

## CANADIAN E-BIKE + E-SCOOTER INDUSTRY BATTERY RECYCLING GUIDE

This guide will provide an overview of the Canadian eBike + eScooter battery recycling program with a January 1, 2021 effective date, with a few Appendix at the back for reference beginning with ***APPENDIX A containing the recycling industry terminology.***

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## DEFINITION OF PRODUCTS INCLUDED IN THE RECYCLING PROGRAM

### The applicable products accepted for recycling will be:

- Batteries used to propel eBikes and eScooters sold as part of an OEM bike or scooter
- Batteries used to propel eBikes and eScooters sold as aftermarket replacement batteries
- Batteries used to propel eBikes sold as part of aftermarket conversion kits for bicycles
- Batteries used to propel eBikes and eScooters as part of ride sharing or rental business

**Electric Bicycle (eBike):** A bicycle style transportation device with an integrated rechargeable battery, typically lithium ion, powering in most cases up to a 500 watt motor, although there may be higher watt exceptions. Drive system can either be activated by pedaling or by a throttle such as a grip-twist, trigger or button, and available in Class 1, 2, or 3, with no motor-input at speeds in excess of 32km/hr.

**Included:** OEM and aftermarket batteries used to propel eBikes, including those available in conversion kits

**Excluded:** OEM and aftermarket batteries used to propel transportation devices travelling in excess of 32km/hr or specialty style vehicles including mopeds, motorcycles, ATVs, dirt bikes, motorized mobility chairs having 3 or 4 wheels, go carts, and golf carts.\*

**Electric Scooter (eScooter):** A rechargeable battery-powered transportation device with a stem, handlebars and designed to be stood on (or standing with a bum rest option) by the operator during travel. Batteries are typically lithium ion. In most cases the maximum 500 watt motor, although there may be higher watt exceptions, will propel the device with or without human assistance to a top speed of 32km/hr.

**Included:** OEM and aftermarket batteries used to propel two in-line wheeled eScooters, two parallel wheeled eScooters, skateboard, hoverboard, youth mini scooter, monowheel

**Excluded:** OEM and aftermarket batteries used to propel transportation devices travelling in excess of 32km/hr or specialty style vehicles including mopeds, motorcycles, ATVs, dirt bikes, motorized mobility chairs having 3 or 4 wheels, go carts, and golf carts.\*

*\*The recycling of batteries from ATVs, dirt bikes, motorized mobility chairs having 3 or 4 wheels, go carts, and golf carts are regulated in Quebec and are under review by Call2Recycle for inclusion at a future date.*

**Aftermarket eBike Batteries:** Stand-alone or replacement batteries, typically Lithium Ion, used to propel eBikes, including those available for conversion kits and replacement on/in a bicycle, ranging between but not limited to 100 and 1,600 watt hours.

**Aftermarket eScooter Batteries:** Stand-alone or replacement batteries, typically Lithium Ion, used to propel eScooters, whether this battery fits in the floorboard, in the down tube, or as ‘click-in’ style attached in a compartment.

## REGULATIONS AND GEOGRAPHIES OF OPERATION

This program will operate nationally in the country of Canada. ***APPENDIX B contains links to the provincial regulations***

This program is structured with a combination of ‘member services agreements’ for regulated products in regulated provinces, and ‘private business contracts’ in non-regulated jurisdictions, to achieve national scope for industry.

	Regulated Provinces	Regulated Provinces	Non-Regulated Provinces
<b>Member agreement with Call2Recycle</b>	SK, MB, PQ, PEI	BC & ON - aftermarket batteries	
<b>Private business contract with Call2Recycle</b>		BC & ON - OEM batteries sold with bikes/scooters	AB, NB, NS, NFLD

Manitoba, Quebec, and Prince Edward Island where regulations are in place:

- Batteries used to propel eBikes and eScooters sold as part of an OEM bike or scooter
- Batteries used to propel eBikes and eScooters sold as aftermarket replacement batteries
- Batteries used to propel eBikes sold as part of aftermarket conversion kits for bicycles
- Batteries used to propel eBikes and eScooters used within a ride sharing or rental business

Saskatchewan, where regulations are recently in effect and Call2Recycle’s program plan is under review:

- We anticipate batteries used to propel eBikes and eScooters, their aftermarket replacements, conversion kits and those used in ride sharing or rental businesses will be included for the January 1, 2021 start date.



British Columbia where regulations require the OEM bike/scooter + battery are to be recycled together, while the aftermarket battery is recycled on its own. These regulations are in place today and companies are required to be compliant.

