

OBLIGATED PRODUCTS	PRODUCT DEFINITION	PRODUCTS INCLUDED IN THE OBLIGATED CATEGORY	PRODUCT <u>NOT</u> INCLUDED IN THE OBLIGATED CATEGORY
DESKTOP COMPUTERS	<p>A computer terminal designed to reside on a desk or similar work surface.</p> <p>May be packaged with a mouse, keyboard, cables, speakers, webcam and other peripherals in a single Original Equipment Manufacturer (OEM) package carrying a single SKU, subject to a single desktop computer EHF.</p> <p>Includes desktop computers and desktop computers acting as servers.</p>	<p>Standalone:</p> <ul style="list-style-type: none"> • Computer terminal • Desktop computer used as a server • Thin client • Zero Clients with CPU • Desktop Tower Server 	<ul style="list-style-type: none"> • Non-standalone computer terminal that is embedded into a non-regulated product • Rack mounted and floor-standing server • Uninterruptible Power Supply (UPS) • Cash registers / POS terminals • Zero Clients with no CPU
PORTABLE COMPUTERS	<p>A personal computer designed for portable use.</p>	<ul style="list-style-type: none"> • Laptop computer • Notebook computer • Tablet computer • Netbook computer 	<ul style="list-style-type: none"> • PDA (non-cellular enabled) – SEE PERSONAL/PORTABLE A/V category: PRODUCTS INCLUDED • Calculator • Other handheld computing devices
DISPLAY DEVICES	<p>A non-portable video display device that typically resides on a table, floor or wall and requires AC power to operate.</p> <p>May contain an imbedded television tuner, or may be used for displaying images from computers or other digital or analog sources such as an external TV tuner or cable/satellite receiver.</p> <p>Includes various display technologies, such as CRT, flat panel (LCD, Plasma, LED, OLED, etc.) or rear projection.</p>	<p>Standalone:</p> <ul style="list-style-type: none"> • Television • Computer monitor • Professional display • Closed circuit monitor screen • Graphic tablets with display • Electronic whiteboards with display 	<ul style="list-style-type: none"> • Non-standalone displays that are embedded into a non-regulated product • Digital photo frames – SEE PERSONAL/PORTABLE A/V category: PRODUCTS INCLUDED • POS Pole Display • Refrigerator with built in TV • Electronic whiteboards with no display • 3D Glasses • Portable Displays less than 10” – SEE PERSONAL/PORTABLE A/V category: PRODUCTS INCLUDED

PHASE 1 – OBLIGATED AS OF: FEBRUARY 1, 2008			
OBLIGATED PRODUCTS	PRODUCT DEFINITION	PRODUCTS INCLUDED IN THE OBLIGATED CATEGORY	PRODUCT <u>NOT</u> INCLUDED IN THE OBLIGATED CATEGORY
DESKTOP PRINTERS AND FAX MACHINES	<p>A printing or facsimile device designed to reside on a desktop or similar work surface.</p> <p>May be a "multi-function" or "all in one" device that performs different tasks such as copy, scan, fax, print, etc., in which case the integrated product is subject to a single EHF.</p> <p>Fax machines packaged with cordless telephone handsets in a single OEM packaged under a single SKU are subject to one EHF.</p> <p>Includes various printing technologies, such as Laser & LED (electrophotographic), ink jet, dot matrix, thermal, dye sublimation, etc.</p>	<p>Standalone:</p> <ul style="list-style-type: none"> • Desktop printers • Camera dock printers • Desktop label, barcode, card printers • Desktop fax machines 	<ul style="list-style-type: none"> • Floor standing printers • Point of sale (POS) receipt printers • Handheld printers such as calculators with printing capability or label-makers • Non-standalone printers that are embedded into non-regulated products
COMPUTER PERIPHERALS	<p>A manual input keying or pointing device, such as a mouse, a keyboard, or a similar device, designed for use with a desktop or portable computer.</p> <p>Includes both wired and wireless devices.</p> <p>A combination of a single mouse and a single keyboard packaged in one OEM box under a single SKU is subject to one EHF.</p>	<ul style="list-style-type: none"> • Mouse • Trackball • Keyboard • Keypad • Touchpad Mouse 	<ul style="list-style-type: none"> • Joysticks and other game controllers • Graphic tablets with no display • Stylus • Magnetic stripe readers • Modems, Hubs, Switches and Routers • Mobile internet sticks • External hard drives

PHASE 2 – OBLIGATED AS OF: FEBRUARY 1, 2009			
OBLIGATED PRODUCTS	PRODUCT DEFINITION	PRODUCTS INCLUDED IN THE OBLIGATED CATEGORY	PRODUCT NOT INCLUDED IN THE OBLIGATED CATEGORY
DESKTOP COMPUTER SCANNERS	Desktop imaging equipment designed for use in conjunction with a personal computer or network system that converts hard copy data such as text, photos, etc., into an electronic file.	<ul style="list-style-type: none"> Desktop computer scanners Desktop business card scanners Desktop cheque scanners Desktop photo negative scanner 	<ul style="list-style-type: none"> Floor standing drum scanners MRI equipment Barcode scanners Cables or other accessories
HOME AUDIO/ VIDEO PLAYBACK AND/OR RECORDING SYSTEMS	<p>Audio and video playback and/or recording systems (mini/mid/full size) or system components for residential use but may also be used for institutional, commercial or industrial applications, including:</p> <p>Audio equipment:</p> <ul style="list-style-type: none"> Amplifiers Receivers Speakers CD players (single and multi-disc units) Radios Turntables Cassette and other tape players <p>Video equipment:</p> <ul style="list-style-type: none"> Data/multi-media projectors VCRs/DVRs/PVRs DVD players Blu-ray players Laser Disc players Security cameras <p>Cable and Satellite TV Equipment.</p> <p>Multiple speakers supplied in a single OEM package and sold under a single SKU are subject to one EHF.</p> <p>Multiple security cameras supplied in a single OEM package and sold under a single SKU are subject to one EHF.</p>	<ul style="list-style-type: none"> AM/FM Radios Video Cassette Recorders (VCRs) Digital Video Recorders (DVRs) Personal Video Recorders (PVRs) Disc players/ recorders (DVD, Blu-ray, etc.) Laser Disc players/recorders Cable & satellite receivers Set-top boxes including digital TV <p>Home stereo systems or components, including:</p> <ul style="list-style-type: none"> Amplifiers Receivers CD or tape decks Turntables/record players Home speaker systems such as 5.1 and 7.1 speaker packages supplied without amplifier or video player, including computer (multi-media) speakers Other digital music recorders/players Audio docking stations Analog & digital video cameras for home security or other closed circuit home use 	<ul style="list-style-type: none"> Industrial/commercial quality amplifiers, speakers and related equipment used for musical recording, performances and/or public address Video gaming equipment, including those that can also play DVDs, etc. Satellite dishes Cables or other accessories Karaoke machines Alarm clocks and wall clocks Audio baby monitors and receivers Intercoms 3D Glasses Overhead projectors Web cameras – SEE PERSONAL/PORTABLE A/V category: PRODUCTS INCLUDED Digital Frames – SEE PERSONAL/PORTABLE A/V category: PRODUCTS INCLUDED Clock radios – SEE PERSONAL/PORTABLE A/V category: PRODUCTS INCLUDED

