

TELUS Communications Company

BC Electronic Equipment – Annual Report - 2010

July 2011



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1.0 Executive Summary

TELUS Communications Company (TELUS) developed its own BC Electronic Equipment Stewardship Plan in October 2009, in order to adhere to the requirements set in the BC Recycling Regulation – Electronic and Electrical Product Category. TELUS has been collecting, refurbishing for reuse, reselling, and recycling electronics for many years now. This Recycling Regulation specifies that a stewardship plan is required to show how the electronics industry (TELUS, taking the responsibility of a producer) proposes to account for full life cycle management of their equipment, including recycling and refurbishing for re-use. A requirement of the BC Recycling Regulation is to report on an annual basis (“Annual Report”), TELUS’ volumes (by weight) for the recycling of specific electronics for 2010 (outlined in Section 2.0), recovery rates and performance measures.

This annual report herein addresses rental and retail TELUS customer premise equipment as well as our internal use equipment. Mobile devices are addressed under the Canadian Wireless Telecommunication Association’s (CWTA) Stewardship Plan – Recycle My Cell.

2.0 Products Included in the Program and Annual Report

The following is a general list of categories of equipment which fall under the current requirements outlined by the BC Recycling Regulation – Electronic and Electrical Product Category. This list is an overview and does not list accessories or additional paraphernalia that might be associated with each equipment category.

- Cordless and corded phones (wireline)
- Voice Over IP (VOIP) phones
- Global Positioning System (GPS) equipment
- Video and telephone conferencing equipment
- Batteries associated with these electronics

Internal use equipment utilized by TELUS is also included in TELUS’ Electronics Recycling Program. This equipment comprises only 5% of all TELUS telecommunication related equipment.

- Corded desktop phones
- Payphones
- Video and telephone conferencing equipment
- Batteries associated with these electronics

Please Note: Other types of equipment such as modems, routers, gateways, set top boxes and network equipment are not included in this plan but will be included in the 2012 regulatory requirements.

3.0 Collection, Targets and Recovery Rates

Rental equipment received back from the customer is tested and working units are refurbished and restocked for reuse; defective units under warranty are returned to the manufacturer; defective units not under warranty that are beyond economical repair are recycled by TELUS’ authorized electronics recycling contractor.

3.1 Residential Customer Returns – Rental Equipment

Collection

Convenient rental return options for residential customers include Canada Post and/or TELUS Service Technicians. A TELUS residential customer making a change to their rental equipment will be advised by TELUS Customer Care to utilize Canada Post to return the rented piece of equipment. Prepaid waybills (see Appendix B) are available at Canada Post retail outlets. In the event a TELUS Technician is installing new equipment at the customer's premise, the old equipment may be returned by the TELUS Service Technician via existing processes.

Targets

Customer Premise Equipment (CPE) rental equipment (residential and business) comprises approximately 90% of all TELUS electronic and telecommunication equipment. Our target is to increase the recovery rate to 75+% over the next four years. There was no specific target for 2010 as this was the first year an annual report was required.

3.2 Business Returns – Rental Equipment

Collection

Convenient rental return options for business customers include Fedex and/or TELUS Service Technicians. TELUS Customer Care will arrange for Fedex to pick-up the rental equipment for return. In the event a TELUS Service Technician is installing new equipment at the customer's premise, the old equipment may be returned by the Technician via existing processes.

Targets

As indicated above this CPE rental equipment (residential and business) comprises approximately 90% of all TELUS electronic and telecommunication equipment. Our target is to increase the recovery rate to 75+% over the next four years. There was no specific target for 2010 as this was the first year an annual report was required.

3.3 Customer Owned Equipment (Residential and Business)

Collection

Residential and business returns of owned equipment are returned via the processes listed in sections 3.1 and 3.2, respectively.

Targets

Sold equipment makes up approximately 5% of all of TELUS electronic and telecommunications equipment. As the recovery process for this equipment was just introduced in 2010 we do not have a current recovery rate. Our target is to achieve a recovery rate of 75% in the next four years as our ability to track material is implemented. This target will be dependent on the responsiveness of customers to TELUS' consumer awareness campaigns for sold equipment.

