateboards, E-Scooters, and Hoverboards, Ride on toys

Excluded Products

This stewardship plan does not include management of:

- Motive batteries³
- Wet cell batteries
- Batteries weighing more than 5 kg
- Damaged, defective, or recalled batteries that have been removed from a device that is covered under a pre-existing approved stewardship plan.

¹ Except when batteries are sold in or with a device that is covered under a pre-existing approved stewardship plan.

² Including Portable Power Banks.

³ Managed under the Canadian Battery Association (CBA) program.

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” also refers to an obligated entity that is not a registered member of the Call2Recycle program. Call2Recycle makes concerted efforts to register all obligated entities with the program to eliminate free rider activity. However, it should be noted that both orphaned and free rider batteries are accepted by our program and are diverted from landfill.

3.2 Collection System

Call2Recycle operates a simple and highly efficient program. Our primary focus is to recycle consumer batteries wherein no battery that can be recycled goes to landfill. The program is offered to consumers dropping off their batteries at our collection sites and for those signed up as collection site partners. The program is available to all residents of Prince Edward Island including the industrial, commercial, and institutional sectors. Call2Recycle also partners with Island Waste Management Corporation and uses their existing collection network to ensure maximum provincial coverage and accessibility.

The program collects from sites located across the province for consumer convenience. Batteries are shipped and sorted by chemistry, then sent to processing partners where their component parts are extracted for reuse in such products as new batteries, stainless steel alloy, and roadbed aggregate additives.

The program’s collection partners, known as collection sites, use one of two collection methods: the bulk program or the box program. The bulk program caters to sites that generate large quantities of batteries for recycling (250 kg minimum per shipment). The box program is designed for sites that do not generate large quantities of batteries in a short period of time or do not have the space to collect bulk quantities. These sites receive collection boxes at no additional cost. The collection box kits include promotional material, plastic bags for battery terminal protection, and pre-paid shipping labels. Each box holds up to 30 kilograms of batteries. Call2Recycle covers the cost of shipping for both the bulk and box programs.

Any retailer, business, institution, or government entity which meets our collection site requirements can participate as a drop-off location that is open to consumers (public site) or collect batteries used internally (private site). Collection sites are strategically located where they are most likely to be used by consumers. Below are other considerations when adding collection sites.

- **Accessibility** – To ensure an optimal number of collection sites available based on geography, population density, and ease of access.
- **Convenience** – 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, recycling/round-up events, or through curbside battery collection special project.
- **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 that want to enroll to promote environmental health and safety through battery recycling.
- **Association to batteries** – The likelihood that consumers will correlate batteries with the location (e.g. an electronics store or recycling depots).

Public collection locations that are available to Prince Edward Island residents are listed on Call2Recycle's website. Residents can search by postal code or city and province to find a battery collection location. The program maintains a strong collection network, which as of September 2023 offers over 124 collection sites throughout Prince Edward Island.

For the duration of the stewardship plan, Call2Recycle will take proactive measures to ensure that battery collection accessibility and convenience in the province is increased. Residents across the island will be served with a variety of battery recycling options that range from permanent drop-off sites, seasonal and event-based recycling. (For strategies see section 5 Communication: Consumer Awareness and Education.)

Call2Recycle is committed to supporting the Prince Edward Island economy by working in partnership with Island Waste Management Corporation and will continue to identify solutions to work with local suppliers to transport and consolidate batteries.

3.3 Consumer Accessibility

Call2Recycle has serviced the province of Prince Edward Island for over 20 years with its collection and recycling program. At the time of this plan development, over 97% of the Prince Edward Island population has a drop off location within 15 kilometers of their home. While coverage in many urban areas exceeds the 15 kilometers accessibility standard, improvements will be made to increase the number of collection sites and/or collection methods in non-urban communities.

The program intends to maintain an accessibility rating wherein over 97% of the population will be within 15 kilometers of a public collection site over the course of the plan period (See section 8 Performance Indicators and Reporting Commitments).

