

Battery Stewardship Renewal Plan for Manitoba

2024-2028

Submitted by:

Call2Recycle Canada, Inc.
100 Sheppard Ave East, Suite 800
Toronto, ON M2N 6N5
<http://www.call2recycle.ca>

Submitted to:

Manitoba Environment, Climate and Parks

Table of Contents

Table of Contents	2
Executive Summary	3
1. Plan Submission	4
2. Call2Recycle Overview	4
3. Collection System and Consumer Access	5
4. Transportation and Sorting	11
5. Processing of Products	11
6. Consumer Awareness - Education and Outreach	13
7. Funding Structure	15
8. Management of Environmental Impacts	16
9. Dispute Resolution	18
10. Performance Measurement and Targets	18
11. Appendices	21
Appendix A: Glossary	21
Appendix B: Physical Flow Chart	22
Appendix C: Highlights from Ipsos Reid Research - 2021	23
Appendix D: Manitoba Battery Stewards	24
Appendix E: Summary of Performance Measures	27

Executive Summary

Call2Recycle Canada, Inc., which administers the Call2Recycle® 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. Call2Recycle has been Manitoba's provincially-approved extended producer responsibility (EPR) organization for stand-alone replacement batteries used in household electronic and electrical products and weighing up to five kilograms since 2011.

Since the program was officially launched, Call2Recycle has collected more than 950,000 Kg of batteries in the province and diverted them from the waste stream. The program has experienced steady growth for the last ten years as a result of many awareness raising events, media and advertising efforts, and participation by our dedicated network of collection site operators encouraging their employees, customers, and communities to recycle their batteries.

Pursuant to the requirements of the Manitoba Household Hazardous Material and Prescribed Material Stewardship Regulation, this Product Stewardship Plan is being submitted for review and approval for Call2Recycle to continue as the battery stewardship program for the Province.

This plan covers the five-year period from 2024 through 2028. It provides an outline of current program operations and our plans to further grow the program in Manitoba.

During the course of this plan, Call2Recycle proposes to:

- Increase consumer awareness of battery recycling from 76% to 86%
- Increase incidence/frequency of battery recycling from 54% to 62%
- Increase accessibility to recycling from the current 90% to 95%¹
- Reach a recovery rate of 32% by 2028

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 is essential. Performance measures and targets herein will be achieved through enhancing public awareness initiatives, increasing accessibility, leveraging partnerships with producers and collection organizations, transparent operational management, and continuing collaboration with the Province toward our shared goals. Every year a report will be provided to Manitoba Environment, Climate and Parks to review activities and performance.

Call2Recycle has proven its ability to meet the requirements of a stewardship program for Manitoba Environment, Climate and Parks over the past years. We are focused on overcoming any challenges present in the marketplace, and we continue to investigate and utilize new technologies and go-to-market strategies. We look forward to continued collaboration with Manitoba Environment, Climate and Parks and the residents of the province to increase battery collections and recycling.

¹ Accessibility defined as the % of the population within 15km of a collection site.

1. Plan Submission

In keeping with the requirements of the Household Hazardous Material and Prescribed Material Stewardship Regulation (the “Regulation”) issued under The Waste Reduction and Prevention Act and the Guideline for stewardship programs issued in Manitoba, Call2Recycle Canada, Inc. has developed this five-year battery recycling plan renewal and is submitting it for approval to Manitoba Environment, Climate and Parks.

2. Call2Recycle Overview

Call2Recycle Canada, Inc., which administers the Call2Recycle® program, is a Canadian-owned not-for-profit product stewardship organization. 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 more than 400 battery and product manufacturers and retailers. The program collects and recycles dry-cell batteries weighing less than five (5) kilograms from local governments, businesses, and consumers at no cost to them. Call2Recycle Canada is governed by a Canadian Board of Directors.

Its network of public and private collection facilities, 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.

In order to be effective contributors to the cause of conservation and recovery, Call2Recycle routinely adopts best practices gleaned from its own research and from associate organizations both in Canada and internationally to increase collections. Promoting environmental sustainability across the country, the program meets Basel Action Network (BAN) e-Steward qualification standards, and is the first program of its kind to receive the Responsible Recycling Practices Standard (R2) certification. As a result, Call2Recycle is the preferred choice for product stewards and stakeholders including retailers, governments, stewardship organizations, associations, and NGOs.

In 2011, the Manitoba Government approved Call2Recycle as the agency to meet producer obligations for household batteries. In 2018, the Manitoba Government approved Call2Recycle’s five-year renewal plan, until 2023. As required by the government we are submitting this five-year renewal plan for review and approval, for the period of 2024-2028. This Product Stewardship Plan proposes to continue to build on the past success of the Call2Recycle program in Manitoba.

3. Collection System and Consumer Access

Call2Recycle operates a simple and highly efficient program. The primary focus is to recycle consumer batteries wherein 100% of batteries collected through the program are diverted from landfill. The program is offered at no cost to consumers dropping off their batteries at collection sites and for those signing up as collection site partners.