3.4 Internal Use Equipment

Collection

Collection of internal use equipment is done via a few internal processes depending on the type of electronic material.

Targets

Internal equipment makes up the remaining 5% of TELUS electronic and telecommunications equipment. TELUS has been proactively recovering our internal use equipment for many years. Our target is to achieve a recovery rate of 100 per cent over the next 4 years, by continuing to ensure that internal processes are in place and employee education is conducted. Achieving this target is dependent upon the responsiveness of TELUS' team members to internal education, training and awareness campaigns.

3.5 Recovery Rates

3.5.1 Categories of Equipment Recovered

- Payphones 4,100 kg
- Telsets 6,858 kg
- GPON Batteries 5 kg
- Phase 2 non-TELUS electronics (weight not known)
- VOIP Phones – included in telsets
- GPS Equipment 415 kg

3.5.2 Equipment Refurbished for reuse (by weight)

- Payphones 0 kg
- Telsets 442 kg
- Telsets (warranty return) 816 kg
- GPON Batteries 0 kg
- Phase 2 non-TELUS electronics 0 kg
- VOIP Phones – included in Telsets
- GPS Equipment 0 kg

3.5.3 Equipment Re-sold for Reuse (as – is condition) (by total weight)

- Payphones 80 kg
- Telsets 10,272 kg
- GPON Batteries 0 kg
- Phase 2 non-TELUS electronics N/A
- VOIP Phones – included in Telsets
- GPS Equipment 50 kg

3.5.4 Equipment Recycled (by total weight)

- Payphones 540 kg
- Telsets 8,033 kg
- Batteries 6,420 kg
- Phase 2 non-TELUS electronics (weight not known)
- VOIP Phones - included in Telsets
- GPS Equipment 0 kg

3.5.5 Overall Recovery Rates

- Payphones 89%
- Telsets/VOIP phones 97%

During this reporting period we were unable to determine which province the return came from. We calculated the recovery rate as the total number of telsets returned as a percentage of the actual number of telsets distributed to BC customers.

- GPON Batteries 12.5%

Recovery rate is low for GPON batteries as we only started deploying this product to TELUS customers in 2009 and the batteries have a 5 year life expectancy. Small percentage was expected during 2010 for failure rate of the battery.

- Phase 2 non-TELUS electronics N/A
- GPS Equipment 77%

4.0 Performance Measures

TELUS is committed to increasing our consumer education and public awareness regarding the recycling of electronics. Outlined below in section 4.1 are various ways in which TELUS communicates our programs to consumers as well as internal TELUS team members.

4.1 Consumer Education and Public Awareness

4.1.1 Call Centre Public Awareness

TELUS Call Centre representatives when speaking to customers about end of life products encourage customers to return their equipment for recycling using the TELUS Electronics Recycling and Take Back Program. The Call Centre representatives have been provided information about how the program works to communicate to the customer. See Appendix G.

4.1.2 Website Education

TELUS' website provides information to the public about the [TELUS Electronics Recycling and Take Back Program](#). See Appendix E.

4.1.3 Yellow Pages™ Directories ecoGuide

TELUS promotes our TELUS Electronics Recycling and Take Back Program as an option for recycling telecom products in the Yellow Pages™ Directories ecoGuide. See Appendix C & D.

4.1.4 Recycling Council of BC (RCBC) – Recycling Hotline, current stewardship programs, and the TELUS Electronics Recycling and Take Back Program

are promoted on the RCBC website under current stewardship programs. In addition, TELUS has requested that RCBC provide a section on telecommunication equipment on their website under the retailer take back section where it will provide a link to TELUS' Electronics Recycling and Take Back Program. This is under development. See Appendix F.

4.1.5 TELUS Technician Awareness

Online systems provide TELUS Technicians with information about the TELUS Electronics Recycling and Take Back Program. In addition, TELUS Technicians are instructed to accept customer's equipment for recycling.