3.4 Transportation, Sorting, and Processing

The program will continue to use a variety of service providers including those for transportation and sorting. To optimize participation, improve efficiency, and meet or exceed collection targets, Call2Recycle is committed to an open, transparent, and fair process in selecting service providers.

The program operates in accordance with intra- and inter-provincial shipping and transportation standards established by Transport Canada, Environment Canada, and any other applicable provincial environment and transportation ministry approvals. Shipments transported internationally are manifested/shipped according to Environment Canada and Transport Canada.

Currently there are no sorters operating in Prince Edward Island, therefore, batteries collected through the program in the province are sorted and consolidated in Ontario or Québec. Once batteries are sorted according to chemistry, their weights are recorded, and they are prepared for shipping to the appropriate recycling processor based on their chemical composition.

The program is committed to meeting the highest global standards for safe and effective battery processing. The program seeks to maximize the amount of material that is captured from processing to direct it to secondary uses. Through the Call2Recycle program, the batteries' constituent parts are

reclaimed and diverted from the waste stream. Different battery chemistries require different reclamation methods; therefore, Call2Recycle seeks partnerships with various processors to ensure optimal performance. When possible, Call2Recycle uses local processing partners to help reduce its transportation footprint. All Call2Recycle's processing facilities use the latest and proven-effective thermal, mechanical, or chemical processes to recover materials such as nickel, iron, lead, cadmium, and cobalt.

3.5 Safety

The safety of consumers, collection sites, transporters, sorters, and processors are a top priority for Call2Recycle. When certain types of batteries reach end-of-life, they may still retain a residual charge that present a safety risk if not handled properly. To advance its commitment to safety, Call2Recycle has introduced a patent pending flame retardant box liner in Canada. This innovation offers an additional layer of protection in the prevention of a thermal event during the battery journey – from collection to transportation to sorting and processing. When used in conjunction with Call2Recycle's program guidelines and regulatory terminal protection requirements, the liner helps prevent flames escaping from the battery box should an event occur. Our collection boxes are also 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.

3.6 Management of Environmental Impacts

The province abides by the pollution prevention hierarchy (PPH)—reduce, reuse, and recycle—however, this hierarchy can be more difficult to apply to batteries than to other materials and products.

Around 80 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 are often used 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 during processing and used for other purposes.

Rechargeable batteries constitute the remaining 20 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. 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 partnerships opportunities with organization such as fire departments to better understand the viability of the battery reuse and reconditioning market.

Call2Recycle's transportation and battery processing partners have passed a rigorous selection process to ensure that they comply with applicable environmental, health and safety, and transportation regulations. Each processor is continually monitored to ensure competitive pricing and the ability to adapt to volume increases. 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.

The program will report annually on product end-fates and battery recycling efficiency rates (RER) by chemistry. Any changes to the recycling efficiency rates or product end fate will be disclosed in the annual report, it must be noted that these RERs are processor specific and may change from time to time if there is a change in processor or updates to the processor's technology.

4. Communication: Consumer Awareness and Education

4.1 Strategic Approach

Consumer awareness is critical to the success of any EPR program, and as such, the program deploys a multi-pronged promotions and education approach to increase the level of awareness and incidences of battery recycling.

Call2Recycle will employ a targeted education and program awareness building campaign. Primarily focusing on Prince Edward Island residents, collection network participants (retailers, businesses, and municipalities)- will be enlisted to help raise awareness, drive participation, and maximize collections. On a parallel track, Call2Recycle will implement a proactive program to reach key opinion leaders, stakeholders, and media outlets. This will be complemented by an integrated, multi-channel approach through traditional, non-traditional, and digital media, as well as sponsorships and partnerships to efficiently reach the defined target audiences and further battery diversion goals.

While Call2Recycle operates a national program across Canada, it also appreciates the unique characteristics of individual provinces, its residents, and available communication channels. Knowing who to reach and how to reach them is critical to the success of any outreach and education plan. To that end, Call2Recycle will engage in specific research to further understand the nuances of the Prince Edward Island market.

