

Submitted to: British Columbia Ministry of Environment & Climate Change Strategy

**Director, Extended Producer Responsibility Programs** 

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# At a Glance



# 1. Executive Summary

Products within plan

Mobile devices that were primarily manufactured to connect to a cellular or paging network.

Program website

Recycle My Cell – www.recyclemycell.ca

Recycling Regulation Reference	Summary (5-bullet maximum)
Part 2, section 8(2)(a)  Public Education Materials and Strategies  Refer to Section 3 for details.	<ul> <li>Joint BC steward initiatives (including Recyclepedia, BC Recycles website, and BC Recycling pamphlet).</li> <li>Continued social media presence.</li> </ul> As a result of Covid-19, many of the activities normally undertaken to promote RMC (outreach to depots and local governments; events, including the Earth
Part 2, section 8(2)(b)  Collection System and Facilities  Refer to Section 4 for details.	<ul> <li>Month Challenge) were put on hold.</li> <li>In 2021, there were 332 permanent drop-off locations (25 of 29 Regional Districts) as of December 31st. Net increase of 66 locations.         <ul> <li>299 carrier return-to-retail;</li> <li>33 RMC branded (third-party and depots).</li> </ul> </li> <li>Participating locations 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.</li> <li>RMC offers a free mail-back option which allows any consumer with access to Canada Post services the ability to return their devices.</li> </ul>
Part 2, section 8(2)(c)  Product Environmental Impact Reduction, Reusability and Recyclability  Refer to Section 5 for details.	<ul> <li>The trend toward multi-functional devices which eliminate the need for multiple individual devices has continued within the wireless industry.</li> <li>Program members use certified third-party processors to manage their materials.</li> <li>Product Management – auditor review of processor standards and data to verify accuracy.</li> </ul>
Part 2, section 8(2)(d)  Pollution Prevention Hierarchy and Product / Component Management  Refer to Section 6 for details.	<ul> <li>Of the volume of cellular devices audited, 73% were sent for reuse and 27% were sent for recycling.</li> <li>While it is understood that reuse is the preferred method for dealing with recovered product, in the case of wireless devices, the amount of product that can be refurbished for reuse is dependent on many factors that are not controllable. These factors include the condition of the phone at time of recovery and the technology that is required for its use.</li> <li>Carriers encourage reuse of devices through initiatives such as trade-in and upgrade programs.</li> </ul>
Product Sold and Collected and Recovery Rate  Refer to Section 7 for details.	<ul> <li>Product sold – 171,223 (estimated).</li> <li>Product collected (all initiatives) – 16,744 (estimated).</li> </ul> As a result of Covid-19, public health orders impacted BC residents in a variety of ways including their ability to drop-off devices at collection sites (both return-to-retail and other).
Part 2, section 8(2)(e.1)	Not applicable to Recycle My Cell.

Recycling Regulation Reference	Summary (5-bullet maximum)
Part 2, section 8(2)(f)	Not applicable to Recycle My Cell.
Summary of Deposits, Refunds, Revenues and Expenses	

	Comparison of Key Performance Targets					
Part 2 section 8(2)(g)						
Priority Stewardship Plan Targets (as agreed with ministry file lead)	ts Strategies for Improvement					
Increase awareness of cell phone recycling nationally to 80% by 2015.	Targets have expired as such will not be reported against.	<ul> <li>CWTA will:</li> <li>continue to use the strategies outlined in this Annual Report, including working with BC Stewards on joint initiatives.</li> <li>increase the number of third-party locations in the collection network.</li> <li>continue its outreach to municipalities and regional districts.</li> </ul>				
100% customer satisfaction with the Recycle My Cell program (nationally).	Targets have expired as such will not be reported against.	<ul> <li>CWTA will:</li> <li>continue to identify multiple methods by which a consumer may recycle their device (drop-off locations and mailback).</li> <li>incorporate additional mechanisms (i.e. depot) into its collection network.</li> <li>work with its members and participating organizations to ensure that identified issues are addressed.</li> </ul>				

# 2. Overview

The Canadian wireless telecommunications industry, under the auspices of the Canadian Wireless Telecommunications Association's (CWTA) Recycling Committee, operates Recycle My Cell (RMC), a free national cellular phone recycling program. The members of CWTA include, among others, wireless service providers, wireless handset manufacturers and processors.

Recycle My Cell has served as the cell phone recycling stewardship program in British Columbia since its formal regulatory approval in the province on November 10, 2009.

This report has been prepared by CWTA and is submitted on behalf of the following stewards:

- Bell (including The Source and Virgin Mobile);
- Freedom Mobile (including Shaw); and
- Rogers Communications (including FIDO and Rogers Wireless).<sup>1</sup>

Samsung Electronics Canada Inc. participated voluntarily in Recycle My Cell.

# 3. Covid-19 Impact

Covid-19 has had an overwhelming impact on the world, and this continued to be the case in 2021. Despite the significant shift in attention that this placed on businesses and residents alike, efforts were made to ensure that Recycle My Cell continued to operate with minimal disruption. However, as Manitoba implemented various public safety measures to protect its residents, this ultimately did impact collection sites and the ability for consumers to freely access locations and return devices.

# 4. Public Education Materials and Strategies

RMC continues to work within the province to increase program awareness and usage.

# Consumer Engagement<sup>2</sup>

# Social media

CWTA maintains a Facebook page and a Twitter account for the promotion of the Recycle My Cell program. RMC's Facebook page is used to provide timely information, promote cell phone recycling in general, as well as support various events in which RMC is a participant. CWTA also engages consumers via its @recyclemycell Twitter account.

# RMC website

CWTA maintains a mobile friendly website (www.recyclemycell.ca and www.recyclemoncell.ca) that serves as a central hub for the program. The website is routinely updated to ensure accuracy. The site continues to provide information including drop-off locations, steps to remove personal information from devices prior to recycling them, as well as a link to mail-back options.

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<sup>&</sup>lt;sup>1</sup> See Appendix A for program specifics for member initiatives.

<sup>&</sup>lt;sup>2</sup> See Appendix B for Samples.

In 2021, the RMC website had 81,540 pageviews and 30,415 sessions nationally, as reported by Google Analytics.<sup>3</sup> There were 5,097 database searches for recycling locations in BC (based on defined criteria entered at time of search).

Designated email address and toll-free number
 Consumers with additional questions about the program are encouraged to contact RMC representatives: via email (info@recyclemycell.ca / info@recyclemoncell.ca) or via a toll-free number (1-888-797-1740).

# Stakeholder Engagement<sup>4</sup>

#### • Stakeholder relations

CWTA continues to be an active participant within the Stewardship Agencies of BC (SABC), including serving on various work groups.

This joint initiative of the BC Stewards provides information to BC residents concerning all approved programs within the province through vehicles like BCrecycles.ca, the RCBC Recyclepedia and app, as well as British Columbia's Recycling Pamphlet.

SABC has also worked with BC Product Stewardship Council on areas of common interest.

Targeted stakeholder outreach
 CWTA sponsored the Virtual Coast Waste Management Association (CWMA) Annual Conference.

### • Recycle My Cell branded 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 serve as drop-off locations simply by registering with CWTA.

There are currently 33 RMC branded drop-off locations in BC; the majority of these are depots.

#### • Promotional materials

CWTA continues to provide RMC promotional materials (brochures, table cards, and posters) to third-party locations (municipal and community sites that wish to support the Recycle My Cell recovery program, at dealer sites, and non-affiliated retailers that do not run their own program) wherever such materials may be requested.

# • Stakeholder promotion and third-party websites

Recycle My Cell continues to receive positive support within the province from relevant waste management stakeholders (including RCBC and various third-party locations). RMC information is included on their websites where feasible. In addition, third party locations are also offered a digital copy of the RMC logo and poster, as well as a short news bulletin about their involvement in the program.

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<sup>&</sup>lt;sup>3</sup> Pageviews is the total number of pages viewed. A session (aka visits) is the period of time a user is actively engaged with the website. A single session can contain multiple screen or page views.

<sup>&</sup>lt;sup>4</sup> See Appendix C for Samples.

# Media Engagement<sup>5</sup>

Editorial content and subject matter expertise
 CWTA responds to all requests for interviews or supplemental information as it relates to cell phone recycling or reuse.

## Member Engagement<sup>6</sup>

Promotional materials and websites
 Participating carriers continue to have marketing plans in place that support their various initiatives, including those for trade-in or upgrades.

#### Staff training

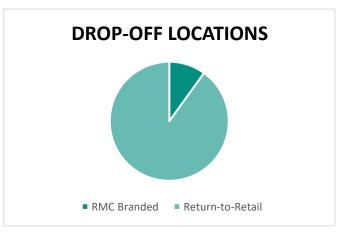
Carriers continue to foster program awareness internally with their staff so that they are able to provide accurate information to their customers.

# 5. Collection System and Facilities

# 5.1 Drop-off locations

In 2021, there were 332 permanent drop-off locations (in 25 of 29 Regional Districts) across British Columbia.<sup>7</sup> This is a net increase of 66 locations over 2021.

Return-to-retail continues to be the primary 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.



# 5.2 Mail-back

In instances where a drop-off location is not available, RMC offers a mail-back option which allows any consumer in the province – with access to Canada Post service – the ability to return their devices and accessories conveniently and easily at no cost to themselves.

# 6. Product Environmental Impact Reduction, Reusability and Recyclability

# 6.1 Handset manufacturers and improving product life cycle management

RMC handset manufacturers continue their efforts to eliminate or to reduce the environmental impacts of a product throughout its life cycle.

The continued trend toward sophisticated and multi-functional devices, which eliminates the need for multiple individual devices, has continued within the tech industry and is well exemplified with the

<sup>&</sup>lt;sup>5</sup> See Appendix D for Samples.

<sup>&</sup>lt;sup>6</sup> See Appendix E for Samples.

<sup>&</sup>lt;sup>7</sup> See Appendix F for list of locations.

smart phone. Today's wireless device does more than ever before and does so within smaller and more efficient designs.

In addition to providing multi-function devices, RMC handset manufacturers carry on their efforts to eliminate or to reduce the environmental impacts of a product throughout its life cycle, and to deliver on sustainability and "social value" promises made to their customers.

Given that handset manufacturers provide devices into global markets, changes made to products are experienced broadly. Handset manufacturers have worked as part of global initiatives (for example, the GSM Association and its work toward a universal charger) to implement cross-industry standards. These initiatives have the potential to bring direct benefit to the entire market.

#### 6.2 Processor members and certifications

All of the processors involved with the RMC program in British Columbia hold multiple certifications, including ISO, R2 and/or verification under Electronic Products Recycling Association's (EPRA) Recycler Qualification Program (RQP).8

# 7. Pollution Prevention Hierarchy and Product / Component Management

Section 7.2 identifies the volume of cellular devices collected through the RMC programs as 16,744 devices. Of the volume of cellular devices audited, 73% were sent for reuse and 27% were sent for recycling.<sup>9</sup>

Devices that have been identified for reuse are not audited; components that have a market or value are not likely to end up in landfill. In scope for the audit are devices that have been identified for "recycle".

Recycled devices that were audited flowed through processors that hold valid certifications: 97% of devices flowed through processors that have been verified to the RQP, and the remaining 3% flowed through processors that have been certified to the R2 standard.