PHASE 2 – OBLIGATED AS OF: FEBRUARY 1, 2009			
OBLIGATED PRODUCTS	PRODUCT DEFINITION	PRODUCTS INCLUDED IN THE OBLIGATED CATEGORY	PRODUCT NOT INCLUDED IN THE OBLIGATED CATEGORY
PERSONAL / PORTABLE AUDIO/VIDEO PLAYBACK AND/OR RECORDING SYSTEMS	<p>A portable device used primarily for personal use, that operates on battery power or is powered directly from the device it is connected to (i.e. computer), including:</p> <ul style="list-style-type: none"> • Clock radios • Computer/docking speakers • Compact/folding speakers • Portable stereos/ tape players/ radios • Personal CD players • Portable audio recorders • Portable amplifiers • Headphones • Computer / phone and/or voice recorder microphones • MP3 players • Voice recorders • Analog and digital cameras and video cameras/ camcorders • Non-cellular enabled PDAs • Portable scanners • Portable printers • Webcams • Digital frames • Portable displays • Portable projectors <p>Portable audio/video players supplied with accessory headphones in a single OEM package under a single SKU are subject to one EHF.</p> <p>Multiple speakers supplied in a single OEM package and sold under a single SKU are subject to one EHF.</p>	<ul style="list-style-type: none"> • Portable AM/FM radios • Clock radios • Portable stereos • Portable tape players/recorders • Portable Disc (CD, DVD, Blu-ray, etc.) players/ recorders • MP3 players • Portable docking/compact speakers (wired and wireless including Wi-Fi or Bluetooth) • Portable cassette or digital audio/voice recorders • Headphones • Mini earphones and microphones • Headsets (wired and wireless, including Bluetooth) • Microphones for use with an obligated product • Digital and non-digital cameras • Digital photo key chains • Video cameras/ camcorders • Personal Digital Assistants (PDAs) which are not enabled to connect to cellular networks • Multi-function satellite radios that include CD, MP3, FM radio or other audio functions. • Portable scanners (Business card scanners; Photo negative scanners) • Portable printers • Web cameras • Digital frames • Portable displays – screen size less than 10" • Baby video monitor and camera systems 	<ul style="list-style-type: none"> • Single-use or one-time use cameras • Children’s toy cameras • Discs (CDs, DVDs, Blu-ray, HDDVD, etc.) • Commercial, Professional or industrial video cameras and/or microphones • Industrial/commercial quality microphones used for musical recording, performances and/or public address • Cables or other accessories • Cellular-enabled PDAs • Industrial or commercial handheld or mobile computing devices • Global Positioning System (GPS) receivers and components • Satellite radio receivers and components (used exclusively for satellite audio) • E-readers / electronic Books • Electronic Dictionaries • 3D Glasses • Two-way radios (walkie-talkies) • Personal FM transmitters • Audio baby monitors and receivers • Portable Point of sale (POS) receipt printers



ELECTRONICS PRODUCT STEWARDSHIP CANADA (EPSC)

RECYCLER QUALIFICATION PROGRAM FOR END-OF-LIFE ELECTRONICS RECYCLING

- OCTOBER 27, 2010 -

In association with:



RECYCLER QUALIFICATION PROGRAM FOR END-OF-LIFE ELECTRONICS RECYCLING

OCTOBER 27, 2010

The *Recycler Qualification Program* (RQP) for End-of-Life Electronics (EOLE) Recycling defines the minimum requirements for EOLE Processors and Recyclers to be considered for use under the provincial electronics recycling Stewardship Program ('Stewardship Program'). The intent of the RQP is to ensure that EOLE products are managed in an environmentally sound manner that safeguards worker health and safety, and the environment from the point of primary processing to the point of final disposition. The RQP applies to both Processors and Recyclers, referred to jointly as 'Recyclers', and it does not replace or absolve the Recycler from any applicable Federal, Provincial/State/Territorial or other local regulatory requirements. Where any requirement of the RQP or ERS conflicts with a legal requirement, the applicable legal requirement shall apply.

The RQP consists of 8 parts:

PART A - ELECTRONICS RECYCLING STANDARD (ERS): Defines the minimum requirements for handling EOLE and materials for the Primary and all Downstream Recyclers until each material reaches the point of final disposition. The ERS includes environmental, occupational health and safety, and material handling requirements that are the auditable criteria that Recycler assessments and approvals are based upon. Recyclers are responsible for maintaining objective evidence of conformance to all requirements of the ERS.

PART B - IMPLEMENTATION GUIDE: Supplements the ERS by providing guidance to both Recyclers and ERS Auditors on the application of the elements of the ERS and also provides resources on some of the key environmental, health and safety issues associated with handling and processing EOLE. Not all examples provided in the Implementation Guide will be applicable to all organizations. However, where applicable, the Implementation Guide defines the minimum best practices required. If a Recycler chooses to implement an element other than defined in the Implementation Guide, the Recycler must demonstrate that the alternative measures provide an equivalent level of control.

PART C - RECYCLER ASSESSMENT AND APPROVAL PROCESS: Defines the steps for initiating and conducting Recycler assessments under the RQP and also outlines the communication protocols between the Stewardship Program, ERS Auditor, Primary and Downstream Recyclers.

PART D - ONGOING RECYCLER SURVEILLANCE AND RE-VERIFICATION: Defines the processes for the ongoing monitoring and surveillance of approved Recyclers to ensure their continuing ability to meet the requirements of the ERS, and includes: the steps to request changes to an approved process; Recycler reporting and spot audit requirements; and the re-verification process to maintain recognition under the RQP following the initial approval phase.

PART E - AUDIT PROTOCOLS: Defines the criteria for classifying audit findings, and communicating audit results to the auditee and the Stewardship Program.

PART F - APPROVED RECYCLER RECOGNITION: Defines the framework for recognizing Recyclers that are audited and approved for use under the Stewardship Program.

PART G - TERMS AND DEFINITIONS: A glossary of acronyms and key terminology.

PART H - FORMS:

- H.1 Recycler Application Form
- H.2 Audit Report Form

TABLE OF CONTENTS

ELECTRONICS RECYCLING STANDARD	5
1.0 ENVIRONMENTAL, HEALTH AND SAFETY MANAGEMENT SYSTEM (EHSMS).....	5
2.0 LEGAL AND OTHER REQUIREMENTS	6
3.0 EHS RISK ASSESSMENT	6
4.0 ENVIRONMENTAL CONTROLS	7
5.0 HEALTH AND SAFETY CONTROLS	10
6.0 OPERATIONAL CONTROLS.....	10
7.0 DATA SECURITY.....	11
8.0 SAMPLING, AUDITS, INSPECTIONS AND OTHER ASSESSMENTS	12
9.0 CORRECTIVE ACTION PLANS	12
10.0 EMERGENCY PLANNING AND RESPONSE.....	12
11.0 TRANSPORTATION	13
12.0 DOWNSTREAM RECYCLERS.....	13
IMPLEMENTATION GUIDE.....	15
13.0 GUIDANCE FOR EHSMS REQUIREMENTS	15
14.0 GUIDANCE FOR LEGAL AND OTHER REQUIREMENTS	17
15.0 GUIDANCE FOR EHS RISK ASSESSMENT REQUIREMENTS	20
16.0 GUIDANCE FOR ENVIRONMENTAL CONTROL REQUIREMENTS	21
17.0 GUIDANCE FOR HEALTH AND SAFETY CONTROL REQUIREMENTS	24
18.0 GUIDANCE FOR OPERATIONAL CONTROLS REQUIREMENTS	27
19.0 GUIDANCE FOR DATA SECURITY REQUIREMENTS	30
20.0 GUIDANCE FOR SAMPLING, AUDITS, INSPECTIONS AND OTHER ASSESSMENTS REQUIREMENTS.....	31
21.0 GUIDANCE FOR CORRECTIVE ACTION PLANS	32
22.0 GUIDANCE FOR EMERGENCY PLANNING AND RESPONSE.....	32
23.0 GUIDANCE FOR TRANSPORTATION REQUIREMENTS	33
24.0 GUIDANCE FOR DOWNSTREAM RECYCLER REQUIREMENTS.....	34
RECYCLER ASSESSMENT AND APPROVAL PROCESS	36
25.0 OVERALL ASSESSMENT AND APPROVAL PROCESS FLOW.....	36
26.0 RECYCLER APPLICATION.....	36
27.0 APPLICATION REVIEW AND VERIFICATION	36
28.0 INITIATION OF THE RECYCLER AUDIT.....	37
29.0 ON-SITE AUDIT	38
30.0 INITIAL AUDIT REPORT	38
31.0 CORRECTIVE ACTION PLANS	38
32.0 CLOSURE OF NONCONFORMANCES	40
33.0 FINAL AUDIT REPORT	40