To ensure a successful education and awareness campaign, the marketing budget will support a range of new and recurring outreach and education efforts. Consumer awareness, attitudes, and actions will be monitored using third-party surveys, and programs will be evaluated against key metrics, including annual collection results and accessibility to collection network. Based on continued learnings and outcomes, strategies and plans will be adjusted accordingly. Call2Recycle will report on the awareness survey results in the annual report.

4.2 Objectives

- 1) Educate:** Inform Prince Edward Island residents that a free collection and recycling solution exists for consumer batteries and what types of batteries can be recycled.
- 2) Motivate:** Inspire the audience to recognize the role they play — raising awareness of the importance of battery recycling.
- 3) Move to action:** Demonstrate the accessibility of battery drop-off sites, and provide a range of opportunities to find collection locations via online and through partnerships.

4.3 Target Audiences

A. Prince Edward Island Residents:

- Consumers
- Businesses

B. Collection Network:

- Public Site (collects directly from residents): Municipalities, Retailers, Communities
- Private Site (internal collections): Solid Waste Facilities, Businesses

C. Stakeholders:

- Key Influencers [(Local Government, Industry and Trade Associations, and Non-Governmental Organizations(NGOs)
- Call2Recycle Members/Obligated Parties
- Media, Experts, Influencers

5. Program Funding and Obligated Parties

5.1 Obligated Parties

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.

Call2Recycle will actively pursue obligated parties to participate under the approved program plan and will actively seek to enroll free-riders. It is crucial that the province also assist the approved program in bringing free riders into compliance through appropriate legislation and proactive outreach. Call2Recycle will provide an annual list of compliant stewards in the annual report and will provide a list to the Ministry of potentially non-compliant organizations.

5.2 Program Funding

The Program is funded by Environmental Handling Fees (EHF), the “fee per unit sold” on applicable products that are sold into a regulated province. This approach is similar to the funding model in BC, SK, MB, ON, and QC as well as standard among other industries. The EHF is applicable to all batteries sold to consumers and to the Industrial, Commercial, Institutional (ICI) sector in the designated province. There is no cross-subsidization between provinces. The EHF reflects the cost of:

- Collection, transportation, sorting, and processing
- Communication and public awareness initiatives
- Program administration
- Audits
- Research and Development to increase collections and accessibility

The organization maintains a reserve fund, whose amount is determined by Call2Recycle Canada, Inc.’s Board of Directors. This fund ensures the stability of the current program and any future financial obligations that may arise. Call2Recycle members are the obligated parties for batteries in the province and members must remit EHF’s to Call2Recycle. The program does not dictate how a steward (retailer, distributors, or others) applies the EHF. A steward may or may not choose to impose the fee onto its consumers - either via charging at point of purchase or building the EHF into the costs of the product.

6. Audits

6.1 Facility Audits and Other Certifications

Service partners are and will continue to be qualified by Call2Recycle under its rigorous selection practices. Processors are selected through a fair and transparent system that requires compliance with applicable environmental, health and safety, and transportation regulations. Processors will also be expected to have industry recognized certification(s) and audit processes in place. Some selection practice examples are noted below:

- Under the R2 standard, processors are certified every three (3) years, but must go through annual surveillance audits to maintain the certification.
- Written policies outlining corporate commitment to environmental management and continuous improvement.
- Complete tracking and documentation of materials in and out of facilities.
- Final destination receipt and disposal documentation/certification, downstream processing material management, residual material management, and residual waste management.

In an added effort to ensure the highest standards, the Call2Recycle program itself also undergoes inspections to maintain industry recognized certifications, including those listed below:

- Responsible Recycling (R2) R2V3: This certifies that Call2Recycle's management practices are comprehensive; covering environmental, health and safety, and data security practices.
- International Standardization Organization (ISO) 14001: This certifies Call2Recycle's Environmental Management Standards for the management of the collection, and the distribution to downstream processors, for the recycling of batteries.
- Occupational Health and Safety Advisory Services (OHSAS) 18001: This certifies Call2Recycle's Occupational Health and Safety Management System for the management of the collection, and the distribution to downstream processors, for the recycling of batteries.
- Quality Management System (QMS) ISO 9001: This certifies Call2Recycle's Quality Management System that ensures a common-sense approach to the management of the organization to consistently satisfy customers and other stakeholders.

