



Recycle My Cell Three Year Business Plan 2012 to 2015

Submitted to Alberta Environment

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Table of Contents

1. ACCOUNTABILITY STATEMENT	2
2. INTRODUCTION	2
<i>WHO WE ARE</i>	2
OUR MANDATE	3
3. RECOVERY OF MOBILE DEVICES WITHIN ALBERTA	4
WHAT WE DO	4
RMC PROGRAM OVERVIEW	4
4. STRENGTHENING RMC IN ALBERTA	5
OBJECTIVE 1: IMPROVE PUBLIC EDUCATION AND AWARENESS	5
<i>PUBLIC EDUCATION AND AWARENESS TARGETS</i>	7
OBJECTIVE 2: ENSURE CONTINUED PUBLIC PARTICIPATION AND PROGRAM ACCESSIBILITY	8
<i>PUBLIC PARTICIPATION AND PROGRAM ACCESSIBILITY TARGETS</i>	9
OBJECTIVE 3: INCREASE COLLECTION RATES	9
<i>COLLECTION RATE TARGETS</i>	10
OBJECTIVE 4: FACILITATE PROPER POST-COLLECTION MANAGEMENT OF MATERIALS	11
<i>POST-COLLECTION MANAGEMENT OF MATERIALS TARGETS</i>	12
5. CONCLUSION	13

1. Accountability Statement

The Recycle My Cell (RMC) Business Plan for the period January 1, 2012 through December 31, 2015 was prepared in accordance with: the Memorandum of Understanding in place between Canadian Wireless Telecommunications Association (CWTA) and Alberta Environment; and the requirements of Section 16 of the *Designated Material Recycling and Management Regulation (Alberta Regulation 93/2004)*, as amended, which was enacted under the Environmental Protection and Enhancement Act.

The Government of Alberta's and Department of Environment's Business Plans and priorities were taken into account in the development of the RMC Business Plan.

RMC is committed to achieving the objectives laid out in this Business Plan, working cooperatively with other provincial stakeholders.

2. Introduction

Who We Are

The Canadian wireless telecommunications industry, under the auspices of the Canadian Wireless Telecommunications Association's (CWTA) Recycling Committee, developed Recycle My Cell, a free national cellular phone recycling program.

CWTA and its members have long recognized the importance of waste management to the environment and the economy, and support the need for a recycling and reusing strategy for mobile devices.

CWTA is the authority on wireless telecommunications issues in Canada. The members of CWTA include, among others, wireless service providers, wireless handset manufacturers and processors. Recycle My Cell is made possible with participation from: Bell, Dell Canada Inc., GEEP Inc., GREENTEC, LG, Lynx Mobility, Mobilicity, Motorola Mobility, MTS, Nokia, Research In Motion, Rogers Communications, Samsung, SaskTel, Sims Recycling Solutions, Sony Ericsson, TBayTel, TELUS, Videotron, Virgin Mobile Canada, and WIND Mobile. Wireless providers currently operating in Alberta include: Bell, Mobilicity, Rogers, TELUS, Virgin Mobile and WIND Mobile.

CWTA manages the program on behalf of the industry, acting as a single point of contact for consumers, the provinces, municipalities and other stakeholders. It is also responsible for any joint administrative requirements such as consumer education and complying with provincial reporting.

As a voluntary program, Recycle My Cell meets the expectations of Alberta Environment, as well as recycling regulations in place across Canada. The operations and objectives of the program are fully consistent with the principles elaborated in Alberta's *Environmental Protection and Enhancement Act*, *Designated Material Recycling and Management Regulations* and *Electronics Designation Regulation*.

Consistent with the principles set out in Alberta's legislative and regulatory framework for electronic recycling, CWTA will ensure that the Recycle My Cell program will:

- Inform consumers of their options for reusing and recycling their mobile devices;

- Ensure environmentally conscious management of end-of-life mobile devices;
- Ensure all work under the program is done by certified and responsible organizations with the results of any and all audits conducted available to Alberta Environment upon request;
- Operate in an economically efficient manner with full transparency of all reported figures;
- Ensure consistency with Canadian regulations at all levels of government and comply with CCME's *Canada-Wide Principles for Electronics Product Stewardship*;
- Be open to all obligated and relevant brand owners;
- Assist in the processing of mobile devices which do not fall under the responsibility of any obligated brand owner (orphan, historic and imported); and
- Encourage fair competition between this and non-affiliated third-party collection programs, allowing them to operate without hindrance.