- **Aftermarket batteries:** We will operate under member services agreement per the regulations.
- **OEM batteries sold with bike/scooter:** We will operate under 'private business contract' between individual companies and Call2Recycle as an interim solution while we work with the MOE on a permanent solution for the entire bike/scooter/battery. During this interim period we will collect and recycle just the batteries used to propel eBikes and eScooters, conversion kits and those used in ride sharing or rental businesses.

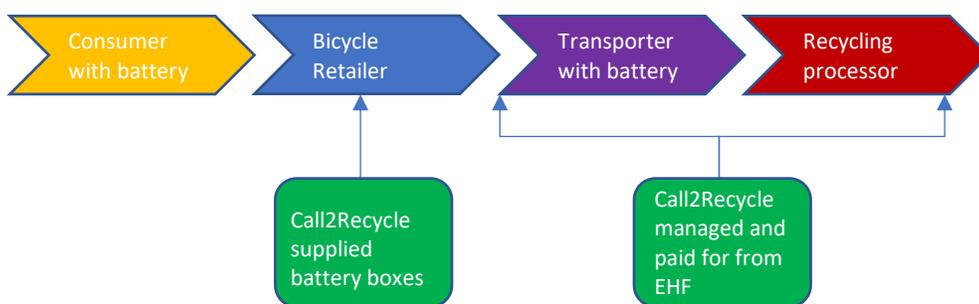
Ontario, where pending regulations state the aftermarket battery is recycled on its own

- **Aftermarket batteries:** We will operate under member services agreement per the regulations.
- **OEM batteries sold with bike/scooter:** We will operate under private business contract between individual companies and Call2Recycle, where we will collect and recycle the batteries used to propel eBikes and eScooters, conversion kits and those used in ride sharing or rental businesses.

Alberta, Ontario, New Brunswick, Nova Scotia, and Newfoundland

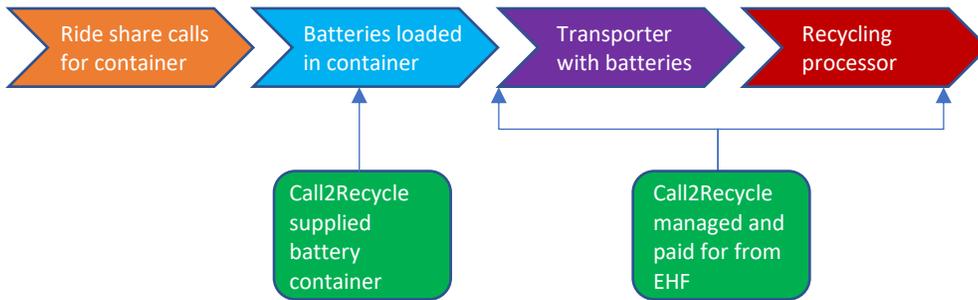
- Where battery legislation does not yet exist, we will operate in these provinces based on 'private business contract' between individual companies and Call2Recycle, where we will collect and recycle batteries used to propel eBikes and eScooters, their aftermarket replacements, conversion kits and those used in ride sharing or rental businesses, and will do so for the same price as in regulated provinces.

## HOW THE RECYCLING PROGRAM OPERATES



**For personal use eBikes and eScooters,** Call2Recycle will supply bicycle retailers registered as collection sites with UN approved pre-addressed fire-retardant battery shipping boxes. When the consumer returns an end-of-life or defective battery, it is inspected then placed in the fire-retardant shipping box and sent by approved carrier for recycling at a pre-approved processor. Additional boxes are ordered from Call2Recycle at any time by calling 1-888-665-0908.





**For ride sharing eBikes and eScooters**, at the time eBike and/or eScooters batteries are damaged in the field and/or reach end-of-life, the operator will call Call2Recycle at 1-888-665-0908 and discuss quantity, location, situation. The proper sized container will be sent to location for loading by operator’s employees based upon clear standard operating procedures (SOPs) pre-approved by both organizations. Call2Recycle will arrange for pick-up and recycling.

## THE ENVIRONMENTAL HANDLING FEE (EHF) AND CONFIDENTIALITY

An Environmental Handling Fee, or EHF, is a charge on a product to handle the responsible collection and end-of-life recycling management of that product.

The EHF for personal use and ride sharing eBike and eScooter batteries will be published spring 2020 and will come into effect January 1, 2021. The EHF’s dollar value is a calculation factoring in the following notable costs, and as a non-profit, does not include incremental profit targets.

