

# Alberta 2016 Annual Report

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**call 2 recycle**<sup>®</sup>  
Leading the charge for recycling.<sup>™</sup>

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## 1. Introduction

Call2Recycle Canada, Inc. is the Canadian arm of North America's first and largest consumer battery stewardship organization. We were established in 1997 to fulfill the product stewardship obligations of battery manufacturers and manufacturers of battery-powered products. In Alberta, where battery collection is not regulated, Call2Recycle operates an entirely voluntary battery collection program. We collect dry cell batteries weighing less than five kilograms each and ensure that they are recycled properly. In 2016, Call2Recycle worked on behalf of more than 300 battery and product manufacturers.

Our mission is to responsibly manage end-of-life batteries to keep them out of landfills and minimize their environmental impact. We do so by promoting battery recycling locally and nationally, and offering a robust, convenient program through which consumers can easily recycle their batteries and cellphones at various public and private collection facilities. These participating collectors simply seal and ship the batteries to us at no cost to them.

In 2016, Call2Recycle experienced a seventh consecutive record-making year for our voluntary battery collection program in Alberta. More than 249,000 kg of batteries were collected from across the province. This is more than triple the total collected just three years ago, and representing a 20% increase over the province's 2015 collection total. Alberta also outpaced Call2Recycle's 12% national growth in battery collections this year.

Since our program began in Alberta in 1997, Call2Recycle has diverted close to 1 million kilograms of used batteries from landfill. This report has been created by Call2Recycle to share the performance of our voluntary battery collection program in Alberta from January 1, 2016 to December 31, 2016.

## 2. Raising Awareness

Call2Recycle strives to raise consumer awareness of the importance of responsible battery disposal, and we create opportunities to increase battery recycling activity across the province. Although battery recycling is not mandated by the Province, we devote significant time and resources to develop national and regional campaigns and partnerships that encourage Albertans to recycle their used batteries through our program. Some examples of these activities include:

Call2Recycle's first ever **Lead the Charge campaign** ran in the weeks leading up to National Battery Day on February 18. The campaign engaged 18 partners including municipalities, retailers, recycling associations and waste management organizations in raising consumer

awareness of battery recycling options available to them. The multi-channel campaign included radio, newspaper, social media, a #NBD2016Recycle2Win sweepstakes and other activities. This resulted in both a 65% bump in website traffic—with 91% being first-time visitors to call2recycle.ca—and a 12% increase in battery collections over the same period in the previous year.

In October, Call2Recycle collaborated with Teck, the world's largest producer of zinc, and WE Day Calgary on the Zinc Saves Lives Battery Recycling Campaign. The campaign had a double benefit: It encouraged students to recycle used batteries to keep them out of landfill and for every AA battery recycled, Teck donated the value of the zinc recycled to WE's zinc and health programming in Kenya. The WE Day campaign collected more than 900 kg of used batteries.

In addition to these and other activities, Call2Recycle also operates a Customer Service call centre that assists consumers to find drop-off locations, educates them about battery recycling, and provides a variety of other battery-related information. We also have a robust social media presence on Facebook and Twitter and recently redesigned our website to improve navigation and encourage greater engagement.

## 3. Collections

### 3.1 Collection Sites & Accessibility

Call2Recycle partners with local governments, businesses, and retailers to offer an accessible network of collection locations to consumers. Factors such as population, proximity to consumers, ease of access, access for remote communities, and the likelihood that consumers will associate batteries with the location (e.g. an electronics store) are some of our considerations when choosing collection sites. Health and safety and, in some cases, a pre-existing battery and/or device return or exchange program within the location are also factors.

In 2016, Call2Recycle had 712 drop-off locations across the province, up from 660 in 2015. Active collection sites are defined as those that have shipped at least one receipt (a box of batteries) within the past 12 months, or any site that has enrolled in the program during the past 365 days. The following chart outlines the types and quantity of Call2Recycle collection sites in Alberta.

Call2Recycle Collection Sites by Channel					
Channel	2016		2015	Change	
	% of Total Sites	# of Sites		#	%
Business Services*	23%	164	270	-106	-39%
Government	34%	245	89	156	175%
Manufacturing	7%	47	55	-8	-15%
Retail	36%	255	244	11	5%
Other	0%	1	2	-1	-50%
<b>TOTAL:</b>	<b>100%</b>	<b>712</b>	<b>660</b>	<b>52</b>	<b>8%</b>

\*In 2016, Call2Recycle changed its collection site segmentation categories. Organizations previously categorized as Environmental Services have been reclassified within the Business Services category.