The program collects batteries weighing up to five (5) kilograms from collection facilities 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.

Applicable Products

Call2Recycle manages a recycling program for batteries which includes:

- Rechargeable and primary (single-use) battery chemistries
- Batteries, regardless of whether the battery is supplied as a stand-alone product or embedded in a product
- Batteries generated by both consumers and those generated by private businesses and other organizations

The Call2Recycle program accepts dry-cell batteries weighing less than five (5) kilograms each. Below is a list of the battery chemistries we accept:

- Nickel Cadmium (Ni-Cd)
- Nickel Metal Hydride (Ni-MH)
- Lithium Ion (Li-Ion)
- Nickel Zinc (Ni-Zn)
- Small Sealed Lead Acid
- Portable Power Banks
- Lithium Primary
- Alkaline/Carbon Zinc (AA, AAA, 9V etc.)
- Zinc Air
- Silver Oxide

Batteries sold in or with a product² including:

- Garden tools
- Construction/renovation tools
- Smoke and CO alarms
- Portable flashlights and spotlights
- E-toys

² Products not covered under an existing stewardship plan.

Some products containing easily removable batteries are selected for inclusion based on the likelihood that their batteries will end up in Call2Recycle's recycling stream due to frequency of battery replacement associated with usage. The program's goal is to ensure that applicable batteries are safely managed at end-of-life while also minimizing the potential for cross-subsidization between products and categories. Applicable products may include garden tools, construction and renovation tools, smoke and carbon monoxide alarms, portable flashlights and spotlights, electronic toys, and e-mobility (electric bicycles, electric scooters, and electric skateboards). Any fee placed on these categories is intended to manage the batteries and not for the device itself. Product categories are subject to change.

(See Appendix A: Glossary for detailed definitions.)

Excluded Products

This stewardship plan does not include management of:

- Motive batteries ³
- Wet cell batteries
- Batteries weighing more than 5 kg

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 manufacturer that is not a registered steward with the Call2Recycle program. It should be noted that both "orphaned" and "free rider" batteries are accepted by the program, and all batteries are diverted from landfill. Call2Recycle makes concerted efforts to register all battery manufacturers with the program to eliminate "free rider" activity to ensure fairness in the market and compliance with the Regulations. This ongoing process involves identifying potential "free riders" followed by a series of recruitment actions including contacting the organization through letters and follow-up phone calls. This formal undertaking is continued until the "free rider" signs on to the Call2Recycle program or provides information that it has its own battery recycling program in the Province. In the case that the organization either refuses to comply or is unresponsive to our efforts and we have exhausted all avenues, Call2Recycle seeks assistance from Manitoba Environment, Climate and Parks to bring these Stewards into compliance.

Collection System

Since 2011, Call2Recycle has laid the foundation for a robust battery collection and recycling program serving Manitoba residents and businesses. In total, more than 940,000 kilograms of batteries have been collected and diverted from the Manitoba waste stream. Call2Recycle will continue to engage with and encourage residents to drop-off their batteries at one of our many collection sites.

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

Call2Recycle collection facilities use one of two collection methods: the bulk or box program. The bulk program caters to facilities that generate large quantities of batteries for recycling (230 kg minimum per shipment). The box program is designed for facilities 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 facilities receive collection boxes free of charge. The box kits include promotional material, plastic bags for battery terminal protection, and pre-paid shipping labels. Each box holds up to 25 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 facilities 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, remote northern and first nation communities, 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, holding recycling/round-up events, or through curbside battery collection.
- **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).

Collection locations that are available to Manitoba residents are listed on Call2Recycle's website and mobile phone locator. Residents can search by postal code or city and province to find a battery collection location. In addition, they can utilize the 'Recycle on the Way' feature that allows them to provide a start and end address and then shows drop-off locations that are en route to their destination.

Evidence from collection programs around the world shows that simply increasing the total number of collection sites doesn't necessarily increase battery collections -- it must be done strategically and carefully.

For the duration of this plan Call2Recycle will take proactive measures to increase the number of collection sites across the province specifically targeting municipalities, retailers, businesses, and government agencies. We will also work to ensure that residents in urban, rural, and remote areas (including First Nation communities) are served with a variety of battery recycling options that range from permanent drop-off facilities, seasonal and event recycling. (For strategies see section 6. Consumer Awareness.)

Over the past years, Call2Recycle has been signing up various businesses as private collection sites. As part of this renewal plan, efforts will continue to sign up these large volume generators of spent batteries. They also have the option to use Municipal and Eco-Depots that are open to

the public. Depots are accessible by anyone, including large volume generators unless the specific depot has chosen otherwise.