**Reuse:** While it is understood that reuse is the preferred method for dealing with recovered product, in the case of wireless devices the amount of product that can be reused is dependent on many factors that are not controllable. These factors include the condition of the phone at time of recovery and the technology that is required for its use. As such, to reintroduce phones into the market that do not meet those criteria or that are not supported on technology in a given market do more harm than good. For this reason, phones that do not meet reuse criteria will continue to be sent for responsible recycling.

Devices that are deemed reusable have their data wiped and are sold via auction to third-parties. These phones may be commingled with devices collected via non-program participants.

Carriers do encourage the reuse of devices through initiatives such as trade-in and upgrade programs

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<sup>&</sup>lt;sup>8</sup> See Appendix F for a list of certifications held by processors.

<sup>&</sup>lt;sup>9</sup> This represents all devices recovered in BC.

In addition, many carriers also have specific plans and incentives for consumers that already have devices and "bring" them when they switch their service provider. These "Bring Your Own Device" programs encourage consumers to reuse devices they already own.

**Recycle:** Devices destined for recycling are handled based on the general practices of the primary processor. In all instances the batteries are removed from the device and the remaining material is either further dismantled, or shredded in entirety (minus the backing), before being sent to approved downstream processors.

Once the material reaches its downstream processor it can either be separated further into its various components and consolidated with other like materials and sent further downstream, or sent in its original shredded state to be smelted.

The material from RMC participating programs may be commingled with other non-program materials. Commingling of materials occurs often in order to gain efficiencies for shipping purposes, and to ensure viable and competitive pricing for materials. This is a standard business practice employed by processors.

In order to validate data concerning end-fate of materials, the RQP and ERS must be used in conjunction with processor "mass balancing" to bring reliance. The mass balance exercise identifies the amount of material received by the processors and the resulting materials and their subsequent downstream processors. Information for the mass balance reporting is provided directly by the processors.

As noted, devices have value whether they are sent for reuse and sold as working devices, or shredded and sold for precious metal recovery. Each stream has legitimate and robust markets for the materials and processors have a monetary incentive to ensure that the material ends up where it is intended to.

In 2021, processors used to recycle RMC materials were either directly contracted RQP-verified primary processors, or R2 certified processors contracted by third-party vendors.

Table 1: RQP-verified primary processors

Material / Component	% of Material Stream	Recycling Process Description - Processor A	Disposition <sup>10</sup>
Metal Dusts <sup>11</sup>	0%	Dust from the plant is gathered by dust machines. Dust pucks made from dust created within plant is sent downstream for precious metal recovery. This process is not exclusive to dust from cell phones.	N/A
Other (Mixed Metals)	100%	Phones destined for recycling are shredded and sent downstream for precious metal recovery.	Refining
	100.00%		

 $<sup>^{\</sup>rm 10}$  The disposition description comes from RQP-approved downstream flow documents.

<sup>&</sup>lt;sup>11</sup> The volume of metal dusts that is attributable to cell phones cannot be separated from the full total, however regardless of where the dust originates from (i.e. material type), it is all dealt with using the same industry approved processes.

Material / Component	% of Material Stream	Recycling Process Description - Processor B	Disposition
Copper Bearing Material	N/A	Material from cell phones and accessories is aggregated, shredded or sent down stream for copper recovery. The specific process will depend on which downstream processor is used. (Not exclusive to cell phones, may include some accessories.)	N/A
HG Circuit Boards	N/A	Circuit boards are manually separated from cell phones and shipped for further processing (shredding or smelting). The specific process will depend on which downstream processor is used.	N/A
	N/A		

Table 1 identifies the components and the processing end-fates for the 97% (of the 27% of material destined for recycling) sent to RQP-verified primary processors.<sup>12</sup> This material has been audited. The remaining 3% (of the 27% of material destined for recycling) was sent to an R2 primary processor.

The percent of material stream presented above is based on Mass Balance reports for RMC material handled at a national level. For the purposes of clarity, the third-party audit cannot confirm that material specifically recovered via RMC was sent to the various processing end-fates. Once the material is separated and/or shredded it can no longer be tracked as belonging specifically to RMC. While it is possible to confirm the volumes that were received, and to trace the volumes of material that were sent to their respective downstream processors as an aggregate, it is not possible to attribute specific volumes to a respective program.

Based on data provided by the primary processor all elements of suggest that the commingled RMC material is dealt with in the manner that is identified.

Table 2: RQP-verified primary processors

Component  (% of component sold/transferred for processing that is treated under each processing pathway)						
		l	Processor A			
	Transfer to	Transfer to	Transfer to	Multi-step	Multi-step	Multi-step
	direct	direct	direct	processing in	processing	processing
	processor in	processor	processor	BC	elsewhere in	outside
	BC	elsewhere in	outside North		North	North
		North	America		America	America
		America				
Other (shredded Cell phones)						100%

-

<sup>&</sup>lt;sup>12</sup> See Appendix G for a chart identifying acceptable processes and end-fates.

(% of compor	nent sold/trans	sferred for pro	Component cessing that is Processor B	treated under	each processir	ng pathway)
	Transfer to direct processor in BC	Transfer to direct processor elsewhere in North America	Transfer to direct processor outside North America	Multi-step processing in BC	Multi-step processing elsewhere in North America	Multi-step processing outside North America
Copper Bearing Material					N/A	
HG Circuit Boards					N/A	

Table 2 identifies the components and the verified processing pathway for the primary processors.

Based on data provided by the primary processors, all elements suggest that the commingled RMC material is dealt with in the manner that is identified.

Table 3: RQP-verified primary processors

Estimated Conformance Levels – Processor A and B <sup>1</sup>						
	Reuse	Recycle	Recycle: Metal Recovery	Landfill	Other Waste Disposal	
Metal Dusts			N/A			
Copper Bearing Material			N/A			
HG Circuit Boards			N/A			
Mixed Metals			N/A			
Other			100%			

Table 3 identifies the estimated conformance levels for the primary processors.

#### Note:

- All material collected via RMC is commingled with other similar material types before being sent to secondary processing streams. It is impossible to verify the exact contents of material streams at this point; therefore the conformance levels are estimations. However, based on data provided by the primary processors, all elements of the RQP audit process suggest that the commingled RMC material is dealt with in the manner that is identified.
- Some of the material (aluminum, plastic, and steel) captured in 'other' may be recycled before metal recovery occurs.

Since RMC material is commingled at the primary processors, and not tracked independently, the estimated conformance level is based on CWTA's understanding of the various processes employed by each primary processor and their downstream processors.

# 8. Product Sold and Collected and Recovery Rate

#### 8.1 Product sold

For the purpose of annual reports, "Product Sold" is the estimated number of all mobile devices attributed to CWTA manufacturer members<sup>13</sup> that are *distributed* into BC by identified stewards. Data collected for CWTA does not track inter-store (nation-wide) transfers, or what happens to unsold products, etc. Estimates are included where actual data is not available.

In 2021, a total of 171,223 devices were reported as having been distributed into BC. This total includes devices sent directly into a province and devices sent to distribution centres:

- 170,462 are estimated to have been directly distributed to locations within the province that were affiliated participating carrier locations. This includes the carrier's corporate stores, sales directly to a customer (Web and phone), as well as third-party retailers.
- 761 are estimated to have been shipped into BC from distribution centres for various third-party retailers. It is difficult to determine an actual quantity for this category since the third-party does not provide that information to the carrier.

It is important to note that this quantity does not reflect the actual quantity that was sold to an end user, or that might become available for collection in the future.

# 8.2 Volume of cellular devices collected

### **Devices collected by members**

RMC data represents the results of consumer facing recovery initiatives that collect devices that are considered to be at the end of their useful life, as well as devices collected through trade-in or upgrade programs. These devices are collected via return-to-retail and participating third-party locations.

RMC members' also recover devices that are returned to them for a variety of reasons including buyer's remorse or damage; this data is captured under the category of "Other Member Initiatives".

In 2021, participating RMC members collected 16,744 devices.

The volume of cellular devices "collected" is the estimated sum total of all Program Products collected by a permanent collection facility.

Quantification of Product Collected is based on:

- Reports generated by the Processors/Consolidation Centres and potentially Reverse Logistics
  Centres/Warehouses Collection Facilities during the Reporting Period and include delineation of
  products by province of origin to the carriers or CWTA directly for some parts of the program.
  - These reports are generated from their individual inventory programs for the Reporting Period.

<sup>&</sup>lt;sup>13</sup> Data provided in this report is exclusive to product distributed by manufacturers that are members of CWTA, and as such is a subset of the total devices that are distributed in to the province. Data concerning devices made by OEMs that <u>are not members</u> of CWTA are not included in this report. (It is expected that this data may be reported by other proponents.)

This data is reported to by a third-party that has been secured for the purpose of aggregating information provided to it by carriers; this is done in order to maintain confidentiality.

- Consolidated values for each product category are reported by quantity and end fate (whether reused or recycled) per product type.
- Internal carrier collection programs (e.g., trade-ins, warranty repairs, etc.).

Products Collected from unknown origin are accounted for using either an estimate based on products returned that are of known origin, or attributed to the province in which the Carrier is headquartered. In the instance where amount is estimated the following process is used:

- The amount of material collected from known origins is determined for each province. An
  aggregate total is also determined for Canada. Based on this information, the percentage of
  product recovered specifically from BC is determined. For example, if 12 devices were recovered
  from BC and a total of 100 devices were collected nationally, the percentage coming from BC
  would equal 12%.
- The amount of material collected from unknown origin (where boxes are received at Processors/Consolidation Centres without a unique identifying number, or those collected via mail-back) are aggregated into a total quantity received. The known percentage (in this case 12%) would then be attributed to the aggregate of unknown origin to determine the estimate of what may have originated from BC.

RMC data represents the results of consumer facing recovery initiatives that collect devices that are considered to be at the end of their useful life, as well as devices collected through Trade-in or Upgrade programs. These devices are collected via return-to-retail and participating third-party locations.

Programs included in this category in 2020 were:

- Bell (includes Virgin Mobile):
  - o Bell Blue Box
  - o Bell Trade-in Program
- Freedom Mobile:
  - o Freedom Mobile Trade-in
  - o Shaw
- Fido:
  - FidoTRADE
- Rogers:
  - Rogers Recycling Program
  - o Rogers Trade Up Program
- The Source:
  - o The Source Trade-up Program

In addition, phones collected through RMC third-party locations are also accounted for here.

An estimated allocation has been made for each Regional District; where data is provided as a breakdown it is included.<sup>14</sup>

# Devices collected by other programs

There are many not for profit organizations across the country that actively encourage Canadians to donate unwanted mobile devices in order to generate funds from recycling and reusing the devices. In

<sup>&</sup>lt;sup>14</sup> See Appendix H for estimated recovery in Regional Districts.

addition, there are also 'for profit' ventures that collect phones by providing incentive – either directly to consumers or to their collectors – to do so. Data from these initiatives is not available.

# 8.3 Recovery rate

Reporting on a recovery rate is not applicable per the currently approved product stewardship plan.

# 9. Summary of Deposits, Refunds, Revenues and Expenditures

This section is not applicable to Recycle My Cell.

# 10. Comparison of Key Performance Targets

Targets included in the approved RMC plan have expired and, as such, will not be reported against.