34.0	STEWARDSHIP PROGRAM APPROVAL	40
35.0	MULTI-SITE APPROVALS.....	41
36.0	REQUEST FOR AMENDMENT TO A RECYCLER APPLICATION	41
37.0	REQUEST FOR AMENDMENT TO AN APPROVED PROCESS.....	41
38.0	RECOGNITION OF APPROVAL FROM ANOTHER STEWARDSHIP PROGRAM	41
39.0	AUDIT COMMUNICATION PROTOCOLS	42
40.0	FORFEITURE OF APPROVAL.....	42
ONGOING RECYCLER SURVEILLANCE AND RE-VERIFICATION.....		43
41.0	RECYCLER SURVEILLANCE	43
42.0	RE-VERIFICATION PROCESS.....	44
AUDIT PROTOCOLS		45
43.0	ERS AUDIT OBJECTIVE	45
44.0	AUDIT SCOPE	45
45.0	CLASSIFICATION OF AUDIT FINDINGS	46
46.0	OBSERVATIONS	46
47.0	MINOR NONCONFORMANCE.....	46
48.0	MAJOR NONCONFORMANCE.....	47
49.0	AUDIT VERIFICATION	47
APPROVED RECYCLER RECOGNITION		48
50.0	PURPOSE OF THE APPROVED RECYCLER RECOGNITION PROCESS	48
51.0	TERM OF RECOGNITION	48
52.0	RECYCLER RECOGNITION	48
TERMS AND DEFINITIONS		50
FORMS.....		52
H.1	RECYCLER APPLICATION FORM.....	53
H.2	RECYCLER AUDIT REPORT	55

EPSC may from time to time issue Technical Bulletins to provide further clarification to the Recycler Qualification Program, including the application of the Electronics Recycling Standard. Consult the EPSC website for further information.

PART A

ELECTRONICS RECYCLING STANDARD

1.0 ENVIRONMENTAL, HEALTH AND SAFETY MANAGEMENT SYSTEM (EHSMS)

Recyclers shall implement and maintain a documented environmental, health and safety (EHS) management system to ensure the identification and adequate control over the environmental, health and safety impacts associated with the organization's operations. The EHSMS shall be updated as required to ensure that it is effective and current to the operations. As part of the EHSMS, Recyclers shall maintain at a minimum:

- 1.1. A written policy reviewed and approved by senior management on an annual basis, detailing the organization's commitment to regulatory compliance, sound EHS management practices and continual improvement in EHS performance.
- 1.2. An EHS training program to provide at a minimum new hire training, annual worker refresher training, and contractor training on the following core EHS components:
 - 1.2.1. Potential EHS risks and controls associated with the position or overall job responsibilities;
 - 1.2.2. Safe material handling and storage practices;
 - 1.2.3. Spill prevention;
 - 1.2.4. Equipment safety;
 - 1.2.5. Proper use and care of personal protective equipment (PPE); and
 - 1.2.6. Emergency response.
- 1.3. A documented process for workers to report, record and track any accidents, injuries, spills or releases, or other incidents that have or could have resulted in injury or unapproved release to the environment.
- 1.4. An EHS committee that monitors and evaluates the effectiveness of the EHS programs, procedures and controls on an ongoing basis and meets at least on a quarterly basis to:
 - 1.4.1. Review any changes in the operations or workplace;
 - 1.4.2. Review results of the risk assessments, EHS sampling, workplace inspections, worker accident/incident reports, Electronics Recycling Standard (ERS) conformance audits, regulatory compliance audits, and any corrective or preventive actions undertaken; and
 - 1.4.3. Make recommendations to management for operational or workplace improvements.
- 1.5. A process to retain all records required by the ERS for a minimum of three years, including training records; worker accident/incident reports; EHSMS annual review minutes; EHS sampling and inspection results; and waste records including the chain of custody of all end-of-life electronics (EOLE) and materials processed.
- 1.6. An annual review of the EHSMS by senior management that provides an assessment of the adequacy and effectiveness of the EHS policy, procedures and other controls. The management review shall consider at a minimum the results of and any corrective or preventive actions undertaken as a result of:

- 1.6.1. The annual risk assessment;
- 1.6.2. EHS sampling;
- 1.6.3. Workplace inspections;
- 1.6.4. Worker accident/incident reports;
- 1.6.5. ERS conformance audits;
- 1.6.6. Regulatory compliance audits; and
- 1.6.7. Recommendations from the EHS committee.

2.0 LEGAL AND OTHER REQUIREMENTS

Recyclers shall identify and comply with all applicable legal and other requirements. At a minimum, Recyclers shall:

- 2.1. Maintain a documented process to identify and track any changes to regulatory and other applicable requirements on an ongoing basis and as a result of any changes in operations or legislation.
- 2.2. Maintain a current summary of applicable legal and other requirements, their relevance to the operations and any associated controls.
- 2.3. Possess and adhere to all necessary permits and/or approvals to operate.
- 2.4. Possess Comprehensive or Commercial General Liability Insurance including coverage for bodily injury, property damage, complete operations and contractual liability with combined single limits of not less than \$2 000 000 per occurrence, \$2 000 000 general aggregate.
- 2.5. Possess adequate workers compensation coverage.
- 2.6. Not use child or prison labour.
- 2.7. Maintain a documented procedure to provide notice to the Stewardship Program of any of the following incidents that have occurred either at the Recycler's facility or a Downstream Recycler within 5 business days of the incident:
 - 2.7.1. Fines or regulatory orders;
 - 2.7.2. Environmental incidents such as fires or spills to the natural environment;
 - 2.7.3. Any incidents requiring notification to a regulatory agency or dispatch of a 'first responder'; or
 - 2.7.4. Data security breaches such as theft or other loss of Program products or data.
- 2.8. Maintain a process to provide notice to the Stewardship Program of any changes in name or ownership of the organization within 5 business days of completion.