Northern, Remote, and First Nation Communities

Northern, remote and First Nations communities pose specific challenges to collecting not only batteries for recycling, but all stewarded materials. These communities include geographic areas not serviced by Canada Post, only accessible by plane or ice roads in winter, and low population density spread out over a large area. Some of the issues in servicing these communities include land transport accessibility, cost of service, infrastructure and willingness of the locals to participate.

Call2Recycle will continue its collaboration with a variety of remote communities including First Nations, municipal offices and provincial government. Call2Recycle has joined forces with other Producer Responsible Organizations (PROs) in order to more effectively service remote communities by pooling resources, sharing costs, and promoting and educating on recycling. Call2Recycle partners with other PROs in Manitoba to provide recycling services to First Nations communities accessible by seasonal ice roads. The project focuses on ensuring communities have the required materials to collect, store, and safely transport stewarded materials and on the removal of designated stewardship material from selected communities.

In the coming years Call2Recycle will continue to work with organizations such as Indigenous and Northern Affairs Canada to participate in Environmental Awareness sessions with First Nations communities. Call2Recycle will deliver educational material to create awareness for our program among the First Nations chiefs and their communities.

Consumer Accessibility

Call2Recycle has serviced the province of Manitoba for more than 20 years with its collection and recycling program. At the time of this plan development, 90% of the Manitoba 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 facilities and/or collection methods in non-urban communities as well as First Nations communities.

By the end of 2028, Call2Recycle intends that 95% of the population will be within 15 kilometers of a public collection site. (See section 10. Performance Measurement and Targets)

The following chart and map depict the current Call2Recycle collection network.

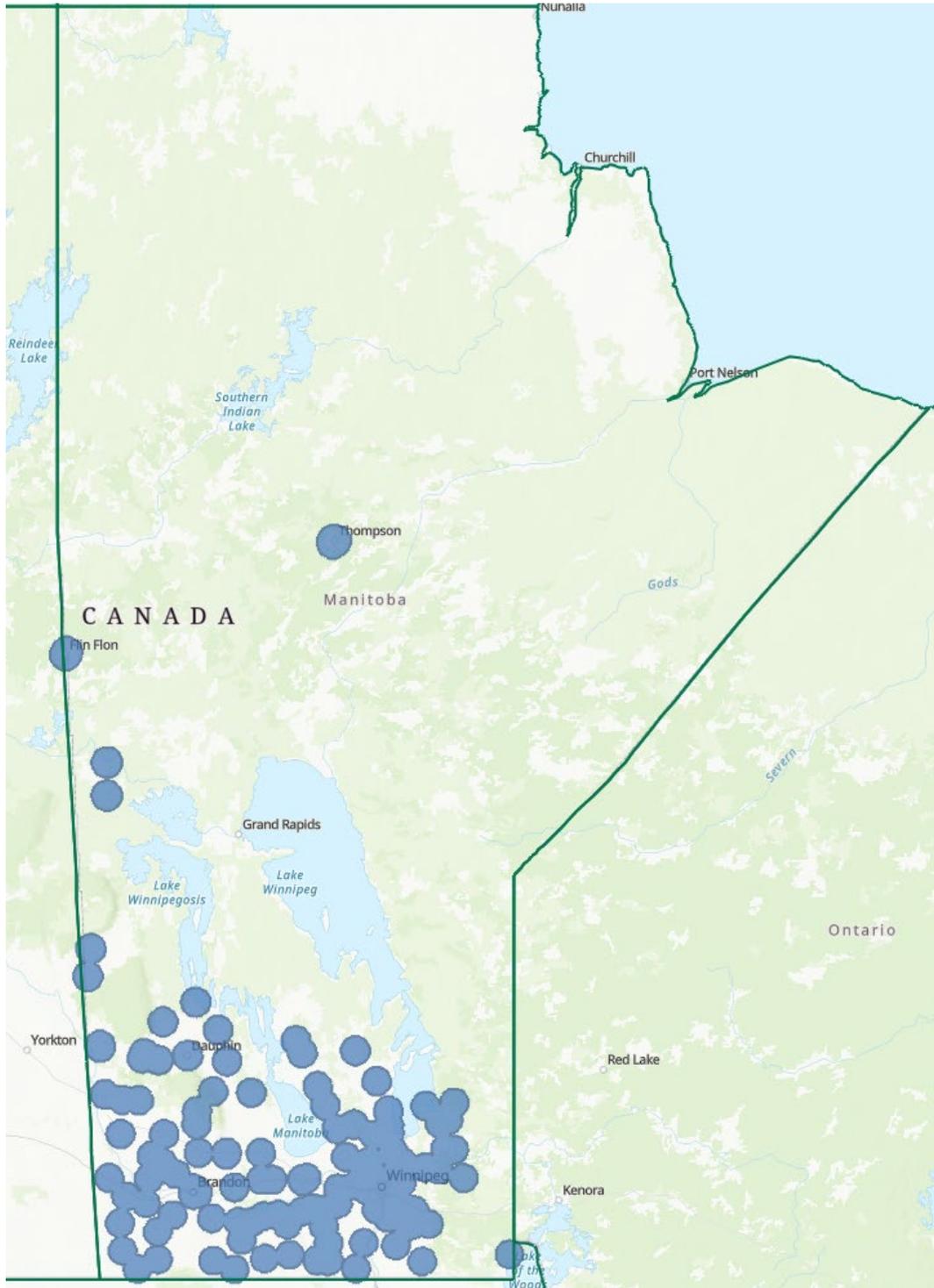
Manitoba Network Summary

Total Active Sites	Active Public Sites	Active Private Sites	Accessibility
755	352	403	90%