Although Call2Recycle’s collection program is operated voluntarily, we take great efforts to make it as convenient and accessible as possible to people across the province. According to our analysis, 84%<sup>1</sup> of Albertans have access to a participating Call2Recycle collection location within 15 kilometers of their home, a distance validated by a third-party marketing research firm as a reasonable distance that consumers would travel to recycle.

### 3.2 Collection Totals

More than 249,000 kg of batteries were collected by Call2Recycle in Alberta this year, bringing the total amount of batteries collected in the province to almost 758,000 kilograms since we voluntarily introduced an all-battery collection program in 2012. While primary battery collections represented the greater increase in collections among the two principal battery types, both primary and rechargeable battery performance were strong this year.

<sup>1</sup> Accessibility was determined by overlaying our collection site network against population information such as postal code or census data. We then used mapping software to determine the population that resides within a given radius of a collection site. The population total derived from this radius is aggregated and then divided by the population totals of larger geographic sets (market, province, country) to determine coverage levels.

Call2Recycle Collections by Weight (Kg*)			
Type	2016 Collections	2015 Collections	% Change
Primary (Single Use)	177,280	145,298	↑22%
Rechargeable	71,926	62,343	↑15%
<b>Total</b>	<b>249,207*</b>	<b>207,641</b>	<b>↑20%</b>

\*Call2Recycle records collections in pounds. Any variance in column sums reflects conversion from lbs. to kg (conversion rate 0.453592).

### 3.3 Collections by Chemistry

In addition to tracking the quantity of batteries (by weight) collected through our program, Call2Recycle also tracks the battery components that are extracted and recycled for other purposes. Among rechargeable batteries, Nickel-metal hydrate and lead (SSLA) batteries experienced the greatest increases in collections. While alkaline batteries continue to dominate the primary battery collection landscape, Lithium batteries experienced triple-digit growth this year.

Rechargeable Battery Collections by Chemistry (in Kilograms)*			
	2016	2015	% Change
<b>Ni-Cd</b>	25,242	21,390	18%
<b>Ni-Mh</b>	9,028	6,768	33%
<b>Li-Ion</b>	27,984	26,363	6%
<b>SSLA</b>	9,672	7,822	24%
<b>Total</b>	<b>71,926</b>	<b>62,343</b>	<b>15%</b>

Single Use Battery Collection by Chemistry (in Kilograms)*			
	2016	2015	% Change
<b>Alkaline</b>	170,069	141,737	20%
<b>Lithium</b>	7,207	3,559	103%
<b>Mercury</b>	4	3	33%
<b>Total</b>	<b>177,280</b>	<b>145,298</b>	<b>22%</b>

\*Call2Recycle records collections in pounds. Each chemistry and the total are converted from lbs. to kg (conversion rate 0.453592) and rounded up or down to the nearest kilogram. Thus addition variances may occur in the total indicated. Accurate within a margin of +/- 3%.

## 4. Process and Product/Component Management

Call2Recycle is an R2:2013-certified organization. This certification from the Responsible Recycling Practices Standard is the highest achievable standard for recycling organizations. It indicates that the certificate holder has met stringent requirements in areas of environmental, public and worker health and safety. Our certified battery recycling process is outlined below.

### Collection

The Call2Recycle program process starts by providing consumers with easy access to collection sites to enable maximum participation in the program. Through collection partners across the province and in a range of sectors, we offer consumers convenience and a simple drop-off process. Our collection partners use one of two collection methods: the box program or the bulk program. Box program sites receive Call2Recycle's bag-and-drop, seal-and-ship collection boxes free of charge. Each box holds up to 30 kilograms of batteries. Our bulk program caters to facilities that generate large quantities of batteries for recycling (250 kg minimum per shipment). Call2Recycle covers the cost of shipping for both the bulk and box programs.

### Shipping and Sorting

Batteries and cellphones collected through Call2Recycle in Alberta are sorted and consolidated by one of our Canadian sorting facilities. Contents are weighed and sorted according to battery chemistry, and readied for shipping to appropriate recycling processors based on their chemical composition.