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

6.2 Audits of Members/Obligated Entities

Call2Recycle audits and inspects the records of its Members with respect to the sale, supply, distribution and importing of the applicable products in Prince Edward Island to verify the accuracy of the remittances of EHF's by the Member to Call2Recycle.

6.3 Audit of Financial Information

Call2Recycle complies with annual reporting requirements as stipulated by the Government of Prince Edward Island. Its consolidated finances are audited annually by an independent third-party auditor, and the results are made public and provided to stakeholders. The audit covers all the organization’s operations nation-wide.

A report specific to the province will be provided to the Government of Prince Edward Island annually. The report will provide an account of activities in the Province as it relates to the waste management of batteries, including all reporting requirements, targets, and commitments (limited to consumer outreach and education, and collection performance).

7. Performance Indicators and Reporting Commitments

Annually, Call2Recycle will meet with the Ministry of Environment, Energy and Climate Action to review the program and discuss performance. An annual report on the reporting commitments below will be submitted to the Minister of Environment, Energy and Climate. Once approved, the report will be publicly available via posting on Call2Recycle’s websites.

INDICATOR	REPORTING COMMITMENT
Collection	<ul style="list-style-type: none"> • Number of collection sites • Total weight of batteries collected • Batteries collected per capita
Accessibility	<ul style="list-style-type: none"> • Percentage of population within 15 kilometers of a Call2Recycle public facing collection site or Call2Recycle partner
Awareness	<ul style="list-style-type: none"> • Percentage of residents aware that batteries can be recycled in PEI
Management of Environmental Impacts	<ul style="list-style-type: none"> • Disclosure of Recycling Efficiency Rate by Processor
Financial	<ul style="list-style-type: none"> • Audited Financial Statement for PEI
Obligated Entities	<ul style="list-style-type: none"> • List of all Prince Edward Island members of Call2Recycle

8. Appendices

Appendix A: Glossary

The following is a glossary of key terms and definitions related to the products covered in this plan.

TERM	DEFINITION
Alkaline /Carbon Zinc	A type of primary battery (e.g. AA or AAA, C, D, 9V, and button batteries).
Lithium Ion (Li-Ion)	A type of rechargeable battery. Li-Ion batteries are typically found in portable devices, such as cellular telephones, tablets, laptop computers, and digital camcorders.
Lithium Metal/Lithium	A type of single-use battery.
Nickel Cadmium (Ni-Cd)	A type of rechargeable battery. Ni-Cd can typically be found in cordless power tools, digital cameras, two-way radios, and cordless phones.
Nickel Metal Hydride (Ni-MH)	A type of rechargeable battery. Ni-MH can typically be found in cordless power tools, digital cameras, two-way radios, and cordless phones.
Portable Power Banks	A rechargeable battery, typically Li-Ion, surrounded by a casing used for the purpose of recharging a device.
Primary /Single-Use Battery	A battery that cannot be recharged by the consumer (for example, but not limited to, alkaline, Carbon Zinc, lithium and zinc-air commonly known as AA, AAA, 9V, D-cell, and button cell batteries).
Rechargeable Battery	A type of battery that is designed to be used for a longer period of time than single-use and is capable of being recharged. It can also be referred to as a “secondary” battery (for example but not limited to, Li-Ion, Ni-MH, SSLA, Ni-Cd).
Small Sealed Lead Acid (SSLA)	A type of rechargeable battery. These relatively heavy batteries can typically be found in emergency devices, emergency exit signs, security systems, mobility scooters, and UPS back-ups.
Zinc-air	A type of single-use battery. These batteries can typically be found in small devices such as hearing aids.