In an effort to continually improve the convenience of its collection network within Manitoba, Call2Recycle will evaluate the Manitoba network on a semi-annual basis and actively solicit participation when and where needed.

Call2Recycle will also continue testing new methods for collecting batteries from Manitoba residents to enhance access.

Manitoba Collection Network Map



4. Transportation and Sorting

Call2Recycle will continue to utilize a variety of service providers including those for transportation and sorting. (See Appendix B: Call2Recycle Physical Flow Chart) In order 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.

Call2Recycle 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, Transport Canada, US Environmental Protection Agency, and the US Department of Transportation.

Currently there are no sorters operating in Manitoba. Therefore, batteries collected through Call2Recycle in the province are sorted and consolidated in Ontario. While sorting batteries is currently done manually, new technologies are emerging and Call2Recycle remains at the forefront of investigating and utilizing these resources.

Once batteries are sorted according to chemistry, their weights are recorded, and they are readied for shipping to the appropriate recycling processor based on their chemistry.

5. Processing of Products

Call2Recycle is committed to meeting the highest global standards for safe and effective battery processing. It seeks to maximize the amount of material that is captured from processing to direct it to secondary uses. Through the Call2Recycle program, all of the battery's 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. It seeks local processing partners wherever possible to reduce our transportation footprint. All of our processing facilities use the latest and proven-effective thermal, mechanical, or chemical processes to recover materials such as nickel, iron, lead, cadmium, and cobalt.

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:

- 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, like those listed below:

- Responsible Recycling (R2) 2013: 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.
- Basel Action Network (BAN): Call2Recycle is the first battery recycling program to be recognized as an e-Steward, by the Basel Action Network (BAN), for ensuring that the battery and electronic waste (e-waste) that the program collects and recycles is not dumped in developing countries, local landfills, or incinerators. Thus, certifying that the Call2Recycle program adheres to the strictest social and environmental standards.

Call2Recycle regularly monitors the landscape to keep abreast of the activities, regulations, and new capabilities within processing facilities both locally (unfortunately at this time there are no processors in Manitoba) and nationally. 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. Consumer Awareness - Education and Outreach

Strategic Approach

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

- Call2Recycle website
- Google AdWords
- Social media
- Customer service call centre
- Point-of-sale signage and handouts available to all retailers (available on call2recycle.ca)
- Sponsorships and collaborations with like-minded associations
- Traditional Advertising
- Media relations outreach

To gauge its effectiveness to positively move the ‘recycling’ needle, Call2Recycle conducts a provincial annual consumer awareness study⁸. The study helps Call2Recycle quantify levels and trends in consumer awareness (i.e. level of awareness that batteries can be recycled) and behaviors 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 study in support of its goal to maintain an awareness level of 78 per cent (%) or higher⁹. The program will also disclose the wording of the question posed to measure awareness in the annual report. As part of the consumer awareness survey, Call2Recycle also measures the percentage of Manitobans who recycled batteries each year (incidence). These numbers will be included in each annual report.

To help raise awareness, drive participation, and maximize collections with Manitoba residents, Call2Recycle will offer opportunities to collection network participants to take part in various education and promotion campaigns. On a parallel track, Call2Recycle will implement a proactive outreach program targeting opinion leaders, stakeholders, and media outlets. This will be complemented by integrated, multi-channel promotions through traditional and digital media, as well as sponsorships and partnerships to efficiently reach the defined target audiences and further battery diversion goals.

Objectives for consumer awareness campaigns are as follow:

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 continue to engage in specific research to understand the nuances of the Manitoba market. (See Appendix C for Highlights of 2015 Ipsos Reid Research Summary and Learnings.)

To ensure a successful education and awareness campaign, the communications budget will support a range of new and recurring outreach and education efforts. We will monitor consumer behaviours, attitudes, and actions, and will evaluate programs against key metrics, including collection targets and collection network accessibility. Based on continued learnings and outcomes, strategies and plans will be adjusted accordingly.

Objectives

1. **Educate and Motivate:** Inform MB residents:
 - a. Batteries can and should be recycled
 - b. Why it's important to recycle batteries
 - c. How and where to safely recycle batteries

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.