4.1.6 TELUS Team Member Awareness

Presentation to TELUS Team Members was held in conjunction with TELUS Green Team session on electronics recycling. Online system provides TELUS Team Members with information about the TELUS Electronics Recycling and Take Back Program, including a promotion using our internal Daily Topics communication tool. See Appendix H.

4.1.7 TELUS Consumer Education

TELUS provides our GPON customers with a battery replacement kit that includes an insert on how to return the GPON battery to TELUS for recycling. See Appendix B.

4.2 Reduction of Environmental Impacts

The efforts taken by TELUS to reduce environmental impacts throughout the product life cycle and to increase reusability or recyclability at the end of the life cycle include working with our manufacturers to encourage them to use minimal packaging materials; FSC certified, high recycled content, and or recyclable or biodegradable materials.

Where appropriate and applicable, TELUS includes corporate social responsibility (CSR) requirements in RFPs when selecting vendors.

4.3 Pollution prevention hierarchy

TELUS ensures the recovered product is managed in accordance with the pollution hierarchy in the following ways:

TELUS' triage of recovered equipment enables TELUS to follow the pollution prevention hierarchy, such as the regulation requires, to ensure pollution prevention is not undertaken at one level unless or until all feasible opportunities for pollution prevention at a higher level have been taken. All of the aspects of pollution hierarchy are achieved by TELUS through the following processes:

Reduce the environmental impact of producing the product by eliminating toxic components and increasing energy and resource efficiency – Although TELUS is not a manufacturer of equipment, environmental considerations are important to TELUS when purchasing products. TELUS endeavors to work with our manufacturers to use minimal packaging, use FSC certified paper, utilize green components and consider additional environmental aspects when purchasing products. In addition, 98% of the items returned back to TELUS are refurbished, sold or returned to the vendor. This allows products to be reused rather than manufacturing new products from virgin materials.

Redesign the product to improve reusability or recyclability - Although TELUS is not a manufacturer of equipment (TELUS branded or not) that we sell or rent, we endeavor to work with our manufacturers to encourage them when designing for the environment to use minimal packaging materials; FSC certified, high recycled content, and or recyclable or biodegradable materials. Where appropriate and applicable, TELUS will also endeavor to include corporate social responsibility (CSR) requirements in RFPs when selecting vendors.

Eliminate or reduce the generation of unused portions of a product that is consumable - During our triage process, in demand consumer products are evaluated to determine whether it is economically viable to repair the product. Those that are deemed beyond economic repair are harvested for reusable components thus reducing the requirement for purchasing new parts or new complete products. Any remaining unusable parts or housing is sent to our recycler where the components are further dismantled, then recycled.

Reuse, recycle and recover energy - By virtue of the triage system TELUS utilizes for its electronics, pollution hierarchy is considered throughout the process. All recovered items are reused where possible and recycling is used as the last resort. TELUS defines what items are to be refurbished for reuse; what equipment can be sold for reuse; what is to be returned to our vendor under warranty; and what products must be recycled. For example, only 2% of the total amount of customer premise equipment recovered is beyond economic repair and therefore is recycled. The other 98% of the items returned back to TELUS gets refurbished, sold or returned to vendor under warranty.

4.4 Future Improvements

TELUS will endeavor to make improvements to our stewardship plan (increasing types of equipment collected and recycled), our reporting as well as our ways in which we engage our employees, residential and business customers.

By using our initial results to establish a baseline and monitoring over time, TELUS will target areas for improvement. This will be an ongoing process initially aimed at improving the visibility of returns. An example process we are currently testing is an online return tracking system for our field technicians.

This application was developed in partnership with one of our third party logistics providers with the goal of improving the visibility of returns, while reducing the need for our workforce to manually complete forms. By improving the quality of the data capture and velocity of returns, TELUS is seeking to improve the internal returns process in order to facilitate timely reporting and targeted improvements over time.

TELUS is currently evaluating options for an online self serve return process for our customers.

Appendix A: Canada Post – Prepaid Way Bill: Returns

The pre-printed information in red identifies the TELUS account with Canada Post. This should not be confused with the client's account information.