3.0 EHS RISK ASSESSMENT

Recyclers shall maintain a documented process to conduct an annual EHS Risk Assessment. The risk assessment shall be planned and conducted in a manner to identify and assess the potential environmental impacts of the operations,

and any workplace hazards under both normal and abnormal conditions. The Risk Assessment shall cover all aspects of the Recycler's operations and include at a minimum:

- 3.1. A process to identify and record physical, chemical and ergonomic hazards.
- 3.2. A process to assess risk of identified hazards considering the potential probability and severity of the hazard.
- 3.3. A process to determine the appropriate level of control necessary to eliminate or effectively control the hazards.
- 3.4. A process to assess the need and frequency for EHS monitoring and sampling, including:
 - 3.4.1. Monitoring and tracking of facility emissions, effluent or wastes;
 - 3.4.2. Facility-wide air sampling and analysis for airborne contaminants such as metal content and dusts;
 - 3.4.3. Surface sampling for contaminants that may not be released under normal operating conditions, or may be released in quantities below detectable air sampling limits, but over time may accumulate to hazardous levels or pose other risk of worker exposure;
 - 3.4.4. Analysis of noise levels in processing areas; and
 - 3.4.5. Medical examinations, including hearing assessments and blood testing, where required by regulations or if sampling reveals elevated exposure levels.
- 3.5. A process to record and track the results of the risk assessment to facilitate the identification of recurring issues or trends.
- 3.6. A process to communicate risks and their associated controls to applicable workers and make the overall results of the risk assessment available to all workers.
- 3.7. A process to conduct subsequent risk assessments, either facility-wide or task specific, as a result of any changes in operations that may affect exposure levels.

4.0 ENVIRONMENTAL CONTROLS

Considering the results of the risk assessment, sampling, audits, inspections, worker accident/incident reports, fines or regulatory orders, and any other key indicators, Recyclers shall implement and maintain adequate environmental controls to prevent unapproved releases to the environment. At a minimum, Recyclers shall:

- 4.1. Identify and communicate to workers materials that may be processed mechanically, where suitable controls exist to prevent exposure to hazardous substances and other releases to the environment as a result of the processing.
- 4.2. Maintain documented procedures for the manual removal of any materials prior to mechanical processing, such as mercury bearing lamps, ink and toner cartridges, and batteries, where suitable processing controls to prevent exposure to hazardous substances and other releases to the environment do not exist.

- 4.3. Maintain a documented procedure for the safe handling of substances of concern, and any hazardous materials and wastes, including labelling and storage requirements.
- 4.4. Maintain a current inventory with associated storage limits, noting both the maximum acceptable quantity of materials and maximum permitted length of time in storage, for any substances of concern and other hazardous materials or wastes.
- 4.5. Ensure EOLE and materials are processed in accordance with Table 1: *Material Disposition Hierarchy, and Acceptable Processes and Points of Final Disposition*, where:
 - 4.5.1. Disposition and audit applicability are defined for single stream, non-contaminated materials only;
 - 4.5.2. Processing of mixed or contaminated materials must satisfy criteria for all contained materials;
 - 4.5.3. Incineration without energy recovery is not permitted for any materials;
 - 4.5.4. Export of materials or components is only permitted to downstream vendors located in a country legally permitted to accept the material or component as determined by the authority of the importing country; and
 - 4.5.5. Export of clean material, including to a non-OECD/EU country, as a raw material feedstock in a manufacturing process is permitted and not subject to audit where the material:
 - 4.5.5.1. Has been cleaned in an OECD/EU country (i.e. washed leaded glass cullet);
 - 4.5.5.2. Is fully consumed in the manufacturing process;
 - 4.5.5.3. No additional pre-processing of the material in the non-OECD/EU country is required; and
 - 4.5.5.4. Where applicable, the destination country has provided prior informed consent for the import of the material.

Table 1: 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 substitute)	Landfill	Hazardous Waste Landfill	Export to a non-OECD/EU country for processing
Electronic Scrap	EOLE	★			✓	✓	✗	✗	✗	✗	✗	✗
	Components (hard drives, chips, etc)	★			✓	✓	✓	✓	✗	✗	✗	✗
	Wires / Cables	★			✓	✓	✓	✓	✗	✗	✗	✗
	Copper Yokes	★			✓	✓	✓	✓	✗	✗	✗	✗
	Circuit Boards	★			✓	✓	✓	✓	✗	✗	✗	✗
	Metal / plastic laminates	★			✓	✓	✓	✓	✗	✗	✗	✗
Non Hazardous	Metal	★							✗	✗	✗	✗
	Mixed Metals	★							✗	✗	✗	✗
	Metal dusts (bag house)	★							✗	✗	✗	✗
	Non-leaded Glass	★						✗	✗	✗	✗	✗
	Plastic		★	★				✗			✗	✓
	Mixed Plastics		★	★				✗			✗	✓
	Wood		★	★				✗			✗	✗
	Leather, cotton and other fibres		★	★				✗			✗	✗
	Insulation (Fibreglass / composite)		★	★				✗			✗	✗
Substances of Concern	Leaded Glass	★			✓	✓	✓	✓	✗	✗	✗	✗
	Washed leaded glass cullet	★			✗	✓	✓	✓	✗	✗	✗	✗
	Mercury Lamps	★			✗	✓	✓	✗	✗	✗	✗	✗
	Mercury	★			✗	✓	✓	✗	✗	✗	✗	✗
	Batteries	★			✗	✓	✓	✓	✗	✗	✗	✗
	Ink / Toner Cartridges		★		✓	✓	✓	✓	✓	✗	✗	✗
	Ink / Toner		★		✗	✓	✓	✗	✓	✗	✗	✗
	Phosphor Powder			★	✗	✓	✓	✗	✗	✗		✗
	Ethylene Glycol			★	✗	✓	✓	✗	✗	✗		✗

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	

5.0 HEALTH AND SAFETY CONTROLS

Considering the results of the risk assessment, sampling, audits, inspections, worker accident/incident reports, fines or regulatory orders, and any other key indicators, Recyclers shall implement and maintain adequate health and safety controls to prevent accidents, injuries or other exposure to hazardous substances. At a minimum, Recyclers shall:

- 5.1. Implement, communicate and enforce policies for worker, contractor and visitor access to and hygiene practices while in and leaving processing areas, including restrictions for eating, drinking and smoking in the workplace to reduce exposure to contaminants.
- 5.2. Implement and maintain a thorough housekeeping program to prevent physical hazards (i.e. slips, trips and falls), and ensure any hazardous materials and contaminants are under suitable control.
- 5.3. Implement a program for the proper use and care of Personal Protective Equipment (PPE) to reduce exposure to hazards such as noise, dusts and flying objects with provisions to:
 - 5.3.1. Provide and enforce the use of necessary PPE ;
 - 5.3.2. Ensure that PPE is appropriate, properly rated, and fit-test to individual needs where required; and
 - 5.3.3. Post notice of areas requiring the use of PPE.
- 5.4. Provide physical guards on hazardous mechanical processes to prevent access to hazardous areas while in operation and an emergency shut-off system for immediate shut down of automated mechanical equipment.
- 5.5. Maintain a lockout/tagout program to ensure that mechanical and electrical equipment remains in a de-energized state during any setup, cleaning, maintenance or other activity that may require the removal of physical guards or other worker access to a hazardous area.
- 5.6. Maintain a mechanical air handling system with appropriate controls for fire suppression to collect airborne particulate from automated shredding, grinding and other mechanical processing equipment that generates gasses, dust or particulates, and provide adequate ventilation to the work area to maintain acceptable air quality levels.
- 5.7. Maintain a process for the safe removal and replacement of filters from processing equipment ventilation systems to prevent exposure to dusts and particulate.