Target Audiences

Target Audiences will include:

MB Residents	Collection Network	Stakeholders
<ul style="list-style-type: none"> • Consumers • Businesses 	<ul style="list-style-type: none"> • Public Sites (collects directly from residents): Municipalities / Local government, Retailers, Communities • Private Sites (internal collections): Solid Waste Facilities, Businesses 	<ul style="list-style-type: none"> • Key Influencers (Local Government, Industry and Trade Associations, and Non-Governmental Organizations) • Call2Recycle Members/Obligated Producers • Collectors • Media, Experts, Influencers

Call2Recycle's collection network - whether a public or private site - receive ongoing training and support. Education is provided on how to participate as a collection site. Other materials are designed to educate staff, and show how to promote collections to the public. A variety of communication vehicles are used to increase consumer awareness on battery recycling at the point of sale including posters, rack cards, bookmarks, promotional items, brochures, signage, newsletters, email blasts, etc. For some examples of material visit <http://www.call2recycle.ca/downloads/>

To further promote recycling of batteries, Call2Recycle requests that collection boxes are placed in an area that is clear and visible. However, the decision on where to place collection receptacles lies with the individual sites.

Below is an overview of the marketing plan in chart form.

Audience	Strategies	Campaigns/Tactics
A. Manitoba Residents & Businesses		
Consumers	Seasonal Campaigns: National & Local	National: National Battery Day, Earth Day, Circular Economy Month Local: Manitoba Moose partnership, Summer Collection initiatives.
Businesses	Key Industry-focused Campaigns	Campaigns targeted at Healthcare, Hospitality, Education, Travel, Solid Waste Facilities
B. Collection Network		
Municipalities/ Communities	Campaigns for organizations who collect directly from residents at public and private places	Collection site Newsletter
Retailers		Retail Campaigns Retailers Newsletter
C. Stakeholders		
Key Influencers	Partnerships with Local Government, Industry and Trade Associations, Non-Governmental Organizations	Association Partnerships: AMM, MARR NGO Partnerships: Manitoba Eco-Network Environmental Partnerships: Pride Manitoba
Stewards	Activities focused on supporters and contributors to our program	Stewards Newsletter
Thought Leaders	Programs targeting media, journalists, subject matter experts, key decision makers	National and Local Media campaign Focused events and conferences

7. Funding Structure

Call2Recycle's funding mechanism is based on a "fee per unit sold" model referred to as Environmental Handling Fees or EHF. 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 MB, 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 MB 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 the EHF into the cost of the product.

The organization maintains a reserve fund determined and review by the Call2Recycle Canada's board of directors. 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.

Call2Recycle complies with all annual reporting requirements as stipulated by Manitoba Environment, Climate and Parks as per the Regulation. Consolidated finances are audited annually by an independent third-party auditor, and the results are made public and provided to stakeholders.

A report specific to the province is provided to Manitoba Environment, Climate and Parks annually. As stipulated in the Regulation, the report provides an account of activities in the Province as relates to the waste management of batteries, including but not limited to consumer outreach and education, and collection performance. Once approved the report is posted on the Manitoba page at call2recycle.ca/manitoba.

In accordance with the requirements of the WRAP Act and the Regulation, Call2Recycle will remit annual payments to Manitoba Environment, Climate and Parks for the payment of salaries and other costs of government for the administration and enforcement of the WRAP Act and the Regulation for the duration of this plan.

8. Management of Environmental Impacts

The Province abides by the pollution prevention hierarchy—reduce, reuse, and recycle—however, this hierarchy can be more difficult to apply to batteries than to other materials and products. Call2Recycle is not in a position to promote a reduction in the use of batteries, and reconditioning batteries for reuse can pose an unacceptable safety risk to consumers. Therefore, Call2Recycle does not support reconditioning batteries unless certain strict conditions pertaining to the reconditioning organization, the safety testing, and the proper labeling of reconditioned batteries are met.

Recycling is the most viable means of keeping battery waste from entering landfills. The Call2Recycle program efficiently and cost-effectively recycles household batteries of all types, and no battery collected through our program goes to landfill. The reclaimed materials from the batteries we collect can be used in various products, such as new batteries, cookware, appliances, and hardware.

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. We continually monitor each processor to ensure competitive pricing and an ability to adapt to increases in volume. The following charts show the recycling efficiency rates (recovery rates) for the processors currently used by the Call2Recycle program and how the various materials are managed.

Recycling Efficiency Rates

Battery Type	Rechargeable Battery Chemistry			Primary Chemistry	
	NI-CD	LI-ION	NI-MH	ALKALINE	LITHIUM
% Material Recovered*					
To Metals	86%	18-27%	57%	18-94%	35%
To co-product, aggregate	0%	0%	14%	1-72%	0%
To Cadmium	0%	0%	0%	0%	0%
To Secondary Recovery**	0%	0-60%	5%	0-57%	21%
Plastic Recovery or Reductant	0%	0-44%	10%	0-5%	0%
Total Recovery	86%	71-78%	86%	84%	56%

* Recovery rates provided by processor.