Client fills out the fields noted in light blue, and if they have been issued an RMA, it should be added to the "Sender's Ref." field noted in green.

| | | | |
|--|--|---|--|
| From Expéditeur | | Telephone No. N° de téléphone | |
| Customer No. N° du client | | Agreement No. N° de convention | |
| SAMPLE ONLY | | | |
| City Ville | | Prov. Postal Code Code postal | |
| To Destinataire | | Telephone No. N° de téléphone | |
| TELUS 12345 ABC Road, Richmond, BC | | | |
| Signature Required Signature requise | | Sender warrants no dangerous goods enclosed and agrees to terms and conditions on reverse. L'expéditeur garantit que cet envoi ne contient pas de matières dangereuses et accepte les conditions indiquées au verso. | |

1

908

Bill of Lading **Connaissance**

| | | | | | |
|--|------------------------------------|-----------------------------------|-------------------|-----------------------------|---------------------------------|
| Billed Facture | Paid by meter Payé par compteur | Weight | Poids | Total Meter Amount | Valeur totale de l'imprime |
| | | | kg | | |
| Oversize/Unpackaged Surdimensionné / Sans emballage | | Mailing Tube Tube d'expédition | Volumetric Weight | Poids volumétrique | |
| | | | kg | | |
| Sender's Ref. Client enters RMA number here (if applicable) | | Ref. de l'expéditeur | | Declared Value for Coverage | Valeur déclarée pour couverture |
| | | | | | |
| Sender's Signature Signature de l'expéditeur | | Site No. N° du bureau | | | |
| | | | | | |
| Accepted by Accepté par | Date | | | | |
| | | | | | |

**FOR DELIVERY
CONFIRMATION**

**POUR CONFIRMER
LA LIVRAISON**

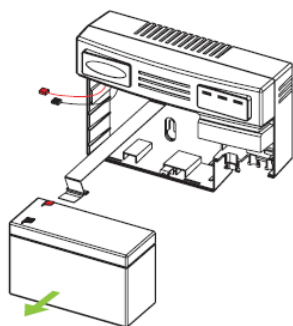
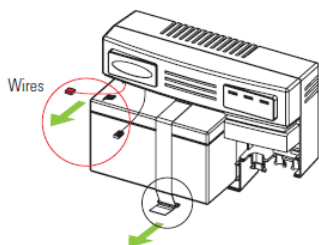
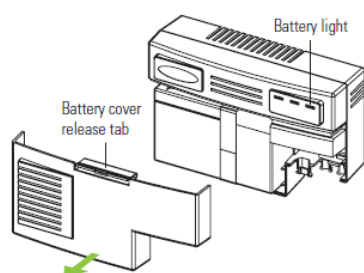
www.canadapost.ca
www.postescanada.ca
 or/ou 1 888 550-6333

ITEM REFERENCE NO.
 N° DE RÉF. DE L'ARTICLE
 102412206

TA 023 150 445 CA

Appendix B: GPON Battery insert

TELUS Home Phone service: battery replacement



Follow the steps below to replace your battery:

1. Remove the battery cover.
2. Loosen and unclip the velcro battery strap.
3. Remove the battery and disconnect the wires.
CAUTION: Battery is heavy
4. Connect the coloured wires to the corresponding colour of the connecting terminal on the top of the battery.
5. Slide the battery into the power unit and tighten the velcro battery strap.
6. Check that the battery light shines green and attach the battery cover.

If the battery light does not shine green, check that the battery wires are connected properly. If after 24 hours of charging in your power unit the battery light is still not green, please contact TELUS at **310-5588**.