CWTA has continued its work to increase awareness of cell phone recycling and to ensure customer satisfaction using the strategies outlined in this Annual Report. This included working with BC stewards, increasing the number of third-party locations, and working with stakeholders to address any identified issues.

# 11. Plan Performance

#### **Consumer Awareness**

#### **Annual Recycling Study 2021**

CWTA has commissioned an Annual National Cell Phone Recycling Study (Study)<sup>15</sup> since 2009. The purpose of this market research survey is to gauge behaviours, attitudes and public awareness related to cell phone recycling and old mobile devices.

# Recycling in General

94% of BC respondents support or somewhat support cell phone recycling.

The survey asked all respondents what products, materials, or other items come to mind when they think about recycling. The top responses included traditional, everyday recyclables such as paper/newspapers (24%), plastic/plastic bottles (28%), Tin Cans (11%), and glass (11%). Electronics (and batteries) as a whole were mentioned by 2% of respondents.<sup>16</sup>

# Consumer Diversion from Landfill as a Model for Consumer Behaviour

Many consumers participate in reuse and recycling activities without being consciously aware of this behaviour.

The term "recycling" is complicated and often misunderstood. Cell phones are *sold* or *traded-in*, and even when used for a new purpose by the consumer or given to someone else, are not considered to be reused.

<sup>15</sup> The study is a full online survey (with telephone only in PEI) with a sample size at 3,000 respondents nationally, and 300 in Manitoba.

<sup>16</sup> National numbers. Question: [Open-ended] When you think about recycling, what products, materials, or items come to mind?

Consumers don't necessarily recognize certain behaviours as recycling, especially when they aren't specifically identified as such. Because consumers don't necessarily see how these activities fit their definition of recycling, they don't see cell phones as part of the traditional recycling equation.

Using Consumer Diversion from Landfill (CDL) to explain consumer behaviours related to end-of-life management of cell phones helps identify the various ways that unwanted devices are dealt with. In this instance, end-of-life simply refers to a consumer no longer actively using the device in question for its intended use.

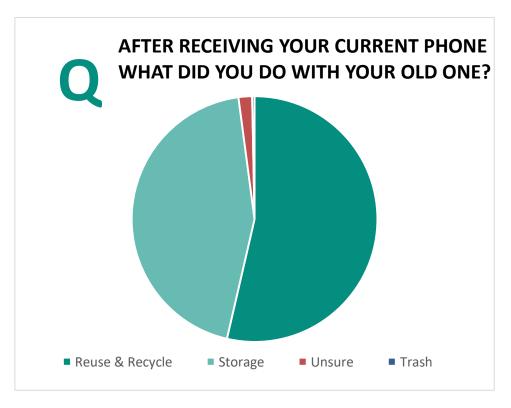
CDL can be separated into two main categories: Storage, and Reuse & Recycle.

The Study shows 98% of British Columbians diverted their last device from landfill as a result of storage or reuse and recycling activities.

#### Storage:

In BC, 44% of survey respondents reported storing their last device upon receiving their current one.

When asked if they had <u>any</u> cell phones in storage, 70% of BC respondents reported that they did. On average, they reported storing 2 devices.



#### Reuse & Recycle:

Over half (54%) of respondents chose forms of reuse or recycling for their previous device. Top methods included: giving away device (16%); return or trade-in to carrier (7%); recycling, as a deliberate choice (10%); returning to a retailer (4%); selling the device (7%); using it for other purposes, e.g. alarm clock (7%); and donate to charity (2%).

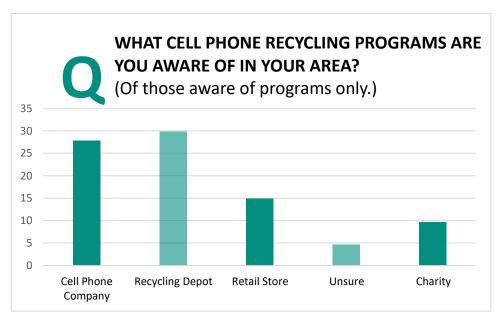
# Other (unsure, trash):

In 2021, less than 1% of BC residents reported throwing their previous device in the garbage, while 2% could not recall what happened to their previous device.

#### **Consumer Perception & Awareness**

BC respondents report a high level of awareness that cell phones can be recycled (86%).

Forty-nine (46%) of respondents reported being aware of a recycling program for cell phones. When asked if they had heard of the Recycle My Cell program specifically, 5% of those aware of programs reported they had.

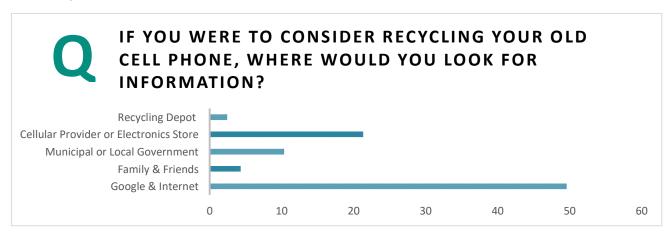


Interestingly, when asked if they were

aware that most cell phone carriers have trade-in or programs that allow them to upgrade their cell phone, 83% of British Columbians respondents reported that they were. Of those who were aware of such programs, 71 % reported being aware that cell phones received through trade-in and upgrade programs were recycled or reused.

#### **Information Search**

Cell phone "recycling" is not an everyday occurrence, as are other types of recycling, so it does not form a habit in the day-to-day life of a consumer. In order to better understand consumer behaviour, respondents were also asked where they would look for information if they were to consider recycling their cell phone.



50% of British Columbians would search the Internet (including referring to Social Media), while 21% would refer to their cellular service provider or an electronics retailer, as well as contacting municipal or local governments (10%).

# 12. Conclusion

CWTA and its members remain committed to the RMC program and its growth within the province.

RMC members continue to make enhancements to their programs in order to increase usage amongst consumers and to minimize the impact of their product at the end-of-life.

CWTA believes that working together – with BC Ministry of Environment & Climate Change Strategy, BC residents and other stakeholders – will ensure continued success.

# Appendix A

# **Program Specifics for Member Initiatives**

Steward	d Program Location		Devices Accepted	Consumer Incentive	
	Bell: Blue Box	Accepted at any Bell Aliant or Bell store, The Source locations, Virgin Mobile stores and participating	All mobile devices as defined by this program from any manufacturer or carrier.	Net proceeds from the program go to World Wildlife Fund to support	
		dealer locations.  Mail-back label available on	Generally \$0-value devices.	the Re-generate Canada initiative.	
		website.			
	Bell:	Accepted at any Bell Aliant	All mobile devices as defined by this	Trade-in value to	
	Bell Trade-in Program	or Bell store, Virgin Mobile	program from any manufacturer or	customer.	
Dall		stores and participating dealer locations.	carrier.		
Bell	The Source:	Accepted at all participating	All mobile devices as defined by this	Trade-in value to	
	The Source Trade-up Program	locations.	program from any manufacturer or carrier.	customer.	
	Virgin Mobile:	Accepted at all participating	All mobile devices as defined by this	Net proceeds from	
	Recycle Me	locations, or via mail-in.	program from any manufacturer or carrier.	the program go to World Wildlife	
			Generally \$0-value devices.	Fund to support the Re-generate Canada initiative.	
	Virgin Mobile: Trade-in Program	Accepted at all participating locations.	All mobile devices as defined by this program from any manufacturer or	Trade-in value to customer.	
			carrier.		
Freedom Mobile	Freedom Mobile Trade-in	Accepted at all participating locations.	All mobile devices as defined by this program from any manufacturer or carrier.	Trade-in value to customer.	
	Fido: FidoTRADE	Accepted at all participating locations.	All mobile devices as defined by this program from any manufacturer or carrier.	Trade-in value to customer.	
	Rogers Recycling	Accepted at all participating	All mobile devices as defined by this		
Rogers	Program	locations.	program from any manufacturer or carrier.		
			Generally \$0-value devices.		
	Rogers: Trade Up Program	Accepted at all participating locations.	All mobile devices as defined by this program from any manufacturer or carrier.	Trade-in value to customer.	

# **Appendix B**

# **Consumer Engagement Samples**

2021 Facebook & Twitter Posts

RMC Twitter Page (Samples of posts)



Recycle My Cell @RecycleMyCell · 22 Mar 2021 · · · · Spring has finally sprung! With the new season comes spring cleaning, if you come across old, unused devices, find out where you can recycle them at recyclemycell.com!





# Recycle My Cell @RecycleMyCell · 13 Aug 2021

**#Didyouknow** its unlucky to hang onto unused mobile devices? At least we think it is! This Friday the 13th try to ward off some bad luck by finding a device drop off location near you, visit recyclemycell.ca/drop-off-locat... for more details!



recyclemycell.ca

Drop Off Locations - Recycle My Cell Some of our drop off locations remain closed as we do our part to mitigate the spread of COVID-19. D...



#### Recycle My Cell @RecycleMyCell · 8 Dec 2021

Planning on buying a used cell phone this season? Be sure to visit devicecheck.ca - a convenient tool to find out if a device has been blacklisted in Canada. Make sure you recycle your old one as well. Visit recyclemycell.ca/drop-off-locat... to find a drop-off location near you.





# Recycle My Cell @RecycleMyCell · 21 Dec 2021

Today is the #WinterSolstice, the official start of winter. It's also a great opportunity to photograph a phenomenon called the "Christmas Star." Here are some great tips for photographing the beautiful night sky with just a cell phone:

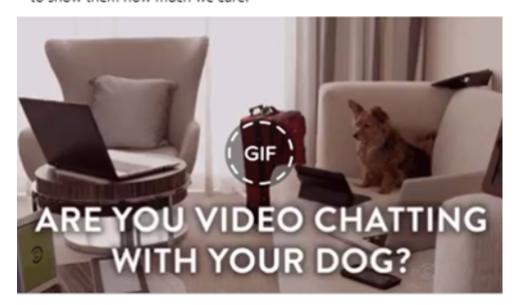


# usatoday.com

How to photograph the Winter Solstice from your ... A tripod is key, and don't forget the smartphone adapter, which costs around \$10. To keep the ... RMC Facebook Page (Samples of posts)



Celebrating #FamilyDay may look different this year than most, but that doesn't mean that we can't call, text, and video chat our families to show them how much we care!





Been thinking about clearing out those office drawers? What better time than on #OrganizeYourHomeOfficeDay! If decluttering is your favorite form of spring cleaning, be sure to visit <a href="https://www.recyclemycell.ca">https://www.recyclemycell.ca</a> to find out how you can recycle your old and unused cell phones for free.



RECYCLEMYCELL.CA

# Recycle My Cell

Canada's free recycling program for mobile devices and accessories...



# Recycle My Cell

Published by Hootsuite **②** · March 30, 2021 · **③** 

Recycle My Cell is Canada's national recycling program for mobile devices and accessories. We make it easy for you to recycle your cell regardless of brand, model, age, or condition.

Find out more at https://www.recyclemycell.ca/overview/



# RECYCLEMYCELL.CA

# Overview - Recycle My Cell

Welcome to Recycle My Cell — Canada's national recycling program for mobile devices and accessories. Recycle My Cell links participating...