6.0 OPERATIONAL CONTROLS

Recyclers shall maintain effective controls to ensure that EOLE and materials are handled, stored and processed in a secure manner to protect from hazards, release or unauthorized access. At a minimum, Recyclers shall:

- 6.1. Maintain a process to track and report the quantity and chain of custody of program materials received, processed, and shipped, as well as provide certificates of recycling for all material once processed.

- 6.2. Maintain effective procedures and security measures to prevent:
 - 6.2.1. Unauthorized access to the premises and storage areas, and
 - 6.2.2. Unapproved removal of any material or equipment from the facility.
- 6.3. Ensure that all processing is conducted indoors.
- 6.4. Ensure that all Substances of Concern are stored indoors.
- 6.5. Ensure that Electronic Scrap is stored indoors or sufficiently covered and contained to prevent exposure to weather and leaching into the surrounding natural environment.
- 6.6. Ensure that materials are not stored in a location, manner or quantity creating increased susceptibility to fire, spill or other release.
- 6.7. Ensure that materials are stored within established and appropriate storage limits, both in terms of quantity of material and length of time in storage, when accumulating material for shipment. Materials may not be stockpiled or otherwise stored without an approved downstream market for the material.
- 6.8. Maintain adequate fire suppression equipment for the type and size of the facility.
- 6.9. Maintain a contingency plan for handling Stewardship Program materials in the event the Recycler is unable to process materials or ship to an approved Downstream Recycler.
- 6.10. Maintain a documented closure plan that at a minimum identifies the financial requirements upon closure of the facility to remove, transport and process all materials under the ownership of the Recycler in accordance with the requirements of the ERS, and further provides the financial mechanism for ensuring the availability of such funds.

7.0 DATA SECURITY

Recyclers shall maintain adequate controls to ensure that data containing products, processed materials and any information contained on either, are received, stored and processed in a manner to protect from unauthorized access or theft. Where data containing products are handled, Recyclers shall at a minimum:

- 7.1. Maintain a process to identify and communicate to workers, products and components that may contain data, such as computers, hard drives, data cards, PDAs, cellular phones, printers and cameras.
- 7.2. Maintain a documented procedure for the secure receiving, storage and handling of data containing products.
- 7.3. Maintain a documented procedure to destroy all information contained on data storage products through physical means.
- 7.4. Maintain an internal audit program to test and verify the effectiveness of the data destruction process.
- 7.5. Maintain a procedure to investigate and respond to any data security breaches.

8.0 SAMPLING, AUDITS, INSPECTIONS AND OTHER ASSESSMENTS

Recyclers shall maintain programs to schedule and conduct any sampling, audits, inspections or other assessments to test and verify the effectiveness and adequacy of EHS programs and controls, and to demonstrate regulatory compliance and conformance to the ERS. At a minimum the programs shall:

- 8.1. Include the following activities:
 - 8.1.1. Regular workplace inspections;
 - 8.1.2. Emission, effluent, or waste sampling required by regulation, approval to operate or through the risk assessment;
 - 8.1.3. Air contaminant, surface sampling, noise analysis or medical evaluations required by regulation, approval to operate or through the risk assessment;
 - 8.1.4. ERS conformance audits; and
 - 8.1.5. Regulatory compliance audits.
- 8.2. Define the schedule, criteria, process, qualifications and responsibilities for conducting, recording, analysing and tracking the results of the activity.
- 8.3. Define the process for assessing the results of the activity in conformance with the requirements of the EHSMS, regulatory requirements and industry best practices, including where applicable, recognized industrial hygiene standards.

9.0 CORRECTIVE ACTION PLANS

Recyclers shall maintain a process to initiate, record, and track corrective and/or preventive actions for any issues identified through sampling or monitoring; audits, inspections or other assessments; accident/incident reports; fines or regulatory orders; security breaches; complaints; or other programs, that pose a risk of noncompliance or nonconformance. At a minimum, the corrective action process shall define:

- 9.1. Responsibility for developing and implementing the corrective/preventive action plan.
- 9.2. Requirements to review the effectiveness of any corrective and/or preventive actions undertaken following implementation.
- 9.3. The process to communicate to applicable workers the outcome of, and any corrective or preventive actions undertaken as a result of the activity.

10.0 EMERGENCY PLANNING AND RESPONSE

Recyclers shall identify any potential emergency situations associated with the operations, such as spills, fires, or medical emergencies, and maintain documented response procedures. The emergency response procedures shall at a minimum:

- 10.1. Define the responsibilities and actions for responding to the incident.

- 10.2. Provide a list of emergency contacts and telephone numbers.
- 10.3. Provide for a readily available supply and direction to response resources, such as first aid supplies and spill clean-up materials.
- 10.4. Detail the requirements for reporting the incident internally, and where applicable to the Stewardship Program and regulatory authorities.
- 10.5. Be tested on at least an annual basis and records of the test and response maintained.
- 10.6. Be reviewed following any test or actual response to an emergency, and revised as necessary considering the effectiveness of the response in preventing or mitigating any environmental, health or safety hazards.

11.0 TRANSPORTATION

Recyclers shall ensure that all material is transported in a safe and environmentally sound manner, in accordance with regulatory requirements. At a minimum, Recyclers shall:

- 11.1. Maintain a documented procedure to identify when export/import regulations, Transportation of Dangerous Goods, or equivalent regulations, apply to shipments and the specific requirements the applicable materials must be shipped under.
- 11.2. Provide specific training for those workers that handle, offer for transport, or transport dangerous goods or other regulated materials.
- 11.3. Maintain a documented process to evaluate third-party Transporters and assess their ability to handle material in a safe and environmentally sound manner, in accordance with regulatory requirements.
- 11.4. Maintain evidence of the Transporter's relevant regulatory permits/approvals, including where applicable permits/approvals for:
 - 11.4.1. Transporting regulated materials; and
 - 11.4.2. Storing regulated materials where storage or consolidation services may be used.
- 11.5. Maintain evidence of the Transporter's insurance coverage.

12.0 DOWNSTREAM RECYCLERS

Recyclers shall maintain a documented process to evaluate Downstream Recyclers to assess their ability to handle material in a safe and environmentally sound manner, in accordance with the ERS and regulatory requirements. At a minimum, Recyclers shall:

- 12.1. Document the downstream flow and handling of materials from the Recycler's facility to each Point of Final Disposition, including details on how the goods are processed at each point, and the percentage of processed materials sent to each Downstream Recycler.
- 12.2. Maintain evidence of the service provider's relevant regulatory permits/approvals, including where applicable any permits/approvals to:

- 12.2.1. Accept, process and store waste materials;
 - 12.2.2. Generate or dispose of regulated waste; and
 - 12.2.3. Release process emissions or effluent.
- 12.3. Maintain evidence of the Downstream Recycler's insurance coverage.

PART B

IMPLEMENTATION GUIDE

13.0 GUIDANCE FOR EHSMS REQUIREMENTS

An effective environmental, health and safety management system (EHSMS) is an optimal tool to facilitate Recyclers in safeguarding the environment and worker health & safety while ensuring compliance to legal requirements and conformance to the ERS.