Our Mandate

CWTA is a wireless industry association that is led by a Board of Directors which is composed entirely of industry representatives. The Recycling Committee, created by the CWTA Board was tasked with creating a national industry-wide umbrella recycling program.

CWTA manages the program on behalf of the wireless industry. Responsibilities include:

- Liaisons with governments, consumers, and other stakeholders;
- Public education and awareness;
- Regular reporting and target setting;
- Induction of all interested and obligated brand owners who are not already participating in the program; and
- Maintaining contracts and relations with all levels of the program, including collection sites and sites of incidental waste.

Members of the CWTA Recycling Committee, comprised of carriers, handset manufacturers and certified processors, will act as advisers to the Association on the operation and further development of the program. Each obligated brand owner is represented at the CWTA Recycling Committee.

Recycle My Cell operates with no fees charged to consumers purchasing or recycling mobile devices. Costs associated with the administration and operation of this program are internal to the CWTA's operating budget and/or absorbed by participating brand owners.

CWTA shares the goal of harmonization of rules and regulations across the country with other stewards operating programs that are multi-provincial or national in scope. Where possible CWTA has worked with stakeholders to ensure that program rules are aligned for RMC in each jurisdiction in which it operates and are also aligned with known national and international best practices. Harmonization ensures that a consistent program is delivered to all Canadians regardless of where they live, and also ensures that program members are able to find operational efficiencies that allow them to provide RMC free of charge.

3. Recovery of Mobile Devices within Alberta

What We Do

RMC is a cell phone recovery program. The primary objective of RMC is to minimize the introduction of wireless devices into Alberta's landfills.

Recycle My Cell deals specifically with mobile devices that were primarily manufactured to connect to a cellular or paging network. Examples of such devices include cellular phones, accessories such as headsets, chargers and batteries, wireless smartphones, wireless PDAs, removable external aircards and pagers.

Ordinary consumer electronics that were not primarily manufactured to connect to a cellular or paging network are not covered, nor collected, by the program. Examples of such devices are cordless phones, PDAs without integrated cellular connectivity, laptop computers and answering machines.

While a list of product definitions has been developed, it should be noted that a regular review of electronic products, either added or deleted from manufacturer product lines, will be required in order to ensure their inclusion in the program as appropriate. The list of product definitions will be updated annually, as required.

Recycle My Cell accepts all orphan, historic and imported mobile devices, as well as mobile devices from non-participating brand owners, when consumers return such product to the Recycle My Cell drop-off locations.

RMC Program Overview

While Recycle My Cell was formally recognized within the province of Alberta in June 2011 it has been operating voluntarily within the province since 2009.

Under RMC, brand owners continue to operate their own corporate programs to collect, reuse and recycle mobile devices. Many of these programs were initiated and established well before regulated Extended Producer Responsibility e-waste programs were in place in Canada.

RMC uses a return-to-retail collection model. Consumers can readily return mobile devices at all participating retail stores operated by brand owners within the province during normal business hours. In addition, consumers will be able to mail back unwanted devices using postage-paid labels when it is not convenient for them to return the devices to a drop-off location.

Devices that have been collected by participating locations are sent to certified processors for proper handling. Processors typically sort the material into three categories – resalable devices, recyclable devices and accessories, and batteries.

When possible, as is consistent with established recycling and reuse practices of cell phone carriers and manufacturers around the world, damaged products are refurbished, and products that meet specific functionality requirements for resale are reintroduced into the market.

All batteries are separated from the device and sorted by chemistry (i.e., nickel-cadmium, nickel-metal-hydride, lithium-ion, small-sealed-lead, mixed); they are sent to appropriate downstream processors where metals are reclaimed.

All material is sent to approved downstream processors for refurbishment, recycling, reclamation or recovery.