# Recycle My Cell

Published by Hailey Roos @ - July 30, 2021 - 🔇

Friends don't let friends hoard their unused mobile devices! \*gasp face\* In fact, on the #InternationalDayofFriendship good friends remind each other that recycling your cell phone is easy, free, and ecofriendly. Find a drop-off location near you at: http://ow.ly/Lgaa50CT5e6

http://gph.is/1qCKdll



MEDIA3.GIPHY.COM

media3.giphy.com



Happy #NationalCookieDay! Whether you're looking up the next great cookie recipe on your cell phone or flipping through a book of family recipes, make sure you make enough to share so that everyone can celebrate this sweet day with you.

https://media.giphy.com/media/tyttpHjOqtR22WNjUyl/giphy.gif





Have you written to Santa one too many times asking for a new cell phone? Make sure you stay on Santa's good list and by recycling your old and unused cell phone when your new one arrives. Visit <a href="https://www.recyclemycell.ca/">https://www.recyclemycell.ca/</a> to find out how.





This #NYE, make a resolution that you can easily check off your list – recycle all the old and unused devices in your junk drawer. It's easy, free, and good for the environment! Visit <a href="https://www.recyclemycell.ca/drop-off-locations/">https://www.recyclemycell.ca/drop-off-locations/</a> to find a drop-off location near you.

# Ringing in the New Year in a pandemic...



# **Appendix C**

# **Stakeholder Engagement**

Outreach - Promotional Materials (Digital Poster and template of news bulletin offered to RMC Branded locations)



# [INSERT Town/Organization name] now part of the Recycle My Cell program

Most of us have owned on average three or four cell phones prior to our current one. That means that a lot of us likely have a slew of old devices that are either getting hidden away in junk drawers or disposed of incorrectly.

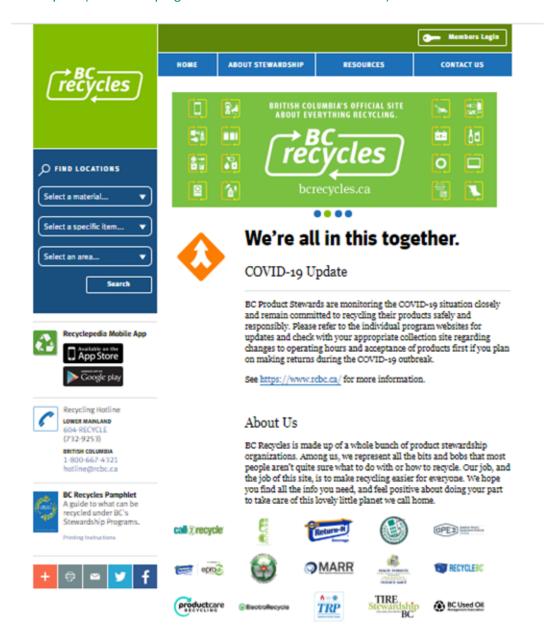


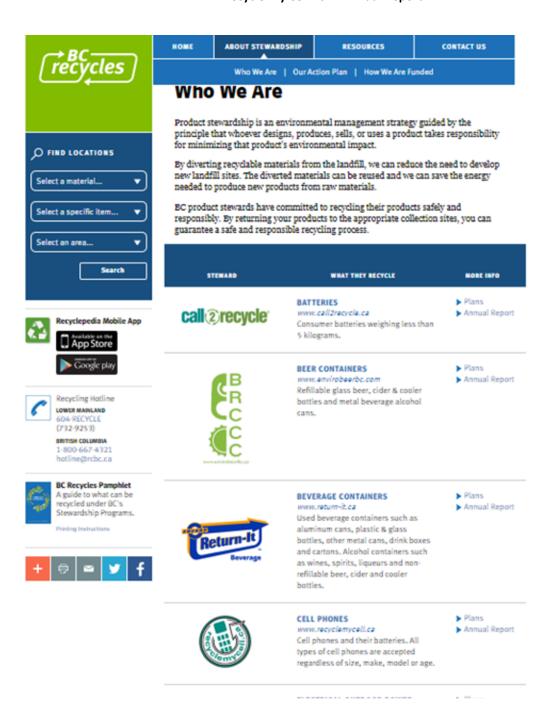
The [INSERT Town/Community/Org name] has joined Recycle My Cell, Canada's free cell phone recycling program, making it easy to dispose of your old devices responsibly. A drop off box is located at [INSERT location], where old wireless devices and their accessories will be accepted, regardless of brand or condition. After your device is received, it is sent to a processor where it can be refurbished or broken down and recycled.

"Thinking green doesn't need to be complicated, and keeping old cell phones out of our landfills couldn't be easier," says Bernard Lord, president & CEO of the Canadian Wireless Telecommunications Association. "I encourage all Canadians to take a few moments to reflect on some of the simple things they can do to help protect the environment for future generations."

Help [INSERT Town/City/Community] go green by dropping off your old cell phones! Accepted items include: cell phones, smartphones, wireless PDAs and pagers (as well as their batteries and accessories). For more information on the program, visit <a href="www.RecycleMyCell.ca">www.RecycleMyCell.ca</a>.

#### BC Recycles (Stewardship Agencies of British Columbia website)



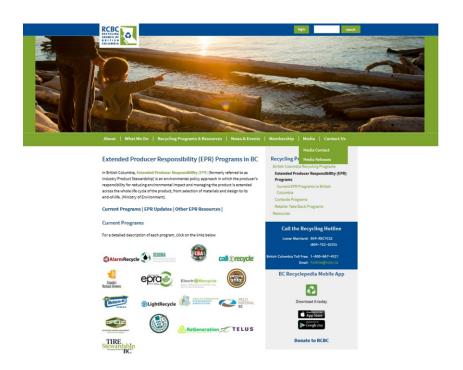


# **BC Stewards Pamphlet**





# **RCBC** Recyclepedia





# What can I do with my old cell phone?

The CWTA's Recycle My Cell program is a province-wide, end-of-life recycling program for cell phones and accessories, available to all consumers and businesses in British Columbia. As of November 2008, you can drop off any of the regulated products at designated collection sites and be assured they will be recycled responsibly. Drop-off locations will accept cell phones, smartphones, wireless PDAs, batteries and pagers, as well as cords and accessories - regardless of brand or condition.



 $\label{thm:continuous} Visit the Recycle \ {\tt My Cell \ website} \ or the RCBC \ Recycle pedia to find the nearest drop-off location for you old cell phone.$ 

Back to Main FAQ's page



Join the Recycling Minute Email List



# Did you know that more than 95% of the materials in an average mobile device are responsable? in SC, cell phones are included in a province-wide recycling program. Also accepted are headsets, chargers, betteries and other access ories. For a list of retailers participating in the program, please visit Recycle Mr Cell. Call phones are also accepted for recycling through Encorp Pacific's province-side electronics recycling program. There are also a number of non-profit organizations and electronic retailers in SC accepting call phones for reuse. label offered by Recycle My Cell. Any mobile device - regardless of brand, model, age can be recycled through this pre-paid mail-back option. For a list of local recycling and reuse options, please see below. 26 results found Showing results for: Cell Phones in Victoria Alpine Disposal & Recycling (Victoria) AC Used Oil Secretary Coll 2 recycles MARR CHAPTER



# Bell (Hillside Centre)

fridges, freezers. Call for details, fees.

Phone: (250) 474-5145

See what other materials this depot also accepts

Address: 5043 Dunford Avenue, Langford - Map Website: http://www.alpinegroup.ca Meura: Mon-Pri 3:00am - 4:00pm



Phone: 5-888-797-6740

Address: 5544 Hitalde Avenue, Hitalde Centre, Victoria - Map Website: Recycle/lyCell.ca

Hours: Regular business hours.

Notes: This organization participates in the CVTA Recycle My Cell program.

Notes: Depot for Redeneration paint plus, OFEIC, SQUONA, MARR, CWTA, CalibRecycle, Encorp beverage container and Alarm Recycle programs. Fee for freon removal for

# Bell (Mayfair Shopping Centre)



Phone: 5-888-797-6740

Address: 5147 Douglas Street, Hayfair Shopping Centre, Victoria - Map

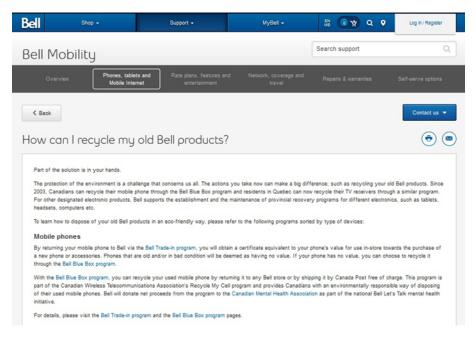
Hours: Regular business hours.

Notes: This organization participates in the CVTA Recycle Hy Cell program. Location Peadback

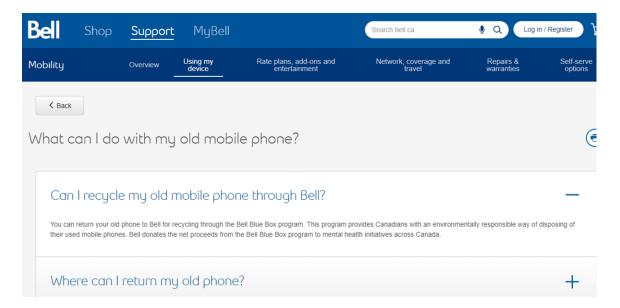
# **Appendix D**

# **Member Engagement**

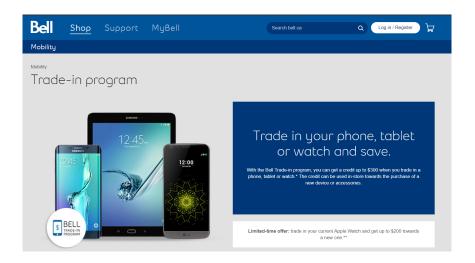
#### Bell

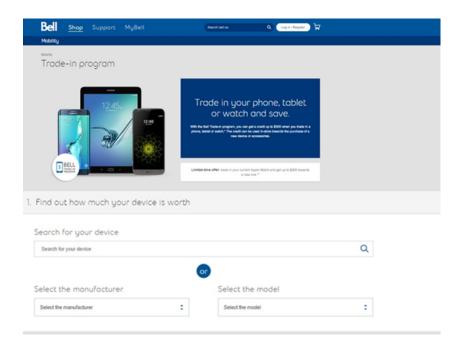


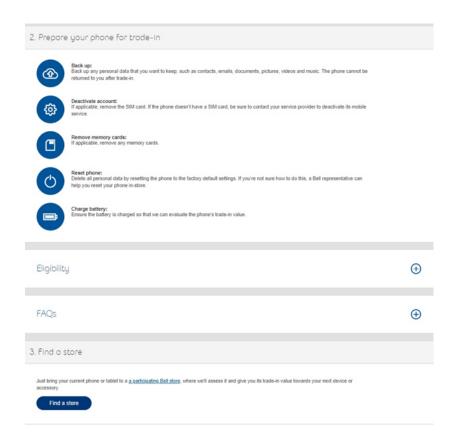
#### Bell: Bell blue box



# Bell: Bell Trade-in







# The Source: The Source Trade-up



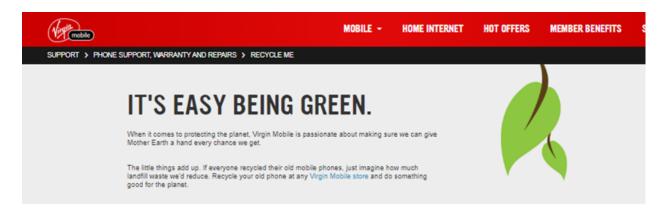
# Trade in and get new tech

Bring your current device to any The Source store and we'll give you a Gift Card equal to the current trade-in value—worth up to \$850. Your Gift Card can be used in-store towards your new phone, or just about any other tech including laptops, smart home or headphones. Find the new tech you want today!