- Collection
- Transportation
- Processing
- Consumer education
- Administration

Monthly, the member companies will confidentially report to Call2Recycle (via password coded private account) their net imports and/or deployments and/or sales into Canadian provincial markets of both batteries sold with eBikes/eScooters and aftermarket batteries, and remit the sum of environmental handling fees. Call2Recycle uses this information for invoicing and to report number of total industry units sold into market and recycled; we do not compare data between individual members, nor do we compile any form of industry market share report.

eBikes and eScooters imported/manufactured in Canada and temporarily warehoused and then exported to another country do not need to be reported. Only eBikes and eScooters destined for, sold into, or for ride sharing use in Canada are reported by province.



In the event additional services are required, this will be charged incrementally and quoted at time of request. For example: If ride sharing company requests the recycling of 50 entire eScooters, a quote for this work will be supplied by Call2Recycle and will depict the price minus the battery EHF remitted when the eScooter was imported/deployed in the province.

## **WHO IN INDUSTRY IS OBLIGATED TO PARTICIPATE?**

Please see provincial regulations in **APPENDIX B** for information on your company's obligations.

The OEM bicycle/scooter manufacturer/brand owner/first importer/company operator who has a place of business in Canada can be the member on behalf of their retail network. **This is the scenario we will operate within for major brands of bicycles and scooters.**

*and...*

If you import or acquire domestically finished eBike and eScooters for the use in a ride sharing or rental company, your business may be an obligated steward in province(s) it does business in. **This is the scenario we will operate within for ride sharing businesses.**

*Inevitably there will be a few exceptions that may fall into the following type of scenarios. Ultimately your company is responsible for determining if it is the obligated party.*

- If you are the provincial importer of OEM eBikes and/or eScooters and/or aftermarket batteries and operate as a franchise of the OEM or independent bicycle retailer, and your OEM is not becoming a member of Call2Recycle, your business may be an obligated steward in the province(s) you operate within for that OEM's brand.
- If you import batteries and/or parts for the assembly of battery modules and/or packs in Canada, your business may be an obligated steward in the province(s) you operate within.
- If you import batteries and/or eBikes and eScooters for the sale out of corporate owned stores and the internet (under your own company's name or third-party brand name), your business may be an obligated member in the province(s) it does business in or ships to.
- If you are importing, distributing and/or retailing a brand of bicycle whose company does not have business operations in Canada (ie this brand of bicycle/scooter is not owned by your company and there are no Canadian offices for this brand), your business may be an obligated member in the province(s) it does business in or ships to.

## **DROP OFF LOCATIONS AND SHIPPING OUT THE BATTERIES**

Call2Recycle will supply most registered bicycle retailers and other locations collecting batteries with pre-paid fire-retardant battery shipping boxes for reverse logistics to a processor for recycling, with costs covered by Call2Recycle. Please call Erich Repper at member services 1-888-665-0908 to register as a battery collection site.

Drop-off locations accepting batteries must inspect for damages, place the battery in appropriate box, and call transport company for pick-up.

## **UNIQUE SITUATIONS**

Call2Recycle can handle OEM battery recalls. Our network can also handle the recycling of entire eScooters. Please contact a Call2Recycle representative at 1-888-665-0908 for quotation. Additional charges may apply.

## **TIMELINE OF EVENTS**

Announcement of eBike and eScooter battery recycling program	February 20
Industry conference call and presentation with Call2Recycle	March 10, 2pm EST
Final environmental recycling fee published	late April
Members enroll in the program; sign private business contracts	April- December 31
Boxes distributed to bicycle dealers	Beginning June
Environmental handling fee begins being charged	January 1, 2021

## **NEXT STEPS**

Feel free to read the frequently asked questions in **APPENDIX C**. Please contact our member services team at the numbers found at end of this program document for further discussions.

We will host the **English language** webinar call for industry on March 10, 2020 at 2pm EST:

Event name:	Canadian eBike + eScooter battery recycling program
Event address:	<a href="https://call2recycle-events.webex.com/call2recycle-events/onstage/g.php?MTID=e9970dd11506ec3e52a6f5c6db4679690">https://call2recycle-events.webex.com/call2recycle-events/onstage/g.php?MTID=e9970dd11506ec3e52a6f5c6db4679690</a>
Date & time:	Tuesday, March 10, 2020, 2:00pm EST (Toronto, GMT-05:00) to 3:00pm EST
Event number:	660 105 310
Event password:	y6rKyjAy
Host:	Jeff Haltrecht, Executive with Call2Recycle
Audio conference:	Toll-free 1-877-668-4493, access code 660 105 310