**This includes metals that are recovered at secondary processors

All collected batteries are sent to sorters and processors in Canada and the U.S. (See Appendix B: Physical Flow chart.) Each of these facilities uses thermal, mechanical, or chemical recovery processes to reclaim materials such as nickel, iron, lead, zinc, manganese, cadmium, and cobalt, and prepare them for use in new products such as new batteries, stainless steel alloy, and roadbed aggregate additives. Some processes also recover plastic and other constituents.

Environmental Transparency and Accountability

Call2Recycle maintains a commitment to third-party audit of non-financial, material end-fates, and downstream processes in accordance with Manitoba Environment, Climate and Parks requirements, in order to ensure transparency and accountability to the government and to the public.

9. Dispute Resolution

Call2Recycle has established written agreements with our Stewards (Membership and Proxy Agreements – available at <http://www.call2recycle.ca/resources-support-centre/>) and service providers (sortation and processing partners). Disputes with either of these groups follow a similar process to ensure that there is a fair and equitable resolution.

For collection facilities that enter into an agreement for cost reimbursement associated with the collection of batteries in bulk quantities, a contract is in place which outlines the dispute resolution process. For collection facilities that do not have a formal agreement with Call2Recycle, the same approach will be followed. 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.

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.

10. Performance Measurement and Targets

It is important to measure the success of a program and organization in order to improve its performance and ensure accountability. In its program plan renewal in 2018, Call2Recycle provided the Manitoba Government with specific collection and recycling targets and thereafter with an annual report on performance. With this plan renewal, the program performance measures remain consistent. The projected new targets are based on the learnings and growth within the province over the past five years. In reviewing performance, both quantitative and qualitative measures are taken into consideration to allow for a full evaluation of the battery

stewardship program in Manitoba.

Accessibility

In 2021, 90% of Manitobans resided within 15 kilometres of a Call2Recycle drop-off site. By 2021, Call2Recycle will ensure that accessibility will reach 95%. Accessibility and convenience is critical in driving recycling behaviour.

As previously written, Call2Recycle will continue to focus on alleviating the challenges of recycling in remote and First Nations communities with a goal of increasing their accessibility to battery recycling. Call2Recycle partners with other Producer Responsibility Organizations in Manitoba to provide recycling services to First Nations communities accessible by seasonal ice roads. The project focuses on ensuring communities have the required materials to collect, store, and safely transport stewarded materials and on the removal of designated stewardship material from selected communities.

A chart with the annual accessibility target is provided below.

2024	2025	2026	2027	2028
91%	92%	93%	94%	95%

Battery Sales and Recovery Rate

Beginning in 2024, the recovery rate will be calculated based on the weight sold into the market in the reporting calendar year divided by the weight sold into the market which will be calculated based on a three (3) year rolling average from the three (3) preceding calendar years. For example, in 2024 the recovery rate will be calculated by dividing the weight sold into the market that year (2024) divided by the average weight sold into the market in 2021, 2022, 2023 (the preceding three years) and expressed as a percentage. Calculating the amount of batteries sold into Manitoba can be challenging for a variety of reasons including:

- 1) Weight of certain battery chemistries sold into the market declines year over year - Heavier battery chemistries, such as nickel cadmium, are being replaced by lighter lithium-ion batteries. This will have implications on the overall battery weight sold into the market.
- 2) Life of a battery - Battery life is increasing which reduces the need to replace batteries as frequently.
- 3) Type of battery - Products that currently require primary batteries will likely be replaced by those that run on rechargeable batteries – both embedded and easily removable.
- 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 1:1 relationship between battery purchase and usage.

- 5) Hoarding issues: 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.

Changing market conditions add to the difficulty of estimating actual sales into market, Call2Recycle will strive to achieve the targets as set out below. The targets also take into account Manitoba specificities such as population density, urban/rural and remote location challenges.

The plan goal is to attain a 32% recovery rate of batteries that are sold into the Manitoba market by the end of year five (2028). Call2Recycle will annually assess performance against targets using pre-defined metrics and may adjust strategies if necessary. Any performance deficiencies will be outlined in a remediation plan, including corrective and strategic actions. The chart below indicates the stepped approach to reach 32% by 2028.

Recovery Targets

	2024	2025	2026	2027	2028
Collection Targets (as a % of sales)	24%	26%	28%	30%	32%

Implementation Timeline

As outlined in the Education and Outreach section, seasonal and other promotions and events will be ongoing through the renewal plan years. The number of initiatives will vary over the years all focusing on accessibility, awareness and action. We will regularly meet with other provincial PROs to identify opportunities for partnerships that promote stewardship programs.

Major initiatives to increase Accessibility, Awareness and Action 2024 - 2028
Traditional (TV, outdoor) and digital (web, YouTube, social, display) advertising campaigns Student education through schools via Earth Rangers partnership
Collection Methods – increasing convenience for consumer drop-off
Increasing Collections - from northern, remote and First Nations communities

For an overview of all targets included throughout this plan, see Appendix E for the Summary of Performance Measures chart.