- 13.1. The ERS requires that recyclers both implement and maintain a documented EHSMS:
 - 13.1.1. Implementation requires the Recycler to demonstrate that the EHSMS is operational, i.e. known, understood and practiced by workers, including, regular employees, contract employees and other contractors.
 - 13.1.2. Maintenance requires that the EHSMS contain processes to review, assess and improve the system and procedures to ensure they are current and adequate.
 - 13.1.3. The EHSMS must be adequately documented to demonstrate conformance with all requirements of the ERS and the documents must be updated where required to reflect any changes in the EHSMS or procedures as a result of regular maintenance and improvements, or as a result of any corrective actions.
 - 13.1.4. In addition, records of EHS and operational activities and performance indicators in line with the requirements of the EHSMS must be maintained to demonstrate conformance with the ERS and EHSMS and compliance with regulatory requirements. Records may include but are not limited to: operational permits/approvals; accident/incident reports; meeting minutes (EHS Committee and Senior Management annual EHSMS Reviews); worker training records; material chain of custody; and results of audits and any other workplace sampling, inspections or assessments.
 - 13.1.5. While the ERS does not define a precise framework for the EHSMS the ISO 14 001 structure is considered a generally accepted standard.
 - 13.1.6. Recyclers will be required to demonstrate independent third-party verification/certification of their EHSMS within 18 months of the release of the RQP.
- 13.2. The Recycler may implement a single combined environmental, health and safety policy, or may implement separate policies, either of which requires annual review and approval by a senior officer of the organization. The Recycler should maintain a schedule or process to ensure that annual reviews and approvals are conducted within the necessary timeframe.
- 13.3. The EHS training program should be designed to utilize the results of the annual risk assessment; any sampling, audits or inspections; worker accident/incident reports; fines or regulatory orders; or other

pertinent activities to identify the need for worker and contractor training as well as determine the effectiveness of training already provided.

- 13.4. The EHS training program should:
 - 13.4.1. Define the qualifications and specific training requirements by job function, as well as the frequency for any subsequent refresher training courses for both workers and contractors; and
 - 13.4.2. Ensure necessary training is scheduled and completed prior to undertaking the associated tasks.
- 13.5. Worker training for core EHS components is required at minimum on an annual basis.
- 13.6. Contractor training should be provided commensurate with the level of risk of the tasks undertaken and the frequency of occurrence of the activity.
- 13.7. EHS training may be provided on the job, through paper or electronic means, classroom format, external certification, or any combination of each, and where necessary, should be supplemented with suitable written procedures or work instructions.
- 13.8. Consideration should be given to incorporating processes to assess knowledge retention following any training to ensure that the training provided is effective and adequate. Training assessments may include written tests, task observation or worker performance reviews, and the results of these activities should be used to determine the refresher and upgrade training requirements and schedule.
- 13.9. Records of all completed training and assessments should be appropriately maintained.
- 13.10. The worker accident/incident reporting process should not only require workers to report, but should also provide direction on when and how to report potentially hazardous situations including:
 - 13.10.1. Spills or other releases to the environment;
 - 13.10.2. Accidents, injuries or near misses; and
 - 13.10.3. Unsafe or hazardous conditions.
- 13.11. Records of worker accident/incident reports should be maintained and assessed from time-to-time to identify any trends in incidents or reports, in order to develop new and/or improve existing EHS or process controls.
- 13.12. The number of members on the EHS committee will vary depending on the size of the Recycler however the committee should be comprised of at least one representative from the workers and one representative from management. Additionally, effort should be made to ensure that the committee has representation from the different operational areas of the organization.
- 13.13. The EHS committee should maintain a documented schedule to ensure meetings are held as required and cover the necessary items for review.
- 13.14. A process should be maintained for the EHS committee to report recommendations to management, and for management to report back to the committee on any actions taken as a result of the recommendations.

- 13.15. Records retention procedure should identify which records are to be maintained, the length of storage, the storage location and the individual or position responsible for maintaining the records.
- 13.16. The requirements for an annual policy review and annual EHS core training has been set to establish a minimum frequency for items considered to be critical to effective EHS management. The annual review of the EHSMS should be attended by the majority of the senior management team and include any other individuals with the responsibility and authority to initiate change in the EHSMS or workplace.
- 13.17. The annual review should cover all aspects of the EHSMS and operational performance, and be used to determine if the EHSMS:
- 13.17.1. Has been properly implemented and maintained according to procedures and in-line with the requirements of the ERS;
 - 13.17.2. Has been effective in controlling environmental releases and workplace hazards; and
 - 13.17.3. Continues to be adequate to the size and scope of the operations.
- 13.18. A schedule should be maintained for the annual review to ensure that meetings are held as required and cover the necessary items for review.
- 13.19. Determination should be made and documented in regard to who or which positions are required to participate in the annual review as well as the number of senior management representatives required at the meeting for a quorum. Annual reviews should only be conducted when those require to participate are present and quorum has been reached.
- 13.20. Minutes of the annual review meetings should be maintained.

14.0 GUIDANCE FOR LEGAL AND OTHER REQUIREMENTS

- 14.1. Regulatory requirements are operational and jurisdictional dependent, therefore each recycler is required to assess the requirements applicable to their operations and in their jurisdiction. Not only must the Recycler identify and comply with all applicable regulatory requirements but they must also maintain valid, objective evidence of compliance with the requirements.
- 14.2. To identify applicable regulatory requirements, Recyclers may employ the services of an individual or organization knowledgeable in Federal, Provincial and local regulatory requirements to conduct a compliance audit/gap analysis. This process should identify the regulations applicable to the Recycler's operations, as well as the specific requirements within the regulations that the Recycler must demonstrate compliance to.
- 14.3. In order to demonstrate compliance to regulatory requirements, the Recycler must maintain evidence that a comprehensive assessment of regulatory requirements has been conducted, applicable regulatory requirements have been identified and adequate controls are in place to ensure compliance to the requirements. This information will provide the initial basis for the Recycler's summary of legal and other

requirements but must be reviewed on an ongoing basis and updated as required to ensure that it is current and adequate.

- 14.4. Recyclers must maintain a process to identify changes in the regulations on an ongoing basis. Various publications and/or services such as internet subscriptions may be used to identify new or modified regulatory requirements and maintain access to the relevant regulations however the Recycler must further maintain a process to assess the impact/applicability of these regulations on the operations. Also, when using such services, the Recycler must ensure that supplemental processes are in place to maintain access to other requirements such as municipal requirements and those of the Stewardship Program.
- 14.5. Where practical, Recyclers shall employ the use of multiple sources of information to validate requirements. Consideration may be given to trade associations or publications, independent legal counsel, and continuing education courses as alternate means to validate regulatory requirements.
- 14.6. Recyclers must also maintain a process to re-evaluate regulatory applicability following changes in operations, such as the implementation of a new process or any modification to an existing processing method or rate that may impact upon compliance. This may be incorporated into a change management or other change approval process, but should be completed prior to the initiation of the new or revised operation.
- 14.7. Where an exemption to a regulation exists, written confirmation of the exemption from the regulating authority or other suitable evidence must be maintained.
- 14.8. Typical regulatory requirements to consider include:
 - 14.8.1. Business/operating permits
 - 14.8.2. Regulatory permits or certification for accepting, transferring, transporting, processing, or disposing of EOLE and/or materials;
 - 14.8.3. Processing permits or certification for process air exhausts, water discharges or waste generation;
 - 14.8.4. Hazardous waste or other controlled substance management regulations (storage, handling, and shipping);
 - 14.8.5. Transportation regulations;
 - 14.8.6. Privacy and protection of personal information; and
 - 14.8.7. Occupational health and safety regulations.
- 14.9. Comprehensive or general liability insurance coverage in the amount of \$2 000 000 is considered the minimum acceptable coverage to suitably mitigate the potential risks associated with the processing of EOLE and materials, however, consideration should also be given to maintaining environmental pollution liability coverage in the amount of \$5 000 000. Recyclers should assess and determine any additional coverage necessary commensurate with the size and scope of their particular operations. In doing so,

Recyclers should not only assess coverage limits, but should also consider the need for supplementary coverage such as first party and third party pollution coverage, professional liability coverage for data security breaches, and crime coverage for theft of contents.