We will host the **French language** webinar call for industry on March 12, 2020 at 11am EST:

Event name: Programme canadien de recyclage des batteries des vélos électriques et des trottinettes électriques  
Event address: <https://call2recycle-events.webex.com/call2recycle-events/onstage/g.php?MTID=e50953f0ee78feb53474eee3e56dff34>  
Date & time: Thursday, March 12, 2020, 11:00am EST (Toronto, GMT-05:00) to 12:00pm EST  
Event number: 667 731 780  
Event password: 3CZn54dwfVA  
Hosts: Jeff Haltrecht, Executive with Call2Recycle  
Line Berube, Directrice l'est du Canada  
Audio conference: Toll-free 1-877-668-4493, access code 667 731 780

## **BECOMING A MEMBER / PRIVATE BUSINESS CONTRACTS**

We will email you a membership agreement, a private business contract, and link to the on-line registration portal in late April, at which time...

1. For regulated provinces and products please have your company complete, sign and remit the Membership Agreement to Call2Recycle and...
2. For non-regulated provinces please have your company complete, sign and remit the private business contract to Call2Recycle and...
3. Complete the on-line questionnaire and confidential private account set-up via the link.

## **ABOUT CALL2RECYCLE**

We are a non-profit stewardship organization committed to the safe handling, transportation, storage and responsible recycling of batteries at end-of-life.

We supply R2 certified reverse logistics and recycling services that bring batteries back from within the market and direct them to the proper processors for recycling. We bring together the battery and product manufacturers, dealers & retailers, industrial operators, and the processor industries in responsible new, defective and end-of-life recycling programs.

With a collection network of 9,000+ battery drop-off locations across Canada, we have safely and responsibly recycled more than 22 million kilograms of consumer batteries since the Canadian company's inception in 1997.

Today we are announcing the eBike + eScooter battery recycling program, and as we look to the future of electric mobility, our intention is to help establish the reverse logistics, diagnostic, refurbishing and recycling options for the broader electric mobility industry.



**CONTACT INFORMATION**

**Member Services Team: Toll free 1-888-665-0908**

**Quebec – French and English**

Eric Repper

[erepper@appelarecyclier.ca](mailto:erepper@appelarecyclier.ca)

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**Canada not including Quebec - English**

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905-601-0311



## APPENDIX A

### RECYCLING INDUSTRY TERMINOLOGY

*An introduction to the industries terminology to help in communicating with each other...*

**Member** – The company obligated by provincial regulations to join a recycling program associated with their product category.

**Program Operator** – Call2Recycle Canada, Inc.

**Collection Site or Drop-off Location** – The location a user can drop off a battery. This place may be the original point-of-purchase or a participating location that handles recyclable materials.

**Regulated Provinces** – British Columbia , Manitoba, Quebec, and Prince Edward Island have regulations in place. Saskatchewan regulations were recently released and Call2Recycle’s program plan is being reviewed by the Saskatchewan Ministry of Environment. Ontario’s existing regulations are being updated by the Ministry of Environment and we anticipate they will come into effect by January 2021.

**Non-regulated Provinces** – At time of writing they will include AB, NS, NFL, NB.

**Environmental Handling Fee (EHF)** – An Environmental Handling Fee is a charge on a product to handle the responsible collection and end-of-life recycling management of that product.

**End-of-life (EOL)** – When the battery is no longer useful for its intended purpose and has not been damaged.

**Damaged, Defective, Recalled (DDR)** – When the battery is no longer useful for its intended purpose because it was or may have been damaged, or is determined defective. Recalled refers to batteries the OEM is doing a voluntary or government directed removal from market. These batteries require special handling to be recycled.

**Transporter** – Program approved company used to transport collected batteries between locations.

**Sorter** – Program approved company in reverse logistics supply chain responsible for separating/sorting batteries into like chemistries.

**Processor** – Program approved company in logistics supply chain responsible for recycling the batteries.

## APPENDIX B

### SUMMARY OF PROVINCIAL END-OF-LIFE PRODUCT REGULATIONS FOR LI-ION BATTERIES

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To learn more about provincial battery stewardship regulations for e-bikes and scooter batteries, we encourage you to check the provincial regulations as follow:

#### [Quebec Environmental Quality Act](#)

Article 29 establishes the products covered by Section 2 of Chapter VI, namely most rechargeable batteries and single-use batteries. Batteries placed on the market as a component of another product, such as batteries placed on the market in a watch, a toy, a tool, a bicycle, a scooter, etc. are also covered (see Article 3).