#### Here's how you can prepare for a quick and easy trade:

- You must be 18 or older, and be the legal owner of the device you're trading in-you may be asked to present a valid form of photo I.D. to prove your age
- 2. Back up your contacts, photos, apps, files, music, info, etc., so you don't lose them
- 3. Perform a factory reset to ensure that none of your personal files are left on the device
- Disable iCloud and Find My Phone features-if you don't disconnect these services, your device will be reimbursed at SO
- Please bring your device's battery and/or charging cable, as it may impact the trade-in value of your device
- 6. Once you trade your device in, it is final-you will not be able to get the device back once the trade in is complete

# Virgin Mobile: Virgin Mobile Recycle



#### WHAT SHOULD I DO BEFORE RECYCLING MY OLD PHONE?

Before you send your phone off for recycling, here's a few things you'll need to do:

- Cancel your mobile service and pay your final bill in full or transfer your mobile service to your new phone. You can use the free Cell Phone Data Eraser by Recycle My Cell to help clear your data.
- . Erase any personal information from your device, including text messages, contacts and personal files.
- · Remove your SIM Card (if there's one).

#### WHERE CAN I RETURN MY OLD PHONE?

You have 2 options to recycle your old phone in an environmentally safe way and get one step closer to a cleaner world:

- 1. Visit a Virgin Mobile Store
- No matter what brand or company your phone is from, you can head to any Virgin Mobile store and drop it off with a Virgin Mobile sales rep. You can also return accessories like headsets, chargers and old batteries.
- 2. Mail it in (It's free!

You can send your old mobile phone, batteries and accessories by Canada Post free of charge. Here's how to do it.

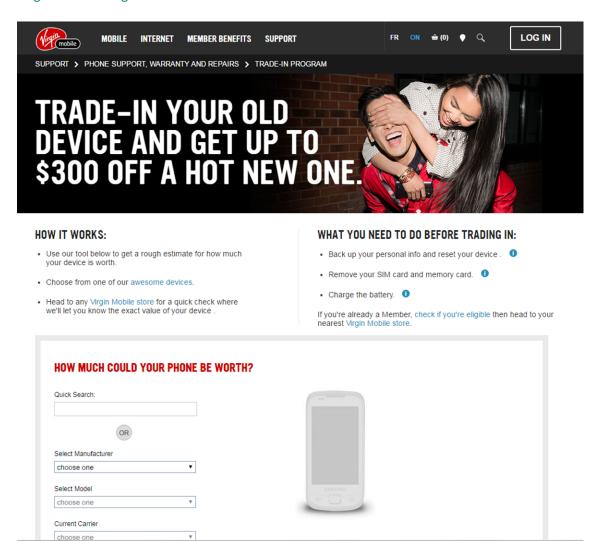
#### WHAT HAPPENS TO RECYCLED PHONES?



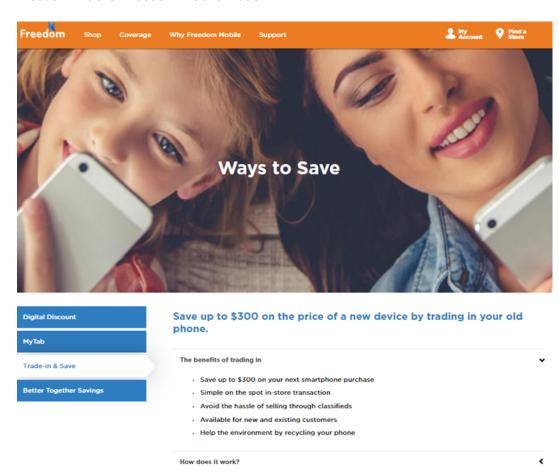
First we delete all data from donated phones. We then proceed to refurbish the phones that are still usable. The remaining phones and accessories are recycled according to Canadian regulations.

Our recycling program donates net proceeds from recycled funds to mental health initiatives across Canada.

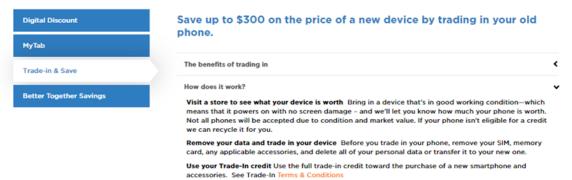
# Virgin Mobile: Virgin Mobile Trade-in



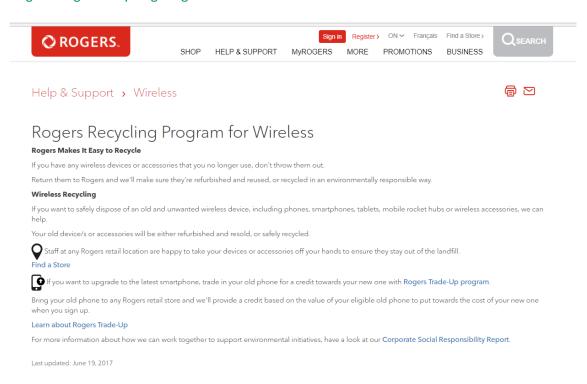
### Freedom Mobile: Freedom Mobile Trade-in



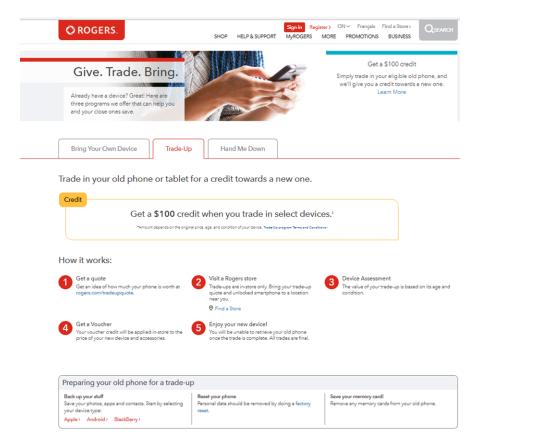




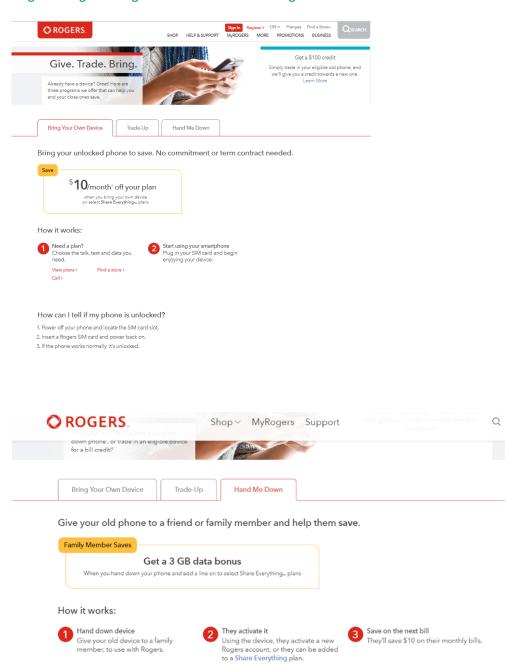
### Rogers: Rogers Recycling Program



### Rogers: Rogers Trade-Up

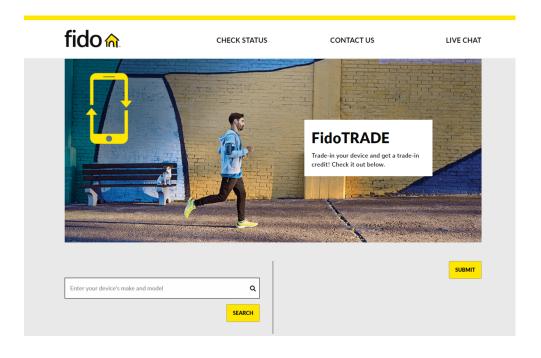


## Rogers: Rogers Bring Your Own Device and Rogers Hand Me Down



(+) SEE FULL DETAILS

## Fido: FidoTrade



fido⋒	CHECK STATUS	CONTACT US	LIVE CHA
BLACKBERRY K			Blackberry Key2 anada
broken or cracked? ① O Yes O No  Have all accounts been removed or turn		\$4 Quote for this device To get a final quote, a select GET A QUOTE	nswer the questions and
Select the Transaction Type of your new device:  Where did you purchase your new device?  What new device did you purchase?	·		

Appendix E

# List of Drop-off Locations in British Columbia (as of December 31)

Program/Location N	lame	Community	Regional District
Bell	The Source	100 Mile House	Cariboo
RMC	Gold Trail Recycling Ltd.	100 Mile House	Cariboo
	Abbotsford Mission Recycling		
RMC	Program	Abbotsford	Fraser Valley
Bell	Bell	Abbotsford	Fraser Valley
Bell	The Source	Abbotsford	Fraser Valley
Bell	Virgin Mobile	Abbotsford	Fraser Valley
Freedom Mobile	Freedom Mobile	Abbotsford	Fraser Valley
Freedom Mobile	Freedom Mobile	Abbotsford	Fraser Valley
Freedom Mobile	Shaw	Abbotsford	Fraser Valley
RMC	Regional Recycling	Abbotsford	Fraser Valley
Rogers	Fido	Abbotsford	Fraser Valley
Rogers	Fraser Valley Wireless	Abbotsford	Fraser Valley
Rogers	Sky-Net Wireless Inc.	Abbotsford	Fraser Valley
Rogers	Kinetic Wireless	Abbotsford	Fraser Valley
Rogers	Rogers	Abbotsford	Fraser Valley
Rogers	Wireless World Solutions	Abbotsford	Fraser Valley
Bell	Bell	Burnaby	Metro Vancouver
Bell	The Source	Burnaby	Metro Vancouver
Bell	Virgin Mobile	Burnaby	Metro Vancouver
Bell	Bell	Burnaby	Metro Vancouver
Bell	Bell	Burnaby	Metro Vancouver
Bell	Bell	Burnaby	Metro Vancouver
Freedom Mobile	Freedom Mobile	Burnaby	Metro Vancouver
Freedom Mobile	Freedom Mobile	Burnaby	Metro Vancouver
Freedom Mobile	Freedom Mobile	Burnaby	Metro Vancouver
Freedom Mobile	Freedom Mobile	Burnaby	Metro Vancouver
Freedom Mobile	Freedom Mobile	Burnaby	Metro Vancouver
Freedom Mobile	Shaw	Burnaby	Metro Vancouver
Freedom Mobile	Freedom Mobile	Burnaby	Metro Vancouver
Freedom Mobile	Shaw	Burnaby	Metro Vancouver
RMC	Regional Recycling	Burnaby	Metro Vancouver
Rogers	Pepper Wireless	Burnaby	Metro Vancouver
Rogers	Inspire Wireless	Burnaby	Metro Vancouver
Rogers	Fido	Burnaby	Metro Vancouver
Rogers	Rogers	Burnaby	Metro Vancouver
Rogers	Fido	Burnaby	Metro Vancouver