11. Appendices

Appendix A: Glossary

The following is a glossary of key terms and definitions in this plan.

Term	Definition
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 less than 5 kilograms each.
Batteries sold in or with a product	A device sold with an easily removable battery/batteries that is not covered under an existing stewardship program and includes, e-toys, smoke and co alarms, garden tool, construction/renovation tools, flashlights and spotlights.
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.
Primary Battery	A battery that cannot be recharged by the consumer commonly known as AA, AAA, 9V, D-cell, and button cell batteries.
Rechargeable Battery	A type of battery that is capable of being recharged.
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 by according to the nature of materials, markets and processing methods.
Responsible Recycling Standard or R2	The R2 standard outlines responsible recycling practices for the recycling of electronics globally. The requirements contained are comprehensive, covering 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.
Zinc-air	A type of primary battery. These batteries can typically be found in small devices such as hearing aids.

Appendix B: Physical Flow Chart*

Call2Recycle Physical Flow: Canada



Public & Private

- Public agencies
- Retailers
- Businesses
- Municipalities



Approved Sorting Service Providers

- Cirba Solutions Trail, BC
- Laurentide Re/Sources Victoriaville, QC
- Aevidas Edmonton, AB
- GFL Hamilton, ON



Battery & Cellphone Approved Process Service Providers

<u>Alkaline, Carbon Zinc</u>	<u>Lithium</u>	<u>Ni-Cd</u>	<u>Ni-MH</u>	<u>Li-Ion</u>	<u>SSLA/Pb</u>	<u>Cellphones</u>
Teck* Trail, BC	Cirba Solutions Trail, BC	Cirba Solutions Lancaster, OH	Cirba Solutions Lancaster, OH	Li-Cycle Kingston, ON	Metalex Richmond, BC	Greentec Cambridge, ON
Cirba Solutions Wixom, MI				Cirba Solutions Trail, BC	Terrapure Ville Ste-Catherine, QC	
Laurentide Re/Sources Victoriaville, QC					Terrapure Mississauga, ON	

*Alkaline only

*Flow charts are updated from time to time and can be found at <http://www.call2recycle.ca/flow-chart>

Appendix C: Highlights from Ipsos Reid Research - 2021

- 76% of residents of Manitoba say that at least some kinds of household batteries can be recycled while one in five (20%) say they don't know and 5% say no, they can't be recycled.
- Men (79%) are more likely than women (73%) to believe that household batteries can be recycled. Women (23%) are more likely than men (16%) to not know if household batteries can be recycled.
- There is not much variation in responses by age, however, residents 55+ are slightly more likely than 18-34 year olds and 35-54 year olds to believe batteries can be recycled.
- Looking at all batteries, nearly four in ten (40%) are recycled. A majority (56%) of Manitobans say they recycle none of their batteries, while 15% recycle all of them. Roughly two in three (23%) batteries are thrown out – in fact, roughly one in ten (13%) residents throw all of their batteries in the garbage, no matter what kind of battery.
- Most frequently, Manitoba residents have recycled their household batteries at a recycling depot or centre (72%), at a retailer (29%), and at work (9%).
- No matter the gender, most Manitobans recycle at a recycling depot or centre, at a retailer, and at work. Men appear to be more likely to recycle at these locations.
- 62% of Manitobans are saving their batteries for a future recycling trip, and 27% just do not know what to do with their used batteries.

Appendix D: Manitoba Battery Stewards

As at December 1, 2022 (Updated list can be found at www.call2recycle.ca/list-of-stewards/)

<p>3M Canada Acer America Corporation Acklands Grainger Canada Inc. ACS Distributing ADI Global Amazon Canada / Amazon.com.ca, Inc. Amplifon Apple Canada Inc. Battery Canada Bay6 Computer Services BDI, a division of Bell Mobility Inc. Bed Bath and Beyond Canada L.P. BellMTS, a division of Bell Canada Best Buy Canada Ltd. Bike Co LLC BISSELL Canada Corporation Bose Corporation Cabela's Canada Computers Inc. / Ordinateurs Canada Canadian Energy and Power Corporation Canadian Tire Corporation, Ltd. Canadian Tire Petroleum Canon Canada Inc. Cardinal Health Canada Inc. Cell Mechanics Inc. Century Optronic Inc. Cervelo Cycles Inc. Château Manis Electronics Inc. Circle K Stores (Previously Mac's Convenience) Connect Hearing Canada Core-Mark International Inc. Costco Wholesale Canada Ltd Cycles Devinci Cycles Lambert D'Amour Bicycle & Sports Inc. Dell Canada Inc. Dollar Tree Stores Canada Inc.</p>	<p>Dollarama L.P. Dynabook Canada Inc Dyson Canada Limited East Penn Canada (Power Battery Sales Ltd.) ECHO Power Equipment (Canada) Edma Marketing Ltd. EECOL Electric ULC Enns Brothers Ltd. Epic Cycles Inc. EUCAN Distribution Inc. Fastenal Canada, Ltd. Federated Co-Operatives Limited FERMETCO INC. FGL Sports Ltd. FuturPlus (Division of Cathelle Inc.) Gazelle USA, LLC Gescan (Sonepar Canada) Giant Bicycle Canada Inc Giant Tiger Stores Limited Google Canada Corporation Grand & Toy Ltd. Grin Technologies Groupe BBH Inc. Guillevin International Cie Hawthorne Canada Limited HearingLife Canada Ltd. Henry's Enterprises Inc. Hilti Canada Corporation Hitfar Concepts Ltd. Home Hardware Stores Limited HRS Global Hudson's Bay Company Husqvarna AB IKEA Supply AG ILINK Industries Ltd Imperial Dade Canada Inc. Indigo Books and Music Inc. Interstate Batteries Inc.</p>
--	---