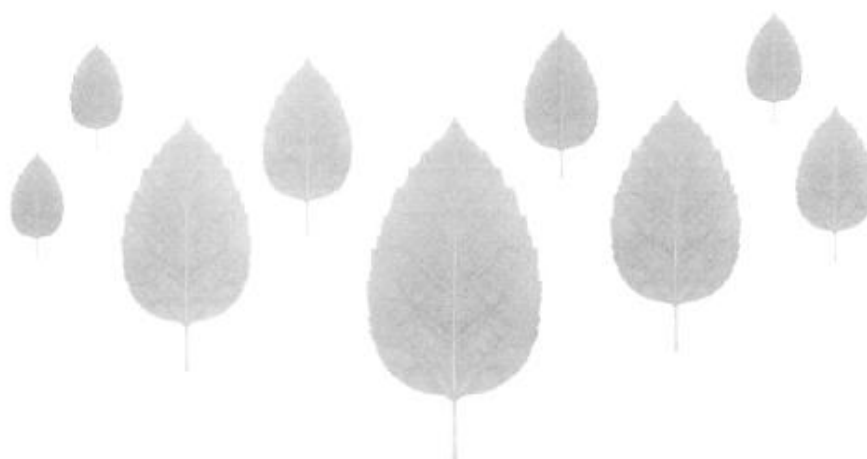
Returning your old battery

1. Place the old battery into the shipping box the replacement battery arrived in or select an appropriate box to hold the battery safely. Seal the box closed.
2. Affix the enclosed Canada Post return mailing label to the box. Be sure to remove or cover up all existing labels on the box.
3. Drop the box off at your nearest Canada Post location.



Appendix C: Yellow Pages™ eco Guide Listings TELUS Advertisement

TELUS Return & Recycle Program



Make the friendly choice.

Help protect the environment by returning any old mobile phone or accessory from any carrier to a TELUS store. It's free and it helps reduce the waste that goes into our landfills, preventing hazardous materials from contaminating the soil and groundwater.

Visit telus.com/recycling for more information.



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Appendix D: Yellow Pages™ ecoGuide Listings



Choose the appropriate solution

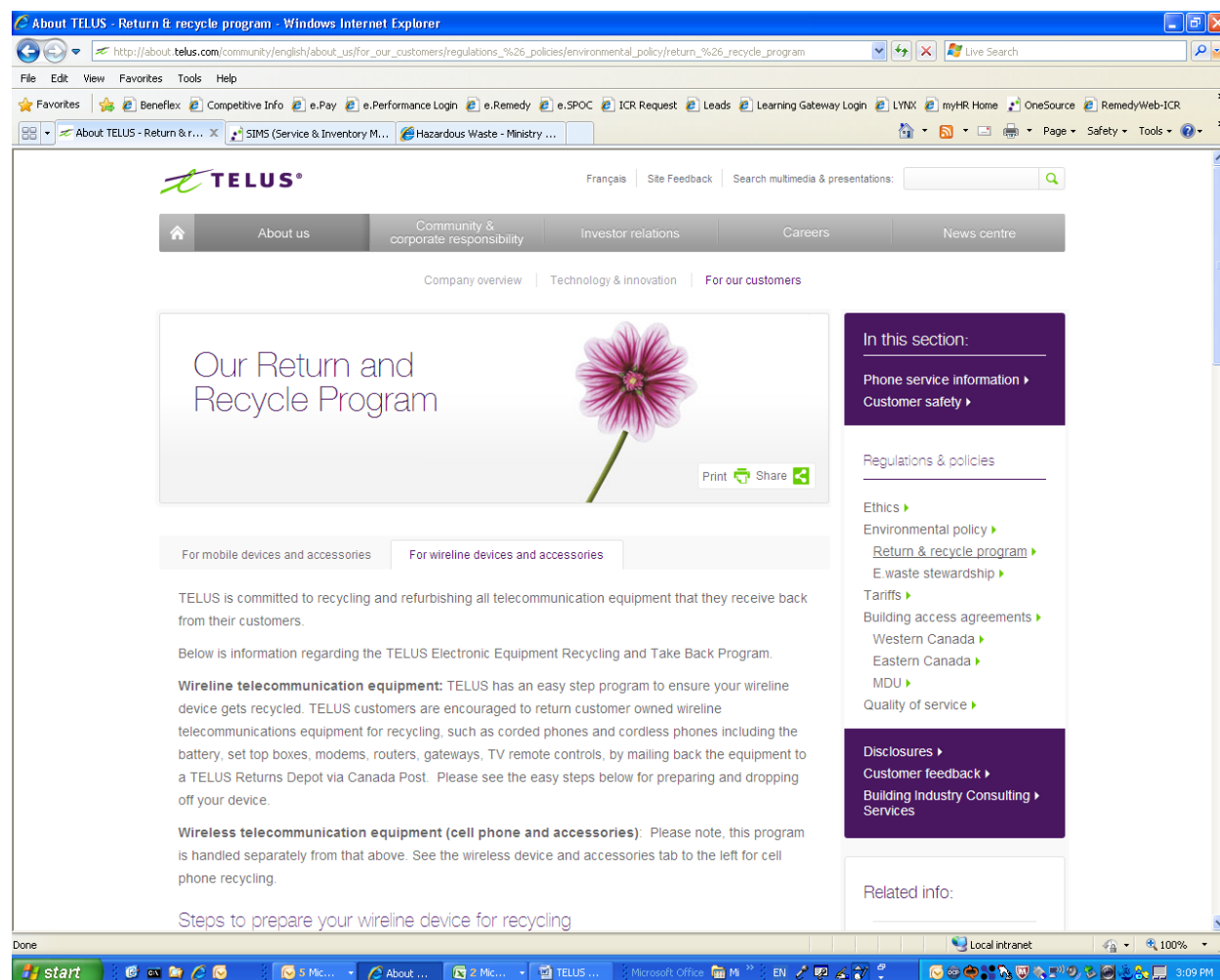
- 🚚 Municipal pickup service
- ➡ Drop-off area – addresses listed on pages 20 and 21
- 🏢 Businesses – addresses listed in the Business Classified section of this Yellow Pages directory