Rogers	Rogers	Burnaby	Metro Vancouver
Rogers	Rogers	Burnaby	Metro Vancouver
Rogers	Fido	Burnaby	Metro Vancouver
Rogers	Prime Communications	Burnaby	Metro Vancouver
Rogers	Fido	Burnaby	Metro Vancouver
Rogers	Rogers	Burnaby	Metro Vancouver
Bell	The Source	Campbell River	Strathcona
Freedom Mobile	Shaw	Campbell River	Strathcona
Rogers	Kinetic Wireless	Campbell River	Strathcona
Bell	Bell	Capilano 5	Greater Vancouver
Bell	Virgin Mobile	Capilano 5	Greater Vancouver
Bell	The Source	Castlegar	Central Kootney
Bell	The Source	Chilliwack	Fraser Valley
Bell	Virgin Mobile	Chilliwack	Fraser Valley
Bell	Bell	Chilliwack	Fraser Valley
Bell	Bell	Chilliwack	Fraser Valley
Rogers	Sky-Net Wireless Inc.	Chilliwack	Fraser Valley
Rogers	Fraser Valley Wireless	Chilliwack	Fraser Valley
RMC	City of Colwood	Colwood	Capital
Bell	Bell	Coquitlam	Metro Vancouver
Bell	Virgin Mobile	Coquitlam	Metro Vancouver
Rogers	Fido	Coquitlam	Metro Vancouver
Rogers	Rogers	Coquitlam	Metro Vancouver
Freedom Mobile	Shaw	Courtenay	Comox Valley
Rogers	Sky-Net Wireless Inc.	courtenay	Comox Valley
Rogers	Kinetic Wireless	Courtenay	Comox Valley
Bell	The Source	Cranbrook	East Kootney
Bell	Bell	Cranbrook	East Kootney
Freedom Mobile	Shaw	Cranbrook	East Kootney
Bell	The Source	Creston	Central Kootney
Bell	The Source	Dawson Creek	Peace River
Bell	The Source	Delta	Metro Vancouver
Bell	Bell	Delta	Metro Vancouver
RMC	Get Cell Repair	Delta	Metro Vancouver
Rogers	Wireless World Solutions	Delta	Metro Vancouver
Rogers	Fraser Valley Wireless	Delta	Metro Vancouver
Rogers	Sky-Net Wireless Inc.	Delta	Metro Vancouver
Bell	The Source	Duncan	Cowichan Valley
Rogers	Sky-Net Wireless Inc.	Duncan	Cowichan Valley
Rogers	Kinetic Wireless	Duncan	Cowichan Valley
RMC	Enderby Return-It Recycling Depot	Enderby	North Okanagan
Bell	The Source	Fernie	East Kootney

Bell	Bell	Fort St. John	Peace River
Bell	The Source	Fort St. John	Peace River
RMC	Gibsons Recycling Depot	Gibsons	Sunshine Coast
Bell	The Source	Golden	Columbia-Shuswap
Bell	The Source	Invermere	East Kootney
Bell	Bell	Kamloops	Thompson-Nicola
Bell	The Source	Kamloops	Thompson-Nicola
Bell	Virgin Mobile	Kamloops	Thompson-Nicola
Bell	Bell	Kamloops	Thompson-Nicola
Bell	The Source	Kamloops	Thompson-Nicola
Freedom Mobile	Freedom Mobile	Kamloops	Thompson-Nicola
Freedom Mobile	Shaw	Kamloops	Thompson-Nicola
Rogers	Fraser Valley Wireless	Kamloops	Thompson-Nicola
Bell	Bell	Kelowna	Central Okanagan
Bell	The Source	Kelowna	Central Okanagan
Bell	Virgin Mobile	Kelowna	Central Okanagan
Freedom Mobile	Freedom Mobile	Kelowna	Central Okanagan
Freedom Mobile	Shaw	Kelowna	Central Okanagan
Freedom Mobile	Freedom Mobile	kelowna	Central Okanagan
Rogers	Fraser Valley Wireless	Kelowna	Central Okanagan
Rogers	Fido	Kelowna	Central Okanagan
Rogers	Fraser Valley Wireless	Kelowna	Central Okanagan
Bell	The Source	Kitimat	Kitimat-Stikine
Bell	Bell	Langford	Capital
Bell	Virgin Mobile	Langford	Capital
Rogers	Rogers	Langford	Capital
Bell	Bell	Langley	Metro Vancouver
Bell	The Source	Langley	Metro Vancouver
Bell	Virgin Mobile	Langley	Metro Vancouver
Freedom Mobile	Freedom Mobile	Langley	Metro Vancouver
Freedom Mobile	Shaw	Langley	Metro Vancouver
Freedom Mobile	Freedom Mobile	Langley	Metro Vancouver
Rogers	Fido	Langley	Metro Vancouver
Rogers	Rogers	Langley	Metro Vancouver
Rogers	Fraser Valley Wireless	Langley	Metro Vancouver
Bell	Bell	Maple Ridge	Metro Vancouver
Bell	The Source	Maple Ridge	Metro Vancouver
Freedom Mobile	Freedom Mobile	Maple Ridge	Metro Vancouver
RMC	Haney Bottle Depot	Maple Ridge	Metro Vancouver
Rogers	Sky-Net Wireless Inc.	Maple Ridge	Metro Vancouver
Rogers	Fraser Valley Wireless	Maple Ridge	Metro Vancouver
Rogers	Fraser Valley Wireless	Maple Ridge	Metro Vancouver

Bell	The Source	Merritt	Thompson-Nicola
	Abbotsford Mission Recycling		·
RMC	Program	Mission	Fraser Valley
Bell	The Source	Mission	Fraser Valley
Rogers	Kinetic Wireless	Mission	Fraser Valley
Bell	Bell	Nanaimo	Nanaimo
Bell	Bell	Nanaimo	Nanaimo
Bell	The Source	Nanaimo	Nanaimo
Bell	Virgin Mobile	Nanaimo	Nanaimo
RMC	Blackapple Cellular	Nanaimo	Nanaimo
Freedom Mobile	Freedom Mobile	Nanaimo	Nanaimo
Freedom Mobile	Freedom Mobile	Nanaimo	Nanaimo
Freedom Mobile	Shaw	Nanaimo	Nanaimo
RMC	Regional Recycling	Nanaimo	Nanaimo
RMC	Regional Recycling	Nanaimo	Nanaimo
Rogers	Kinetic Wireless	Nanaimo	Nanaimo
Rogers	Sky-Net Wireless Inc.	Nanaimo	Nanaimo
Rogers	Kinetic Wireless	Nanaimo	Nanaimo
Bell	Bell	Nelson	Central Kootney
Bell	The Source	Nelson	Central Kootney
Bell	The Source	New Westminster	Metro Vancouver
Bell	Virgin Mobile	New Westminster	Metro Vancouver
Freedom Mobile	Freedom Mobile	New Westminster	Metro Vancouver
Freedom Mobile	Freedom Mobile	New Westminster	Metro Vancouver
RMC	Mobile Zone Communication	New Westminster	Metro Vancouver
RMC	Queensborough Landing Return-It	New Westminster	Metro Vancouver
Rogers	Pepper Wireless	New Westminster	Metro Vancouver
Rogers	Prime Communications	New Westminster	Metro Vancouver
Rogers	Wireless World Solutions	New Westminster	Metro Vancouver
Bell	The Source	North Vancouver	Metro Vancouver
Bell	Bell	North Vancouver	Metro Vancouver
Bell	Virgin Moblie	North Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	North Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	North Vancouver	Metro Vancouver
Rogers	Prime Communications	North Vancouver	Metro Vancouver
Rogers	Prime Communications	North Vancouver	Metro Vancouver
Rogers	Prime Communications	North Vancouver	Metro Vancouver
Rogers	Rogers	North Vancouver	Metro Vancouver
Rogers	Wireless World Solutions	North Vancouver	Metro Vancouver
J		-	Okanagan-
Bell	The Source	Oliver	Similkameen
			Okanagan-
RMC	T2 Market Ltd.	Oliver	Similkameen

			Okanagan-
Bell	The Source	Osoyoos	Similkameen
Bell	The Source	Parksville	Nanaimo
			Okanagan-
Bell	The Source	Penticton	Similkameen
			Okanagan-
Bell	Virgin Mobile	Penticton	Similkameen
			Okanagan-
Bell	Bell	Penticton	Similkameen
For all or Nachille	Freedom Maltile	Bestines	Okanagan-
Freedom Mobile	Freedom Mobile	Penticton	Similkameen
Pogors	Fracer Valley Wireless	Pontiston	Okanagan- Similkameen
Rogers Bell	Fraser Valley Wireless Bell	Penticton  Pitt Mandaus	
		Pitt Meadows	Metro Vancouver
Bell	The Source	Powell River	qathet
RMC	Sunshine Disposal and Recycling	Powell River	qathet
Bell	Bell	Prince George	Fraser-Fort George
Bell	The Source	Prince George	Fraser-Fort George
Bell	Virgin Mobile	Prince George	Fraser-Fort George
Freedom Mobile	Freedom Mobile	Prince George	Fraser-Fort George
Freedom Mobile	Shaw	Prince George	Fraser-Fort George
Rogers	Fraser Valley Wireless	Prince George	Fraser-Fort George
Bell	The Source	Prince Rupert	North Coast
Rogers	Fraser Valley Wireless	Prince Rupert	North Coast
Bell	The Source	QUESNEL	Cariboo
Bell	The Source	Revelstoke	Columbia-Shuswap
Bell	Bell	Richmond	Metro Vancouver
Bell	Virgin Mobile	Richmond	Metro Vancouver
Bell	Virgin Mobile	Richmond	Metro Vancouver
Bell	Bell	Richmond	Metro Vancouver
Bell	The Source	Richmond	Metro Vancouver
Freedom Mobile	Freedom Mobile	Richmond	Metro Vancouver
Freedom Mobile	Freedom Mobile	Richmond	Metro Vancouver
Freedom Mobile	Shaw	Richmond	Metro Vancouver
Freedom Mobile	Shaw	Richmond	Metro Vancouver
Freedom Mobile	Freedom Mobile	Richmond	Metro Vancouver
RMC	Regional Recycling	Richmond	Metro Vancouver
Rogers	Pepper Wireless	Richmond	Metro Vancouver
Rogers	Inspire Wireless	Richmond	Metro Vancouver
Rogers	Pepper Wireless	Richmond	Metro Vancouver
Rogers	Rogers	Richmond	Metro Vancouver
Rogers	Fido	Richmond	Metro Vancouver
	Bell		
Bell	Dell	Saanich	Capital