Call2Recycle operates in accordance with intra- and inter-provincial shipping and transportation standards established by Transport Canada, Environment Canada, and provincial environment and transportation ministry approvals. All shipments transported internationally are manifested according to Environment Canada, Transport Canada, the US Environmental Protection Agency and the US Department of Transportation.

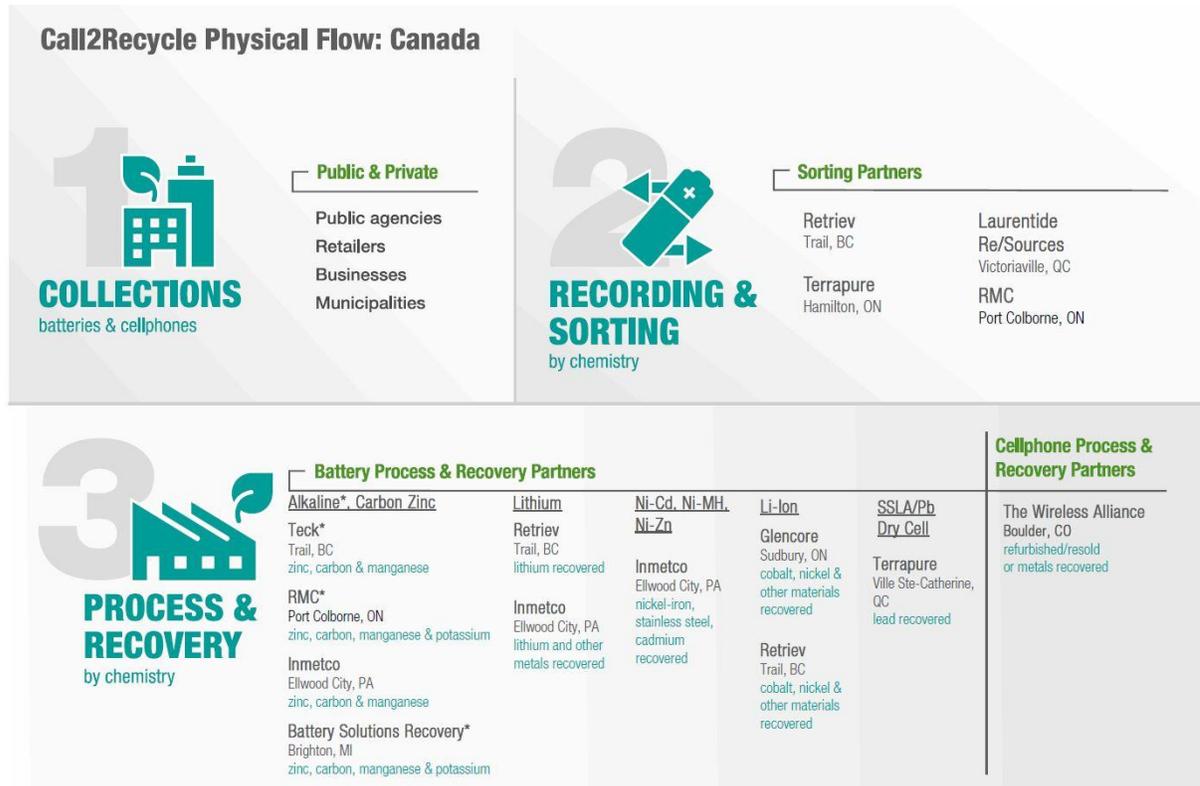
### Processing

Call2Recycle Canada is committed to meeting the highest global standards for safe and effective battery processing and to reclaiming as much of the batteries we collect as possible to divert them from the waste stream.

Different battery chemistries require different reclamation methods, and Call2Recycle has partnerships with various processors to ensure optimal performance. We seek local processing partners wherever possible to reduce our transportation footprint. All of our processing facilities

use the latest and proven-effective thermal, mechanical and chemical processes to recover materials such as nickel, iron, lead, cadmium, and cobalt. These are either returned to rechargeable battery manufacturers or used to make other products.

The following chart outlines the Call2Recycle process from collection to recovery.



## 6. Organizational Reports

To view Call2Recycle Canada's Audited Financial Statement visit:

<http://www.call2recycle.ca/annual-report/>.

For an extensive list of voluntary battery stewards, please contact our Director, Western Canada, Kristen Romilly at [kromilly@call2recycle.ca](mailto:kromilly@call2recycle.ca).