Ivan Hupalo -2448131 Manitoba Ltd.
John Deere Canada ULC
KMS Tools and Equipment Ltd.
Kranked Bikes
Lee Valley Tools Ltd
Lego Brand Retail, Inc.
Lem-Rich Foods Ltd.
Lenovo Canada Inc.
Loblaws Inc.
London Drugs Limited
Louis Garneau Sports Inc.
Lowe's Canada ULC
LTP Sports Group Inc.
Magnacharge Battery Corporation
Makita Canada Inc.
Marin Bikes Canada
Mark's / L'Équipeur
Mastermind LP
MB Battery Distributors Inc.
McKesson Canada
McMunn and Yates
Mica Sport Canada Inc.
Michaels Stores Inc.
Microsoft Corporation
Motorola Solutions Canada
Mountain Equipment Company Ltd.
MSA Safety Sales, LLC
Nedco West Division
Newell Brands Canada
Nikon Canada Inc.
Northern Building Supply
Northern Specialities Ltd.
Novexco Inc.
Onlybatteries.com
On the Edge Canada Inc.
Orgill Inc.
Orka Division Rexel Canada Electrical Inc.
Outdoor Gear Canada
Part Source
Peavey Industries Limited
Pedego Canada (Voltage Bikes Ltd.
Photo Central Inc.
Prairie Battery Ltd.
Praxis Works

Prime Deals International Ltd.
Princess Auto Ltd.
Proflash Techonologies Inc.
Rad Power Bikes LLC
Riese & Muller
Robert Bosch Inc. (Canada)
Rocky Mountain, Div. of Industries RAD Inc.
RONA Inc.
S.P.Richards Co. Canada, Inc.
Santa Cruz Bicycle
Save on Food Limited Partnership
Scotts Canada Ltd.
SharkNinja Operating LLC
Shimano Canada LTD
Shopper+Inc.
Shoppers Drug Mart Inc.
Snap-On Tools of Canada Ltd
Sobeys Capital Inc.
Sonos Inc.
Specialized Bicycle Components Canada
Standard Products Inc.
Staples Canada Inc.
Staples Professional, Inc.
Steelcase Canada Ltd
Stihl Limited
Super Thrifty Drug Stores
Supreme Basics
T-Zone Health
Telus Communications Company
Tenaquip Limited
The \$1. Store Plus
The Battery Man
The Bicycle Group (TBG) Kona Canada
The Home Depot of Canada, Inc.
The North West Company
The Source (Bell) Electronics Inc.
The Stevens Medical Company Limited
Tip Top Electronics Supply Ltd.
ToolTown Inc.
Toys R Us Canada, Ltd.
Trek Bicycle Canada ULC
UAP Inc.
Uline Canada Corporation
Veritas Technologies LLC

<p><i>Velec inc.</i> <i>Vulpine Networks</i> <i>Wallace and Carey Inc.</i> <i>Walmart Canada</i> <i>Wesco Distribution Canada</i> <i>Westburne Midwest Division</i> <i>Wisdom Electronics Inc.</i> <i>Wurth Canada Ltd.</i></p>	
---	--

Appendix E: Summary of Performance Measures

Measures	Annual Targets and Goals				
	2024	2025	2026	2027	2028
Accessibility - % of population within 15 km of collection site	91%	92%	93%	94%	95%
Collections Targets - batteries to be collected expressed as a percentage of what is sold into the MB market	24%	26%	28%	30%	32%
Consumer Awareness	Conduct two (2) Omnibus Surveys per year to inform on awareness and incidence				
Battery Recycling Awareness*	78%	79%	80%	81%	82%
Battery Recycling Incidence**	54%	56%	58%	60%	62%

*Battery Recycling Awareness: # or % of residents aware that household batteries can be recycled in Manitoba

**Battery Recycling Incidence: # or % of residents who have recycled their batteries in Manitoba