4. Strengthening RMC in Alberta

CWTA and its members are committed to the long-term feasibility of Recycle My Cell. All stakeholders in the chain – from manufacturer to carrier to processor – continuously look for ways ensure that the environmental impacts of the devices at all stages of their life are minimized.

Objective 1: Improve Public Education and Awareness

CWTA, and its participating members, have undertaken various promotional activities to raise awareness about the importance of cell phone recycling in general, and the Recycle My Cell program specifically.

Consumers are an integral component of the recycling chain. They make the ultimate decision as to what happens to their devices.

Based on a survey conducted by Quorus Consulting, it was determined that 51% of Albertans knew about cell phone recycling programs in general in 2010; 22% were aware of programs run by participating partners; and 10% were specifically aware of the RMC brand.

CWTA intends to raise awareness utilizing a combination of the initiatives listed below.

Sponsorship of events: CWTA has sponsored relevant events like Waste Reduction Week in Canada and the Recycling Council of Alberta's annual conference in order to increase visibility with audiences that are able to help further the objectives of Recycle My Cell within the province.

Based on results of this sponsorship, as well as a review of other sponsorship opportunities, CWTA will determine its participation in similar events on a case-by-case basis.

Participation at local trade shows and fairs: CWTA plans to explore involvement in provincial trade shows and fairs as they are an excellent opportunity for concentrated exposure in front of a targeted audience.

Paid advertising to support specific events: CWTA has developed and run RMC ads in select markets to coincide with targeted events, like Earth Day, as appropriate.

In addition, CWTA is investigating the use of other advertising methods, such as Google ads, which will offer a more targeted approach to providing information to those searching for it on-line.

Social Media: CWTA developed a Facebook page for RMC that was used to promote the various events that RMC was part of. In addition, Twitter (@RecycleMonCell) has been used to further promote messages about RMC to followers.

A plan is being developed to more effectively use Social media to engage those with an interest in environmental issues and causes.

Ongoing support for the program is provided via:

RMC Web site: To provide on-going support to the RMC program, the CWTA maintains a Web site (www.recyclemycell.ca/www.recyclemoncell.ca) that serves as the central hub for the program. Information about the RMC recovery program, member programs, current collection sites, and steps to clear personal information from a device before it is recycled, is available to consumers via this site.

This site also includes links to the mail-back options that are in place through member programs. Consumers with additional questions about the program are encouraged to contact RMC representatives via an email address that has been established for this purpose (info@recyclemycell.ca / info@recyclemoncell.ca).

RMC material on stakeholder Web sites: CWTA will continue to work with other stewardship organizations, recycling councils and third-parties to ensure relevant information is provided to consumers.

The primary focus of this activity is to ensure that information about cell phone recycling is made available to consumers through Web sites that deal with waste reduction activities in their specific communities, or through sites that are known to be trusted sources of information.

Promotional materials (including recovery boxes, brochures, posters, tent cards and banner/button ads) for municipal and other 3rd party sites: In an effort to increase the number of drop-off locations hosted by municipalities and community groups, and increase program visibility, the CWTA has developed a generic recovery program. Third party locations, such as municipal waste depots, not for profit organizations and other parties not affiliated with current RMC members, are encouraged to participate in the program.

The bilingual brochure provides details about the RMC program, including the Web site address and toll-free number for those requiring further information. The 5"x7" bilingual tent card or 11"x17" poster (available in either English or French), identifies the municipal site or dealer site as a RMC drop-off location and includes the Web site address.

CWTA will continue to provide information to third-parties.

News Canada stories for inclusion in newspapers or Web sites: CWTA will continue to use News Canada as a valuable tool for program promotion. News Canada is a paid service that provides articles, free of charge, for use by publications and Web sites. This has shown to be an effective way of including the Recycle My Cell story in community newspapers and on Web sites that often look for content from external sources. These story pick-ups are then monitored and tracked by News Canada and that information is provided to the CWTA.

Press releases highlighting latest developments regarding RMC: CWTA develops and distributes both targeted and national press releases to coincide with activities RMC participates in.

Earned media: When possible CWTA will continue to honour media requests for information and opportunities to discuss the program via interviews. As an authority on the wireless industry, CWTA is best positioned to speak about the positive steps the industry has taken to properly deal with its end of life materials.