14.10. Compliance can be demonstrated through various means but may include records of:

- 14.10.1. Current permits or approvals;
- 14.10.2. Tests, inspections or sampling;
- 14.10.3. Transfer of ownership of materials;
- 14.10.4. Material shipping or other movement documents;
- 14.10.5. Regulatory compliance audits; or
- 14.10.6. Submitted compliance reports.

14.11. Adequate worker's compensation coverage is dependent on the size of the work force and the type of operations undertaken. Coverage must be sufficient to insure all workers in the event of need. Coverage may be obtained through provincial program or through a private insurance policy, and evidence of coverage may be in the form of an insurance certificate from the Recycler's insurance company or broker, or confirmation of participation in the provincial workers' compensation plan, or equivalent.

14.12. The use of child and/or prison labour is prohibited for any functions associated with the processing, transportation or handling of EOLE. The minimum age requirement for workers should be either the local legal minimum age or 14 years old, whichever is higher.

14.13. The documented procedure to notify the Stewardship Program within 5 days of receiving any fines, orders or other reportable incidents should detail:

- 14.13.1. How the fine/order/incident will be identified or flagged internally to the individual(s) responsible for notifying the Stewardship Program;
- 14.13.2. The actual method to notify the Stewardship Program (email, letter, etc.);
- 14.13.3. Who the notification will be issued to on behalf of the Stewardship Program; and
- 14.13.4. The timeline and individual/position responsible for issuing the notification, to ensure that it is completed within the 5 day timeframe.

14.14. Notification of fines, orders or other reportable incidents does not require the disclosure of confidential or other business information that may be subject to an investigation or other review. However, following such an incident, the Stewardship Program may request a summary of any internal investigation of the situation, any actions taken to mitigate any health, safety or environmental impacts as a result of the incident as well as any preventive actions to prevent any further occurrence of the incident.

14.15. Recyclers must communicate any changes in their company name, ownership or other contact details to the Stewardship Program within 5 business days of the change.

15.0 GUIDANCE FOR EHS RISK ASSESSMENT REQUIREMENTS

- 15.1. A risk assessment is a systematic process to identify hazards and evaluate the potential risks associated with them.
- 15.2. The risk assessment should consider physical, chemical and ergonomic hazards under both normal and abnormal conditions. Examples of hazards associated with the processing of EOLE include:
 - 15.2.1. Physical – equipment noise and vibration; sharp or rough surfaces of materials and tools
 - 15.2.2. Chemical – gas, dust and fume from shredding, grinding or heating; hazardous substances such as lead and mercury
 - 15.2.3. Ergonomic – awkward work posture; heavy lifting; repetitive tasks; excessive force
- 15.3. When evaluating risks, consideration should be given to the potential probability and severity of the hazard.
 - 15.3.1. Probability: The likelihood of occurring.
 - 15.3.2. Severity: The scale or impact of any occurrence.
- 15.4. The documented results of any risk assessments should be used to determine the appropriate level of control necessary to eliminate or effectively control the hazard. The adequacy of a hazard control is determined by its ability to effectively protect the environment and worker health and safety, using the highest rank of control feasible. Where required, multiple or redundant controls may be necessary to properly control a hazard. Hazard controls are categorized as follows, in descending order of preference;
 - 15.4.1. Primary control: engineering controls – eliminating a hazard at the source;
 - 15.4.2. Secondary control: administrative controls – implementing safe work procedures and other training;
 - 15.4.3. Tertiary control: personal protective equipment – controls at the worker.
- 15.5. Monitoring and evaluating the effectiveness of any implemented controls may be part of the Recycler's corrective action process, but should also be a planned component of regular workplace audits, inspections and other assessments.
- 15.6. The risk assessment shall be conducted at a minimum on an annual basis and should cover all aspects of the Recycler's operations. Regardless of the planned schedule of the risk assessments, an assessment should take place as a result of any changes in the operations (i.e. implementation of a new process) or regulatory requirements (i.e. new waste handling or noise level requirements) that have not been previously assessed.
- 15.7. As a result of the risk assessment the Recycler should make a determination of the processes that it is able to undertake in a safe and responsible manner, and as a result, identify the acceptable products and waste materials that the organization is capable of handling.
- 15.8. The individual(s) conducting the risk assessment and evaluating identified risks must be appropriately

trained in and knowledgeable of hazard identification and evaluation practices.

- 15.9. The need for sampling, monitoring and other workplace or worker evaluations may be defined by regulation, be a condition of a regulatory permit or approval, or may be subject to operational conditions (i.e. where a risk of exposure is identified through the risk assessment), however, all Recyclers should consider establishing sampling, monitoring and worker evaluation programs for certain air contaminants, such as lead, and generally for dusts or fumes; noise; and worker blood samples for levels of lead and other heavy metals.
- 15.10. When assessing the need for sampling or monitoring, special consideration should be given to low level or infrequent releases, such as those from the breakage of a mercury containing CCFL during manual removal, that on their own may not be detectable through conventional sampling methods, however, overtime could pose a risk as a result of cumulative quantities.
- 15.11. Further, as airborne contaminants can pose hazards through other routes of entry, such as contact with eyes and absorption through skin, the recycler should consider and evaluate all potential routes of entry and associated hazards from airborne particles, and not just inhalable dusts.
- 15.12. Where applicable, Recyclers should make annual medical exams available to employees if interested, at the Recycler's cost.
- 15.13. The risk assessment process should consider sampling, monitoring and evaluation requirements in the context of operational conditions and exposure limits to determine the risk of exposure and the frequency for ongoing sampling, monitoring or evaluations activities required.
- 15.14. The results of any sampling, monitoring and evaluations should be compared not only against regulatory limits but also recognized industry standards, and used to determine the appropriate types and levels of controls necessary to eliminate or effectively control any hazards.
- 15.15. The results of risk assessments should be recorded and promptly communicated to workers.

16.0 GUIDANCE FOR ENVIRONMENTAL CONTROL REQUIREMENTS

- 16.1. Suitable controls should be implemented and maintained to ensure that EOLE and materials are appropriately processed and handled in accordance with regulatory requirements and a manner to prevent unapproved releases to the environment including air emissions, effluent or wastes. At a minimum, worker should be trained on and provided with written operational procedures or work instructions for any task or operation where their absence could result in improper operation leading to a breach in a regulatory requirement or environmental impairment.
- 16.2. Recyclers should be knowledgeable of the EOLE equipment stream and any substances of concern that the products may contain as well as the special handling or processing requirements these items may have.