#### [Manitoba Waste Reduction and Prevention \(WRAP\) Act](#)

In Manitoba, batteries are included in the Household Hazardous Material and Prescribed Material Stewardship Regulation. This includes devices that convert chemical energy to electrical energy and that can be restored to full charge by the application of electrical energy.

#### [British Columbia Environmental Management Act Recycling Regulation](#)

The electronic and electrical product category includes batteries that could be used in electronic or electrical products, including primary batteries and rechargeable batteries. This applies to batteries used in electronic sporting equipment.

#### [Prince Edward Island Environmental Protection Act: Materials Stewardship and Recycling Regulations](#)

The Act and regulations list rechargeable and single-use batteries as designated materials. In the case of a rechargeable or single-use battery contained in a device or product that is a designated material under these regulations, (a) subsections (1) and (2) do not apply; and (b) the rechargeable or single-use battery shall be dealt with in accordance with the stewardship program for the device or product in which it is contained.

#### [Saskatchewan Household Hazardous Waste Products Stewardship Regulations](#)

The recently released regulations, include requirements for single-use and rechargeable batteries defined as devices that convert chemical energy to electrical energy and that can be restored to full charge by the application of electrical energy. The Saskatchewan Ministry of the Environment has not yet announced the program effective date for 2020.

#### [Ontario Ministry of the Environment Conservation and Parks](#)

The final regulation for producer responsible end-of-life product management for single-use and rechargeable batteries will come into effect January 2021. The provincial government is presently reviewing the final regulation, and we await its publishing.

**APPENDIX C**

**FREQUENTLY ASKED QUESTIONS**

**Why do we have to work with Call2Recycle?**

You actually don't, however your company will need to establish battery recycling programs in the regulated provinces and work individually with each Ministry of Environment in order to be in compliance with regulations.

Call2Recycle offers a service to industry whereupon we operate government approved environmental services for recycling batteries in the provinces of BC, MB, PQ, and PEI. SK's regulations are recently in effect and Call2Recycle's program plan is currently under review by the Ministry. Ontario's existing regulations are being updated by the Ministry of Environment and we await its publishing any day now. The company operates voluntary recycling programs in AB, NB, NFLD, and NS.

Call2Recycle is recognized by the current 400+ members and government for its reverse logistics battery recycling network and ease of implementation of its programs.

**How much profit does Call2Recycle make on this program?**

With its not-for-profit status, Call2Recycle designs the recycling programs to be self-funding and no incremental profit.

**How is the environmental handling fee calculated?**

We include the following costs:

- Collection
- Processing
- Administration
- Transportation
- Consumer education

Fees are determined using a calculation that factors in the cost to manage the collection and responsible recycling of each battery, by specific type.

**Do we have to operate in the non-regulated provinces?**

Our experience over 22 years would suggest it beneficial to run a national program. The industry hears one message and the volume helps with fixed overhead keeping the cost of program lower.



**Is my business obligated if we sell only on the internet?**

Your business may be obligated to participate in certain regulated provinces as you will be considered the provincial importer of record. Please see regulations in Appendix B.

**Why are BC's regulations different than the other provinces?**

Recycling legislation is provincial jurisdiction (vs. federal), and as such we have varying regulations per province.

BC requires the OEM bike/scooter + battery to be recycled together, while the aftermarket battery is recycled on its own. These regulations are in place today and companies are required to be compliant.

Aftermarket batteries: Call2Recycle will operate under 'member services agreement' per the regulations.

OEM batteries sold with bike/scooter: Call2Recycle will operate under 'private business contract' between individual companies and Call2Recycle as an interim solution while we work with the MOE on a permanent solution for the entire bike/scooter/battery. During this interim period we will collect and recycle just the batteries used to propel eBikes and eScooters, conversion kits and those used in ride sharing or rental businesses.

**Can we just drop the batteries off at other battery recycling locations?**

Yes, the batteries may be dropped at select participating locations. Not all collection locations in the Call2Recycle program will accept eBike or eScooter batteries. It's very important to consider the safe handling requirements of eBike and eScooter batteries. They should be transported in UN approved fire-retardant battery containers and under Transport Canada guidelines by people trained in handling dangerous goods.

**Where do the batteries go after they are collected?**

A network of dangerous goods approved transporters and battery chemistry specific processors primarily in Canada.

~~~~~ END ~~~~~