CWTA will review the results of its annual survey to ascertain trends in consumer awareness and behaviour concerning cell phone recycling. Based on those results CWTA will work to devise program promotion initiatives with the goal of increasing the level of awareness concerning cell phone recycling.

Public Education and Awareness Targets

Target: Achieve an awareness rate as outlined in the table below.

Year	Cell Phone Recycling Awareness in Alberta	Recycle My Cell Awareness in Alberta
2008*	49%	
2009*	54%	5%
2010*	51%	10%
2011	64%	11.5%
2012	68%	13%
2013	72%	14.5%
2014	76%	16%
2015	80%	17.5%

*2008, 2009 and 2010 levels of awareness are actual and gathered from the annual surveys commissioned by CWTA.

CWTA considers the targets noted in the table to be aggressive but they are in-line with the national awareness targets that have been set for the program.

- Indicator 1: Percentage of population aware of the program.
- Method to evaluate: Annual survey to gauge consumer awareness and propensity to participate in a mobile device recycling program.
- Indicator 2: Number of visitors to the recyclemycell.ca Web site.

- Method to evaluate: Tracking of number of visitors to the recyclemycell.ca Web site.

CWTA will report on its progress as part of its Annual Report obligation to Alberta Environment.

Objective 2: Ensure Continued Public Participation and Program Accessibility

CWTA and its members support a return-to-retail model for collection drop-off sites. It is felt that the most effective method for cell phone recovery is simply dropping off an existing device(s) when a new one is purchased.

Participating locations that are included in the RMC database collect all devices regardless of make, model or condition in order to provide consumers with the convenience that they seek.

In instances where a drop-off location is not available, RMC will continue to offer several mail back options through its member programs which will allow any consumer in the province – with access to Canada Post service – the ability to conveniently and easily return their devices and accessories at no cost to themselves.

Partner locations: The number of drop-off locations correlates to the number of corporate retail locations in the province. The vast majority of Albertans, more than 80%, live within 15 km of a collection point. Where there is the ability to use a cellular phone there is a retailer and therefore a means to recycle it.

There are currently 560 drop-off locations in 79 communities across the province of Alberta. The Recycle My Cell network of collection sites is continually evolving and expanding as more retailers and brand owners join the program, and as companies introduce new retail stores and dealerships into the marketplace.

CWTA will continue to work with its members to ensure that the list of collection sites noted on recyclemycell.ca is updated on a regular basis to allow consumer access to the most current information available.

Third-party locations: Recycle My Cell provides an easy and effective method for community partners and other organizations to become involved in the recycling effort. Any municipal location, charity organization or corporate/private initiative that wishes to act as a collection site will be able to join the program as a collector.

In addition to program information that will be available on the recyclemycell.ca Web site, RMC representatives will reach out to municipalities and those wishing to participate as a drop-off location.

Promotional materials and box delivery and pick-up will be provided to all participants at no cost.

Mail-back option: Recycle My Cell will continue to offer links to a variety of postage-paid mail-back options for anyone currently unable to reach a drop-off location for any reason.

Public Participation and Program Accessibility Targets

Target: Increase the number of Recycle My Cell drop-off locations by 1% per year from 2012 to 2015.

Year	Recycle My Cell Drop-off Locations Total Forecasted
2012	566
2013	571
2014	577
2015	583

- Indicator: Accessibility of drop-off locations measured by the population within a certain proximity to drop-off location, or by the average travel distance to a drop-off depot.
- Method to evaluate: Map to highlight the number of drop-off locations.

Target: 100% customer satisfaction with the Recycle My Cell program.

- Indicator 1: Target community and program partner satisfaction.
- Method to evaluate: Annual survey to gauge consumer awareness and satisfaction as well as the propensity to participate in a mobile device recycling program.
- Indicator 2: Number and nature of complaints.
- Method to evaluate: Keeping logs of calls to toll-free number as well as keeping track of emails sent to info@recyclemycell.ca to determine the number of and nature of complaints received, as well as the number that are resolved/unresolved.

CWTA will report on its progress as part of its Annual Report obligation to Alberta Environment.