Bell	Bell	Saanich	Capital
Bell	The Source	Salmon Arm	Columbia-Shuswap
Freedom Mobile	Shaw	Salt Sping Island	Capital
Bell	The Source	Sechelt	Sunshine Coast
RMC	Village of Silverton	Silverton	Central Kootney
RMC	The Village of Slocan	Slocan	Central Kootney
Bell	The Source	Smithers	Bulkley-Nechako
Bell	The Source	Sooke	Capital
Rogers	Fraser Valley Wireless	South Surrey	Metro Vancouver
Rogers	Fraser Valley Wireless	South Surrey	Metro Vancouver
RMC	District of Sparwood	Sparwood	East Kootney
RMC	District of Sparwood	Sparwood	East Kootney
Rogers	Prime Communications	Squamish	Squamish-Lillooet
			Okanagan-
Bell	The Source	Summerland	Similkameen
Bell	Bell	Surrey	Metro Vancouver
Bell	Virgin Mobile	Surrey	Metro Vancouver
Bell	The Source	Surrey	Metro Vancouver
Bell	Bell	Surrey	Metro Vancouver
Bell	Virgin Mobile	Surrey	Metro Vancouver
Bell	Bell	Surrey	Metro Vancouver
Bell	Bell	Surrey	Metro Vancouver
Bell	Bell	Surrey	Metro Vancouver
Bell	Bell	Surrey	Metro Vancouver
Bell	Bell	Surrey	Metro Vancouver
RMC	Digi-Tech Computing	Surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	Surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	Surrey	Metro Vancouver
Freedom Mobile	Shaw	Surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	Surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	Surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	Surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	Surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	Surrey	Metro Vancouver
Freedom Mobile	Freedom Mobile	Surrey	Metro Vancouver
RMC	Freedom Wireless Ltd.	Surrey	Metro Vancouver
RMC	Newton Bottle Depot	Surrey	Metro Vancouver
RMC	Regional Recycling	Surrey	Metro Vancouver
Rogers	Pepper Wireless	Surrey	Metro Vancouver
Rogers	Inspire Wireless	Surrey	Metro Vancouver
Rogers	Fido	Surrey	Metro Vancouver

Rogers	Rogers	Surrey	Metro Vancouver
Rogers	Fido	Surrey	Metro Vancouver
Rogers	Sky-Net Wireless Inc.	surrey	Metro Vancouver
Rogers	Kinetic Wireless	Surrey	Metro Vancouver
Rogers	Sky-Net Wireless Inc.	Surrey	Metro Vancouver
Rogers	Kinetic Wireless	Surrey	Metro Vancouver
Rogers	Wireless World Solutions	Surrey	Metro Vancouver
Rogers	Sky-Net Wireless Inc.	Surrey	Metro Vancouver
Rogers	Kinetic Wireless	Surrey	Metro Vancouver
RMC	Semiahmoo Bottle Depot	Surrey	Metro Vancouver
Rogers	Wireless World Solutions	Surrey	Metro Vancouver
Bell	The Source	Terrace	Kitimat-Stikine
Bell	The Source	Trail	Kootenay Boundary
Bell	Bell	Tsawwassen	Metro Vancouver
Rogers	Rogers	Tsawwassen	Metro Vancouver
Rogers	Fido	Tsawwassen	Metro Vancouver
Bell	The Source	Vancouver	Metro Vancouver
Bell	Virgin Mobile	Vancouver	Metro Vancouver
Bell	Bell	Vancouver	Metro Vancouver
Bell	Virgin Mobile	Vancouver	Metro Vancouver
Bell	Bell	Vancouver	Metro Vancouver
RMC	Dell'	Vancouver	Metro Vancouver
Freedom Mobile	Shaw	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Shaw	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
Freedom Mobile	Freedom Mobile	Vancouver	Metro Vancouver
RMC	Get Cell Repair	Vancouver	Metro Vancouver
RMC	PC Galore Consignment Ltd.	Vancouver	Metro Vancouver
RMC	Regional Recycling	Vancouver	Metro Vancouver
Rogers	Pepper Wireless	Vancouver	Metro Vancouver
Rogers	Sky-Net Wireless Inc.	Vancouver	Metro Vancouver
Rogers	Pepper Wireless	Vancouver	Metro Vancouver
	Rogers	Vancouver	Metro Vancouver
Rogers	Fido	Vancouver	Metro Vancouver
Rogers	riuu	vancouver	ivietro varicouver

Rogers	Pepper Wireless	Vancouver	Metro Vancouver
Rogers	Pepper Wireless	Vancouver	Metro Vancouver
	Prime Communications	Vancouver	Metro Vancouver
Rogers	Prime Communications  Prime Communications		Metro Vancouver
Rogers		Vancouver	
Rogers	Fido	Vancouver	Metro Vancouver
Rogers	Pepper Wireless	Vancouver	Metro Vancouver
Rogers	Prime Communications	vancouver	Metro Vancouver
Rogers	Rogers	Vancouver	Metro Vancouver
Rogers	Rogers	Vancouver	Metro Vancouver
Rogers	Fido	Vancouver	Metro Vancouver
Rogers	Rogers	Vancouver	Metro Vancouver
Rogers	Rogers	Vancouver	Metro Vancouver
Rogers	Fido	Vancouver	Metro Vancouver
Rogers	Pepper Wireless	Vancouver	Metro Vancouver
Bell	Bell	Vernon	North Okanagan
Bell	The Source	Vernon	North Okanagan
Freedom Mobile	Freedom Mobile	Vernon	North Okanagan
Freedom Mobile	Shaw	Vernon	North Okanagan
Rogers	Fraser Valley Wireless	Vernon	North Okanagan
RMC	Alpine Recycling	Victoria	Capital
Bell	Bell	Victoria	Capital
Bell	The Source	Victoria	Capital
Bell	Virgin Mobile	Victoria	Capital
Bell	The Source	Victoria	Capital
Bell	Bell	Victoria	Capital
Bell	Virgin Mobile	Victoria	Capital
Bell	Bell	Victoria	Capital
Bell	The Source	Victoria	Capital
Bell	Virgin Mobile	Victoria	Capital
Freedom Mobile	Freedom Mobile	Victoria	Capital
Freedom Mobile	Freedom Mobile	Victoria	Capital
Freedom Mobile	Freedom Mobile	Victoria	Capital
Freedom Mobile	Freedom Mobile	Victoria	Capital
Freedom Mobile	Shaw	Victoria	Capital
Freedom Mobile	Freedom Mobile	Victoria	Capital
Freedom Mobile	Shaw	Victoria	Capital
	Rogers	Victoria	Capital
Rogers			·
Rogers	Rogers	Victoria	Capital
Rogers	Fido	Victoria	Capital
Rogers	Fido	Victoria	Capital
Rogers	Rogers	Victoria	Capital
Rogers	Fido	Victoria	Capital

Rogers	Rogers	Victoria	Capital
Rogers	Fido	Victoria	Capital
Rogers	Rogers	Victoria	Capital
Rogers	Fido	Victoria	Capital
Bell	The Source	West Vancouver	Metro Vancouver
Rogers	Prime Communications	West Vancouver	Metro Vancouver
Rogers	Fido	West Vancouver	Metro Vancouver
Rogers	Fraser Valley Wireless	Westbank	Central Okanagan
RMC	Regional Recycling	Whistler	Squamish-Lillooet
Rogers	Fraser Valley Wireless	Whistler	Squamish-Lillooet

# Number of Locations in Regional Districts (as of December 31)

Regional District	Locations in 2020	Locations in 2021	Variance
Alberni-Clayoquot	0	0	0
Bulkley-Nechako	1	1	0
Capital	35	35	0
Cariboo	3	3	0
Central Coast	0	0	0
Central Kootenay	6	6	0
Central Okanagan	8	10	+2
Columbia-Shuswap	3	3	0
Comox Valley	1	3	+2
Cowichan Valley	1	3	+2
East Kootenay	8	7	-1
Fraser Valley	15	23	+8
Fraser-Fort George	5	6	+1
Greater/Metro Vancouver	135	176	+41
Kitimat-Stikine	2	2	0
Kootenay Boundary	1	1	0
Mount Waddington	0	0	0
Nanaimo	11	14	+3
North Okanagan	4	6	+2
Northern Rockies	0	0	0
Okanagan-Similkameen	8	9	+1
Peace River	3	3	+3
Powell River	2	2	0
Skeena-Queen Charlotte	1	2	+1

Squamish-Lillooet	1	3	+2
Stikine Region	0	0	0
Strathcona	2	3	+1
Sunshine Coast	2	2	0
Thompson-Nicola	8	9	+1
Provincial Total	266	332	+66

# **Appendix F**

## Material Disposition Hierarchy, and Acceptable Processes and Points of Final Disposition

		Disposition Hierarchy		Acceptable Processes & Points of Final Disposition								
		Material Recovery Required	Energy recovery Permitted	Other disposition Permitted	Manual dismantling and material separation	Mechanical material separation	Extraction / purification / refinement	Smelting to reclaim metal	EFW Incineration (use of material as an energy	Landfill	Hazardous Waste Landfill	Export to a non-OECD/EU country for processing
	EOLE	*			✓	✓	×	×	×	×	×	×
Electronic Scrap	Components (hard drives, chips, etc.)	*			<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	*	×	*	×
tron	Wires / Cables	*			✓	✓	✓	✓	*	×	×	×
Elect	Circuit Boards	*			✓	✓	✓	✓	×	*	×	×
	Metal / plastic laminates	*			$\checkmark$	✓	✓	✓	×	×	×	×
	Metal	*							×	×	×	×
Non Hazardous	Mixed Metals	*							×	×	×	×
	Metal dusts (bag house)	*							×	×	×	*
	Non-leaded Glass	*						×	×	×	×	×
	Plastic		*	*				×			×	✓
	Mixed Plastics		*	*				×			×	✓

In accordance with the Disposition Hierarchy material recovery is always preferential over other disposition methods for all materials but only required where indicated with an '\*.

Where the use of the material for energy recovery, or other disposition methods is permitted, they are indicated with an '\*.

Process/application not permitted under the ERS	×		
Process/application is permitted under the ERS & subject to on-site audit	✓		
Process/application is permitted under the ERS & subject to document review and verification			

# **Appendix G**

## **Known Product Recovered in Each Regional District**

	Amount
Regional District	Recovered
Bulkley-Nechako	22
Capital	1,228
Cariboo	58
Central Kootenay	29
Central Okanagan	252
Columbia-Shuswap	92
Cowichan Valley	60
East Kootenay	73
Fraser Valley	514
Fraser-Fort George	132
Greater/Metro	
Vancouver	5,562
Kitimat-Stikine	10
Kootenay Boundary	9
Nanaimo	245
North Okanagan	230
Okanagan-Similkameen	160
Peace River	32
Powell River	6
Skeena-Queen	
Charlotte	4
Squamish-Lillooet	37
Strathcona	8
Sunshine Coast	11
Thompson-Nicola	272
UNKNOWN**	7,698
Provincial Total	16,744

<sup>&</sup>quot;Unknown" includes devices received via mail-back (4,616) and instances where RD was not able to be traced (3,082) for which Regional District is unknown.



Independent practitioner's reasonable assurance report on select performance indicators as presented in CWTA's Annual Report to the Director, of the British Columbia Ministry of Environment & Climate Change Strategy

To the Management of Canadian Wireless Telecommunications Association (CWTA)

We have undertaken a reasonable assurance engagement on select performance indicators as presented in CWTA's Annual Report to the Director (the subject matter) of the British Columbia Ministry of Environment & Climate Change Strategy (the Ministry) detailed in Appendix A, as part of CWTA's commitments under the Extended Producer Responsibility (EPR) program as hosted on the CWTA website 1 for the year ended December 31, 2021.