| G | G | G | H |
|---|--|--|---|
| Electronics & Appliances (page 20) | Electronics & Appliances (page 21) | Electronics & Appliances (page 21) | Food, Drink, Household Goods |
| <p>G2</p>  <ul style="list-style-type: none"> ➡ Canadian Diabetes Association ➡ Christmas Recycling Program - BC ➡ Electronic Recycling Association ➡ Free Geek Vancouver ➡ Garner & Gibe ➡ Neighborhood Safety Recycling Coordinator – G4 230x200 Program ➡ Salvation Army Thrift Stores 🏢 Apple Computer 🏢 Battery Depot 🏢 Bell Canada Stores 🏢 Best Buy 🏢 Canadian Tire Associated Stores 🏢 Costco Wholesale 🏢 iBox 🏢 InHomeShops 🏢 Home Depot 🏢 Jumbo Group 🏢 Rogers/Wireless 🏢 Radio 🏢 Staples 🏢 Telus 🏢 The Bay 🏢 The Source 🏢 Value Village 🏢 Zellers | <p>G3</p>  <ul style="list-style-type: none"> ➡ Big Brothers of Greater Vancouver ➡ Boys & Girls Club of Greater Vancouver ➡ Exchange to Disabilities Association (EDA) ➡ Electronic Recycling Association ➡ Frisco Pacific Canada – Return to Recyclers Program ➡ Salvation Army Thrift Stores ➡ Recycling Council of British Columbia 🏢 Audio Books 🏢 Audiophile 🏢 Best Buy 🏢 Carson Books & Records 🏢 Future Shop 🏢 Mapleton Records & CDs 🏢 Staples 🏢 The Source 🏢 Treasure Chests Thrift & Gift Shop 🏢 Value Village 🏢 Zellers <p>🏠 Thrift shops will accept books, movies & video games in good condition</p> <p>G4</p>  <ul style="list-style-type: none"> ➡ BC Data Centre – Computer Equipment Donation ➡ BC Electronics Material Exchange ➡ Computers for Schools BC ➡ Electronic Recycling Association ➡ Frisco Pacific Canada – Return to Recyclers Program ➡ Free Geek Vancouver ➡ Recycled Recycling Vancouver ➡ Salvation Army Thrift Stores ➡ Vancouver Central Return to Depot 🏢 Best Buy 🏢 Future Shop 🏢 Sony Style 🏢 Staples 🏢 The Source | <p>G5</p>  <ul style="list-style-type: none"> ➡ Recycling Council of British Columbia ➡ Salvation Army Thrift Stores <p>G6</p>  <ul style="list-style-type: none"> ➡ Big Brothers of Greater Vancouver ➡ Boys & Girls Club of Greater Vancouver ➡ Canadian Diabetes Association ➡ Salvation Army Thrift Stores ➡ St. Vincent de Paul Society – Value Village 🏢 Best Buy 🏢 Future Shop 🏢 Sony Style 🏢 Staples 🏢 The Source 🏢 Value Village <p>G7</p>  <ul style="list-style-type: none"> ➡ BC Electronics Material Exchange ➡ Canadian Diabetes Association ➡ HomeStart Foundation ➡ Monmouth Central Committee Thrift Store ➡ Salvation Army Thrift Stores ➡ St. Vincent de Paul Society – Value Village ➡ Vancouver Peoples | <p>H1</p>  <ul style="list-style-type: none"> ➡ Garbage pickup <p>H2</p>  <ul style="list-style-type: none"> ➡ Salvation Army Thrift Stores ➡ St. Vincent de Paul Society – Value Village 🏢 Value Village <p>H3</p>  <ul style="list-style-type: none"> ➡ Garbage pickup ➡ BC SPCA Thrift Stores (Inland) <p>H4</p>  <ul style="list-style-type: none"> ➡ Curbside Recycling ➡ Regional Recycling Programs ➡ Vancouver Central Return to Depot <p>H5</p>  <ul style="list-style-type: none"> ➡ Garbage pickup 🏢 Pacific Waste Disposal 🏢 Pure & Simple 🏢 Recycling Depot <p>H6</p>  <ul style="list-style-type: none"> ➡ Best Buy – Bottle Depot ➡ Recycle Centre – British Blue Recycling ➡ Recycling Council of British Columbia |