Objective 3: Increase Collection Rates

The CWTA believes that the strategies outlined in Objective 1 and 2 will help facilitate an increase in the number of phones kept out of Alberta's landfills. CWTA notes, however, that an increase in consumer awareness concerning cell phone recycling does not guarantee that the devices will be recycled through RMC and as such the need to look at the full picture in Alberta becomes increasingly important.

Cell phone recycling is a lucrative endeavour, often used by for-profit and charitable organizations as a source of revenue. While efforts are made to funnel devices through the Recycle My Cell program the ability of other programs to continue their work is one of the basic tenants of the program.

CWTA will work with other known organizations (i.e. Call2Recycle) within the province, where feasible, to ensure relevant data is reported in order to provide a full view of what is recovered within the province. In addition, CWTA will work to identify other organizations that are large purchasers – the provincial government, large utilities – of mobile devices in order to investigate their inclusion in RMC.

CWTA would respectfully submit that recovery programs operating within the province with the government's blessings be supported by the government in their efforts to recover obligated materials.

To this end, CWTA would ask that Alberta Environment also take a role in ensuring that the various government departments and agencies be made aware of both the Recycle My Cell program, as well as the ministry's support of our shared objectives: improving the recycling rate of mobile devices.

Collection Rate Targets

Target: Achieve a collection rate as outlined in the table below.

CWTA Available for Collection, Estimated Collection Targets and Collection Rate

Year	CWTA Available for Collection (units)	CWTA Estimated Collection (targets, unit)	Collection Rate	CWTA Available for Collection (tonnes)	CWTA Estimated Collection (targets, tonnes)	Collection Rate
2006	262,131	19,383	7%	52.4	3.9	7%
2007	293,541	35,984	12%	58.7	7.2	12%
2008	326,961	37,926	12%	65.4	7.6	12%
2009	361,336	45,827	13%	72.3	9.2	13%
2010	393,650	59,048	15%	78.7	11.8	15%
2011	424,199	80,598	19%	84.8	16.1	19%
2012	453,370	108,809	24%	90.7	21.8	24%
2013	481,023	134,686	28%	96.2	26.9	28%
2014	509,884	168,262	33%	102	33.7	33%
2015	540,477	199,976	37%	108.1	40	37%

* For years 2006, 2007 and 2008, the CWTA Estimated Collection figure is based on actual national collection data; the resulting Alberta figures for each year are an estimate of the amount collected in Alberta based on Alberta's percentage of the national population.

** 2009 was the first year collections were reported by province instead of an estimate.

*** The weight of devices available for collection includes the weight of batteries within the devices.

**** Churn input into the LCM for 2010, 2011, 2012 and 2013 has been estimated, using a 6% growth rate year over year, in order to allow for the development of a full data set for the years 2012, 2013, 2014 and 2015.

- Indicator 1: Absolute collection¹
- Method to evaluate: Devices collected on an aggregate provincial basis. This data will consist of two elements: the amount of material that is collected through a physical collection site and an estimate of the material that is collected through the mail-back option.
- Indicator 2: Per capita breakdown of Aggregate Total of devices collected.
- Method to evaluate: Absolute collection can be further broken down to a per capita amount (% of product that has been collected relative to the size of the target community).

CWTA will report on its progress as part of its Annual Report obligation to Alberta Environment.

Objective 4: Facilitate Proper Post-collection Management of Materials

Management of Material

At the most basic level, all phones that are collected by the program are diverted from landfill whether through reuse, recycling or energy recovery.

Reuse: When possible, as is consistent with established recycling and reuse practices of cell phone carriers and manufacturers around the world, damaged products are refurbished, and products that meet defined functionality requirements for resale are reintroduced into the market.

Since a phone destined for reuse is re-supplied into the market it is 100% diverted from landfill.

Recycling: Handsets not suitable for reuse are sent to approved downstream processors where they are either disassembled for harvesting spare parts or ground down for the recovery of precious metals.

Of those phones entering the recycling process, 96% of the original input by weight is material that is diverted from landfill and destined for recycling, reclamation and recovery.