### Management's responsibility

Management is responsible for the preparation of the subject matter in accordance with sections 8(2)(b), 8(2)(d) and 8(2)(e) of the British Columbia Recycling Regulation 449/2004 (the criteria) detailed in Appendix A. Management is also responsible for such internal control as management determines necessary to enable the preparation of the subject matter that is free from material misstatement, whether due to fraud or error.

### Our responsibility

Our responsibility is to express a reasonable assurance opinion on the subject matter based on the evidence we have obtained. We conducted our reasonable assurance engagement in accordance with Canadian Standard on Assurance Engagements (CSAE) 3000, *Attestation Engagements Other than Audits or Reviews of Historical Financial Information.* This standard requires that we plan and perform this engagement to obtain reasonable assurance about whether the subject matter is free from material misstatement.

Reasonable assurance is a high level of assurance, but is not a guarantee that an engagement conducted in accordance with this standard will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of users of our report. The nature, timing and extent of procedures selected depends on our professional judgment, including an assessment of the risks of material misstatement, whether due to fraud or error, and involves obtaining evidence about the preparation of the subject matter in accordance with the applicable criteria.

<sup>&</sup>lt;sup>1</sup> The maintenance and integrity of the CWTA website (https://www.cwta.ca/about-cwta/advocacy/provincial/) is the responsibility of CWTA; the work carried out by PricewaterhouseCoopers LLP does not involve consideration of these matters and, accordingly, PricewaterhouseCoopers LLP accepts no responsibility for any changes that may have occurred to the reported information or criteria since they were posted on the website.



Our reasonable assurance procedures included, but were not limited to the following:

- Making enquiries of management and senior executives to obtain an understanding of the overall governance and internal control environment and risk management processes relevant to the management and reporting of CWTA's Annual Report to the Director;
- Analytical reviews and trend analysis of reported data;
- Testing the processes, documents and underlying data on a sample basis;
- Recalculating quantitative data on a sample basis as it pertains to the subject matter information; and
- Evaluating the presentation and disclosure of the subject matter information in the Annual Report to the Director.

We believe the evidence we obtained is sufficient and appropriate to provide a basis for our opinion.

### Our independence and quality control

We have complied with the relevant rules of professional conduct/code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Canadian Standard on Quality Control 1, Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements, and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### **Opinion**

In our opinion, the subject matter information as presented in CWTA's Annual Report to the Director for the year ended December 31, 2021 has been prepared, in all material respects, in accordance with the criteria.

### **Emphasis of matter**

We draw your attention to Appendix B, which describes why certain items required by the Assurance Requirements have been excluded. Our opinion is not modified in respect of this matter.



## Purpose of statement and restriction on distribution and use of our report

The subject matter has been prepared in accordance with the applicable criteria to report to the Ministry. As a result, the subject matter may not be suitable for another purpose. Our report is intended solely for the use of CWTA and the Ministry. We neither assume nor accept any responsibility or liability to any other third party in respect of this report.

**Chartered Professional Accountants** 

Pricewaterhouse Coopers LLP

June 30, 2022



### Appendix A - Subject matter and applicable criteria

1. The location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of the Recycling Regulation, as presented on pages 3, 4, 8, and Appendix E of CWTA's 2021 Annual Report to the Director.

### Result:

The number of permanent drop-off locations is 332. This is a net increase of 66 locations from the previous year. Appendix E of the report lists all drop-off locations in British Columbia by Program/Location Name, Account, Community and Regional District.

Reference: pages 3, 4, 8, and Appendix E of CWTA's 2021 Annual Report to the Director.

### Method of reporting:

- Reporting Period: January 1st to December 31st, 2021.
- The number of Permanent Collection Facilities is reported in the Annual Report and consists of the number of Collection Facilities that were listed in the Recycle My Cell searchable database. The information recorded in this database is generated based on data updates provided by Carriers and non-carrier registrations. CWTA has worked with Carriers to generate data collection procedures detailing the types of drop-off locations which should be included or excluded in the reported data.
- Temporary, Processors/Consolidation Centres, and Reverse Logistics Centres/Warehouse Collection Facilities may be identified and reported to CWTA by Program Participants. These are compiled separately and may only be disclosed as a total number in the Annual Report.
- The change in number and/or location of Permanent Collection Facilities is derived from the net difference from the previous year.



### **Definitions:**

- In B.C. Reg. 449/2004, collection facility" means (c) in respect of a product within the empty oil container product category, electronic and electrical product category, tire product category or packaging and printed paper product category, a collection facility established by the producer.
- "Collection Facilities" are one of the following types of locations that are active as of December 31, 2021
  - 1. Permanent Carrier identified retail locations and franchisees, or other approved third party operators (e.g. non-affiliated retail stores, libraries, municipal centres, etc.) that host Recycle My Cell collection boxes year round. These locations are accessible by consumers and included in the Recycle My Cell searchable database;
  - 2. Temporary Carrier identified locations, or other third party operators (e.g. schools, offices, etc.) that host collection boxes for a limited period of time, seasonal drives and challenge-based drives or other limited temporary collection activities. These locations are not included in the Recycle My Cell searchable database:
  - 3. Processors/Consolidation Centres Facilities that receive Program Products via recovery mechanisms (product that is recovered via Mail-backs or delivered by couriers). These locations are not accessible by consumers; or
  - **4.** Reverse Logistics Centres/Warehouses Facilities where Program Products under warranty are returned. These locations are not accessible by consumers.
- "Collection Facilities" are not Canada Post or courier service providers (e.g., FedEx) locations.
- "Program Participants" include carriers, manufacturers and processors as identified in the Annual Report.
- "Program Products" are all products included in the program as listed in the currently approved product stewardship plan. These include:
  - a. "Mobile devices":
    - Cellular phones (with and without batteries)
    - Smartphones (with and without batteries)
    - Pagers
    - Wireless PDAs
    - Air cards;
  - b. Accessories (all additional parts that may come with the phone including chargers, headsets, cables, etc.); and
  - c. Cellular phone and Smartphone batteries.



2. The description of how recovered product was managed in accordance with the pollution prevention hierarchy in accordance with 8(2)(d) of the Recycling Regulation as presented on pages 2, and 9-12 of CWTA's 2021 Annual Report to the Director.

### Result:

- Of the volume of cellular devices audited (16,744), 73% were sent for reuse and 27% were sent for recycling.
- The dispositions of materials/components as outlined in Table 1, pages 10-11.
- The end fate descriptions as outlined in Table 3, page 12.

Reference: pages 5, and 9-12 of CWTA's 2021 Annual Report.

### Method of reporting:

- Reporting period: January 1st to December 31st, 2021.
- Processor selection is a business decision made by Program Participants based on a short list of accepted processors that maintain specific certifications and provide required services.
- CWTA has opted to use primary processors that are approved by the Recycler Qualification Office (RQO) or certified by the Responsible Recycling (R2) standard.
  - The devices sent for recycling are handled by RQO-approved or R2-certified processors.
  - Confirmation that Primary Processors have sufficient environmental and safety oversight was done by viewing the RQO approval or R2 certification documentation for the 2021 reporting year.
- The downstream material flows and expected end fates of materials are based on information provided by the RQO-approved processors and supporting process documents.

### **Definitions:**

The Pollution Prevention Hierarchy includes the following:

- "Reuse" Wireless devices and batteries that can be resold or donated as a complete unit.
  - The Program Product may or may not be refurbished.
  - Program Products can be resold both within and outside the BC market.
- "Recycle" includes:
  - Wireless devices that cannot be Reused as a complete unit.
  - Wireless devices that have been broken down and harvested for parts (e.g. plastic).
  - Any commodities that are captured from the recycling process, such as through metal recovery.



- "Metal Recovery" relates to a recycling process where any element of the Program Product is extracted for next use (e.g. circuit boards are smelted and broken down to separate commodities).
- "Energy Recovery" relates to processing activities where any element of the Program Product is harvested to create energy.
- "Waste" includes any residual material from Program Products not captured in the three streams above (may include comingled packaging, etc.) and may go to landfill.
- "Other waste disposal" includes other approved and commercially-viable end fates not captured in the four streams above.
- "End fate" is defined as final processed state of each material commodity before reuse in another product or shipment to landfill.
- 3. The total amount of the producer's product sold and collected and the recovery rate as presented on pages 4, 9, 13 and Appendix G of CWTA's 2021 Annual Report to the Director.

### Results:

Total amount of producer's product collected in 2021 is 16,744 devices.

Note: Please see Appendix B to which describes why the total amount of the producer's product sold and the recovery rate have been excluded.

Reference: pages 4,9,13 and Appendix G of CWTA's 2021 Annual Report.

### Method of reporting:

- Reporting period: January 1st to December 31st, 2021.
- Quantification of Product Collected is based on:
  - Reports generated by the Processors/Consolidation Centres and potentially Reverse Logistics Centres/Warehouses Collection Facilities during the Reporting Period
    - These reports are generated from their individual inventory programs for the Reporting Period and are broken down by province of origin.
    - These reports include delineation of products by province of origin to the carriers and non-carrier members.
    - Consolidated values for each product category are reported by quantity and end fate per product type.
    - Product Collected includes carrier internal initiatives such as warranty repairs, devices returned because of buyer's remorse or damage, etc.



- Products Collected from unknown origin are accounted for using an estimate based on products returned that are of known origin, or attributed to the province in which the Carrier is headquartered. In the instance where amount is estimated the following process is used:
  - The amount of material collected from known origins is determined for each province. An aggregate total is also determined for Canada. Based on this information, the percentage of product recovered specifically from BC is determined. For example, if 10 devices were recovered from BC and a total of 100 devices were collected nationally, the percentage coming from BC would equal 10%.
  - The amount of material collected from unknown origin (where boxes are received at Processors/Consolidation Centres without a unique identifying number, or those collected via mail-back) are aggregated into a total quantity received. The known percentage (in this case 10%) would then be attributed to the aggregate of unknown origin to determine the estimate of what may have originated from BC.
- Products Collected can be reported as number of units and is dependent on the identified end fate
  of the product type.

#### **Definitions:**

- "Program Products" are all products included in the program as listed in the currently approved product stewardship plan. These include:
  - "Mobile devices":
    - Cellular phones (with and without batteries);
    - Smartphones (with and without batteries);
    - Pagers;
    - Wireless PDAs; and
    - Removable External Air cards.
  - Accessories (all additional parts that may come with the phone including chargers, headsets, cables, etc.); and
  - Cellular phone and Smartphone Batteries.
- Products not included in the program:
  - Cordless phones;
  - Regular batteries (rechargeable or single use);
  - Tablets; and
  - PDAs without integrated cellular connectivity, laptop computers and answering machines.



 "Product Collected" is the estimated sum total of all Mobile Devices collected by any Collection Facility.



## Appendix B - Exclusions

CWTA has not reported the recovery rate for the year in accordance with 8(2)(e) of the Recycling Regulations for the year ended December 31, 2021 as the approved stewardship plan does not outline the requirement to report recovery rates. If the stewardship program does not report a recovery rate in the approved plan, assurance for producers' product sold data is not required as outlined in the Assurance Requirements.

CWTA has not reported its performance for the year in relation to approved targets in their approved stewardship plans under 8(2)(b), (d) and (e) in accordance with 8(2)(g) of the Recycling Regulation for the year ended December 31, 2021 as CWTA is not required to report this to the Director as there are no targets set in the approved stewardship plan for these sections applicable to the reporting year.