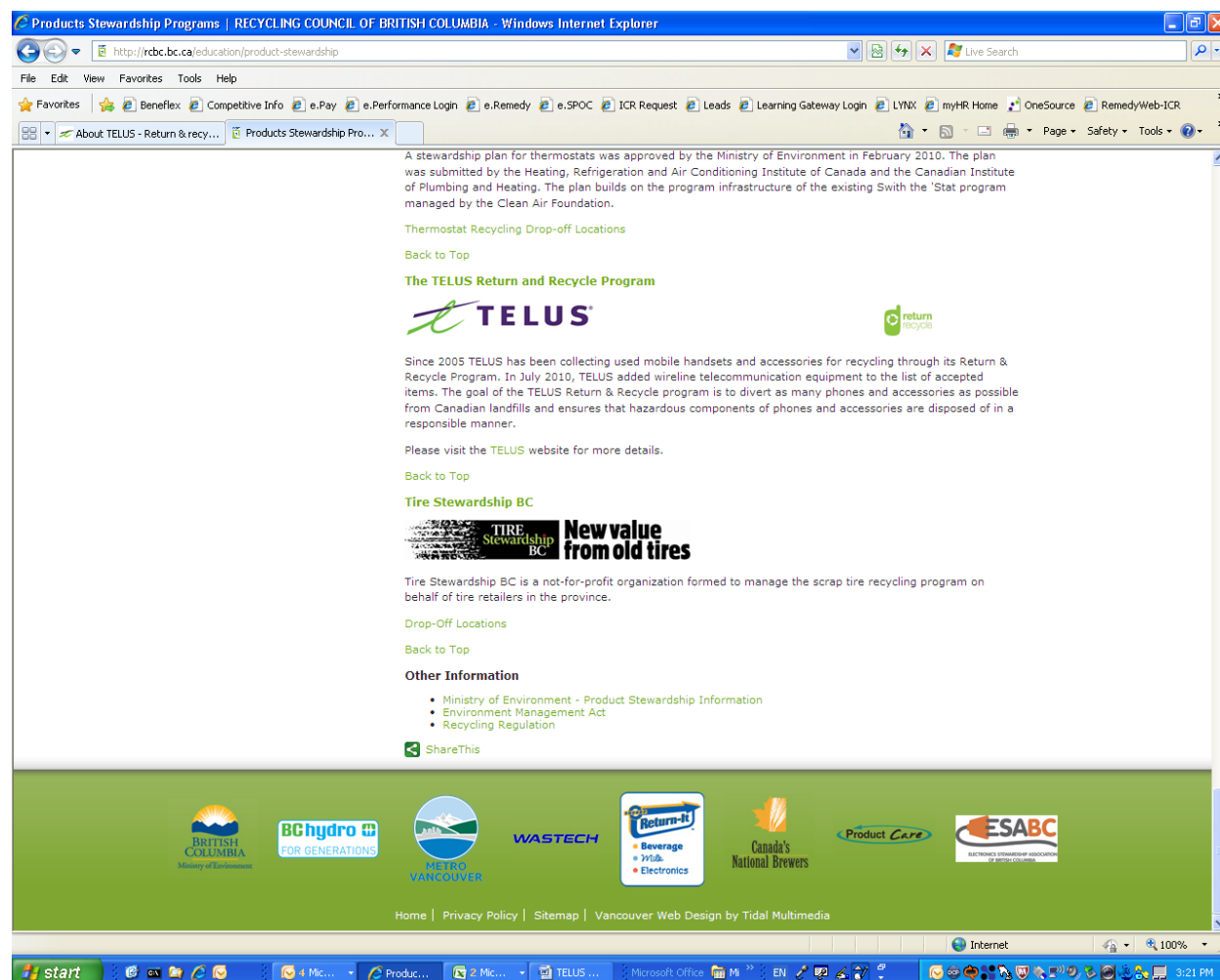
For the online version, visit:

<http://Vancouver.YellowPages.ca>

Appendix E: Website Education



Appendix F: Recycling Council of BC website – Product Stewardship/Current Programs



Appendix G: TELUS Call Centre internal information

Electronic Equipment Recycling and Take Back program - Windows Internet Explorer

http://onesource.tsl.telus.com/pages/invoke.cfm?objectid=2AFF7489-D601-980B-638EE3EF125C8E2

File Edit View Favorites Tools Help

Home tools forms portal other sites a to z favourites history feedback profile logout help

onesource where you are: electronic equipment recycling and take back program : description

Electronic Equipment Recycling and Take Back program | add to favourites | printable page | sticky notes

page menu

- description
- contact information
- contacts

Description

TELUS is committed to recycling and refurbishing all telecommunication equipment returned from their customers.

TELUS has an easy step and free program to ensure wireline devices are recycled. TELUS customers are encouraged to mail the following customer-owned wireline telecommunications equipment to a TELUS Returns Depot via Canada Post:

- Corded and cordless phones including the battery
- Set top boxes
- Modems and gateways
- Routers
- TV remote controls

Wireless equipment, e.g. cell phones and accessories, are handled separately. See the [TELUS Return and Recycle](#) program.

Customer how to

| Step | Action |
|------|--|
| 1 | Remove all personal information from your device. See the owner's manual for instructions. |
| 2 | Leave the battery in the device. |
| 3 | Select an appropriate box to ship the device. <ul style="list-style-type: none"> ■ The box should be sturdy enough to hold and protect the device. ■ You do not have to use a new box, but use one that is in good condition. ■ Cross out any information, e.g. other delivery addresses, on the box. |
| 4 | Pack your device in the box and seal the box with suitable tape. |
| 5 | Go to your nearest Canada Post retail outlet. See http://www.canadapost.ca/cpo/mc/lang/ageswitcher.jsf . |
| 6 | Fill out the preprinted waybill with your name, address, telephone number. Canada Post will deliver the equipment to TELUS for recycling at no cost to you. |

section last updated - July 14, 2011

content on onesource is confidential

Local intranet 100%

start 3 Mic... Electro... 2 Wi... TELUS ... Microsoft Office EN 7:57 AM

Appendix H: Daily Topics