Recovery: The 4% of the product that is not recyclable is mainly made up of plastics that are found in most cell phones; this material is recovered as fuel/energy in the precious metal refining process.

Device manufacturers continue to take steps to improve the recyclability of their devices and processors continually refine their processes to reduce the amount of non-recoverable material associated with the recycling of cell phones and accessories. At this time, however, it is difficult to know how much these actions will impact the amount of material that is recovered as fuel/energy.

¹ CWTA will continue to report on the number of devices that are recovered by RMC. RMC data currently represents the results of consumer facing recovery initiatives that collect devices that are considered to be at the end of their useful life by their owners. These are devices that are returned by a consumer because they are meant to be recycled.

In addition, CWTA, with its members, is investigating how to incorporate data regarding other diversion methods employed internally for devices that are returned to members by other means. These returned devices typically originate as a sale to a consumer who then returns them because of buyer's remorse or because the devices are defective or damaged but still under warranty. Since these returns usually involve newer model devices they are not considered to be at the end of their useful life.

Developing meaningful targets for reuse and recycling of wireless devices is challenging and focusing on one aspect of the hierarchy may work against the overall objective of diverting material from landfill for proper disposal. While it is understood that reuse is preferable over recycling whether a phone can be reused is dependent on numerous factors outside the control of RMC members. Where it is possible to reuse a phone the phones are reused. However, it should be understood that phones that meet the criteria for refurbishment from a physical perspective (i.e. can power on, etc.) may not meet the criteria for marketability in that the technology is no longer seen as desirable by consumers. To reintroduce phones into the market purely to meet a defined volume target will prove to be harmful.

Processor Certifications

All of the processors involved with the RMC program are ISO certified and/or certified under Electronic Product Stewardship Canada's (EPSC) Recycling Vendor Qualification Program (RVQP) meaning they have an environmental management system in place which ensures accountability and knowledge of the associated environmental impacts.

CWTA does not currently perform audits on the processors involved with the RMC program. The reporting relationship in place with processors is with their primary partner, in this case the carrier program. It is understood that in order to fall under the RMC umbrella the processor must commit to ensuring they meet their relevant certifications (i.e. a valid ISO certification, confirmation that they meet any specific provincial requirements set out by regulations such as the need to use OES-certified processors in Ontario).

Given that the processors used by RMC members are all certified through their work with provincial bodies that also collect cell phones, and are all legitimate businesses with reputations to protect, it is within reason to believe that the methods by which they deal with products collected through the RMC stream would be no different than those collected by other streams.

CWTA would also like to note that when member programs experience issues with processors – as recently noted with a specific provider that was not providing relevant and timely reporting – the issue is dealt with quickly, and the relationship is severed if necessary.

All members of the recovery chain – from carrier to processor – have a vested interest in ensuring proper processes are followed at all times.

Post-collection Management of Materials Targets

Target: Reuse: Maintain the current diversion level from landfill of 100% for products that meet reuse criteria.

- Indicator: Post-collection fate of material.
- Method to evaluate: Figures provided from recyclers concerning the allocation of RMC recovered devices that were reused, recycled, recovered as energy and land-filled as defined in the pollution prevention hierarchy.

Target: Recycle: Maintain the current level of recycling, reclamation and recovery of 96% for wireless products entering the recycling process.

- Indicator: Post-collection fate of material.

- Method to evaluate: Figures provided from recyclers concerning the allocation of RMC recovered devices that were reused, recycled, recovered as energy and land-filled as defined in the pollution prevention hierarchy.

Target: Ensure that certifications held by processors associated with RMC are valid and align with identified provincial requirements.

- Indicator: Valid certifications of processors.
- Method to evaluate: Copies of valid ISO certifications to show compliance with applicable regulations.
- Method to evaluate: Web site listings for provincial programs that use same processors as RMC to show compliance with program certification.

CWTA will report on its progress as part of its Annual Report obligation to Alberta Environment.

5. Conclusion

CWTA and its members are committed to providing residents of Alberta with a free, convenient and accessible method to dispose of their unwanted wireless devices and accessories. Working together – with Albertans, Alberta Environment and other stakeholders – will ensure that the objectives outlined in this plan are achieved.