For general information on substances of concern in EOLE and materials, Recycler's may consult the following:

- 16.2.1. *Toxic and Hazardous Materials in Electronics* by Five Winds International, LP; and
- 16.2.2. *Technical Guidance For The Environmentally Sound Management of Specific Waste Streams: Used and Scrap Personal Computers* (ENV/EPOC/WGWPR(2001)3/FINAL) by the OECD.

- 16.3. Recyclers should conduct and document a review of their processing operations particularly in respect to the substances of concern contained within the EOLE and determine those items that can be handled and processed in a safe and environmentally sound manner that does not result in an uncontrolled release of a hazardous substance.
 - 16.3.1. The term 'hazardous' is often used to indicate 'regulated' materials, however, as regulations vary greatly between jurisdictions, the ERS defines hazardous material broadly as "any material that poses a risk to the worker or the environment if not maintained under suitable control." This means that materials do not need to be regulated to be considered hazardous, thus requiring all recyclers to suitably control any material that poses a threat to the environment or workers.
- 16.4. Releases may occur frequently and through the actual processing methods used, such as dusts generated as a result of shredding or grinding of material. As a result, suitable controls such as mechanical ventilation and filtration systems must be implemented to manage those releases.
- 16.5. Alternately, releases may occur less frequently and as a result of unintended incidents such as breakage of a mercury containing CCFL during manual removal. Control measures should also be implemented to manage these incidental releases not only following the release but also to prevent any hazards associated with the cumulative release of the hazardous substance.
- 16.6. Items may only be mechanically processed where proper controls have been implemented to prevent any uncontrolled release of a hazardous substance.
- 16.7. Where suitable controls to effectively manage any potential releases from mechanical processing have not been implemented, documented procedures for the manual dismantling of the item and removal of the hazardous substances must be in place. Procedures should outline the hazards associated with the item and the proper handling procedures to prevent any unintended release through handling, breakage, etc.
- 16.8. All substances of concern, and hazardous materials or wastes should be suitably identified, properly handled and stored in accordance with documented procedures that define the proper storage location, condition and storage limits for the materials. Recyclers should ensure that storage areas are secure and equipped with impermeable flooring, and regular inspections of the condition of the storage area are undertaken.

- 16.9. Inventories of substances of concern, and hazardous materials or wastes should be tracked to ensure conformance with the documented procedures and regulatory storage limits. Inventories should note the type, quantity and location of material, and should be accessible in the event of emergency, particularly where electronic files are used.
- 16.10. Substances of concern, and hazardous materials or wastes stored longer than 90 days, should have appropriate authorization from the local regulatory authority where required and a plan for their eventual disposition including estimated timelines in storage.
- 16.11. The *Disposition Hierarchy* (Table 1) defines when material recovery from EOLE and materials is required and when other disposition methods are permitted. Recyclers are required to either process materials to meet the defined requirements of the hierarchy or use the services of a suitable approved Downstream Recycler to meet the requirements.
- 16.12. While material recovery from all materials is preferable, the Disposition Hierarchy permits other disposition methods to allow for the proper treatment of problematic materials that may not have suitable, established material to material end use markets. For instance, plastics containing brominated flame retardants are not required for material recovery as their use in the production of food containers or toy applications would pose alternate hazards from the reuse of the material in such applications. As a result, landfill or energy recovery from plastics is considered acceptable. Where material recovery is occurring, Recyclers should ensure that suitable processes are in place to communicate to any downstream recycler or reuse market, the source of, and where known, the types of plastic being supplied and that they may contain brominated flame retardants.
- 16.13. Table 1 also defines the *Acceptable Processes and Points of Final Disposition* for EOLE and materials, and classifies the processes/applications in three categories; those that are:
- 16.13.1. Not permitted under the ERS;
 - 16.13.2. Permitted under the ERS and subject to an on-site audit; or
 - 16.13.3. Permitted under the ERS and subject to a documentation review and verification.
- 16.14. Priority is given to domestic processing of material to minimize the transboundary movement of materials and wastes wherever possible in order to limit other environmental impacts associated with the movement of the materials. Certain export of materials may be permitted by the stewardship program on a case-by-case basis and only where the recycler can demonstrate that adequate processing facilities exist for the management of the material in a safe and environmentally sound manner. Any process or application not specifically outlined in the *Acceptable Processes and Points of Final Disposition* table is subject to review and approval by the Stewardship Program.
- 16.15. Provision of a clean material for use as a feedstock in a manufacturing process is permitted, including to non-OECD/EU member countries, and not subject to an on-site audit, providing that the material has been

separated and cleaned in an OECD/EU country, is completely used in the manufacturing process, and no additional pre-processing of the material is required. Where applicable, the destination country should provide prior informed consent for the import of the material prior to shipment. Conditions qualifying material as feedstock will be assessed during the Recycler's on-site audit and are also subject to interim review or assessment as per the Ongoing Surveillance process.

16.16. Example applications of Table 1:

- 16.16.1. The *Disposition Hierarchy* indicates that 'material recovery' is required for EOLE, therefore preventing EOLE from being land filled, incinerated or otherwise disposed of in an unapproved manner; and the *Acceptable Processes & Points of Final Disposition* indicate that both manual and mechanical material separation of EOLE into sub material groups is permitted, with both processes being subject to an on-site audit. The resultant material streams from the manual and/or mechanical separation of EOLE (i.e. metals, plastics, batteries and lamps) would then be individually assessed to determine the disposition requirements and acceptable processes for each stream.
- 16.16.2. The *Disposition Hierarchy* indicates that Metals separated from EOLE must go through a material recovery process. Metal and mixed metal streams may be manually or mechanically separated, and may go through processes for extraction, purification or refinement, or may be smelted to reclaim metal. Processing of clean single stream metals or mixed metal streams are not subject to an on-site audit but would require a document review and verification.
- 16.16.3. Material recovery from mercury lamps is required, however a mechanical process is required to dismantle and separate the lamp materials, as manual separation of mercury lamps is not permitted. This does not imply that mercury bulbs may not be manually removed from EOLE but rather that the bulbs themselves may not be manually dismantled for material separation. Therefore mercury lamps must be mechanically processed and go through an extraction/purification or refinement process to reclaim materials such as metal, glass, mercury and phosphor powder.
- 16.16.4. Material recovery from batteries is required, however manual dismantling and material separation of batteries is not permitted. This does not imply that batteries may not be manually removed from EOLE but rather that the batteries themselves may not be manually dismantled. Therefore removed batteries must be mechanically processed and go through an extraction, purification or refinement process, or be smelted to reclaim metal, of which, all processes are subject to an on-site audit.

17.0 GUIDANCE FOR HEALTH AND SAFETY CONTROL REQUIREMENTS

- 17.1. Suitable controls should be implemented and maintained to prevent accidents, injuries and exposure to other hazards such as noise, vibration, or hazardous substances.
- 17.2. Consideration should be given to various possible routes of exposure to hazardous substances including inhalation, absorption and ingestion.
- 17.3. At a minimum, written operational procedures or work instructions should be provided for any task or operation where their absence could result in improper operation leading to a breach in a regulatory requirement, accident or injury.
- 17.4. Where possible, it is optimal to eliminate a hazard altogether at the source. This can be accomplished through various process design changes or by substituting hazardous materials or processes with less hazardous alternatives.
- 17.5. Where it is not possible to eliminate a hazard, key elements of the health and safety control program should include any of the following elements in descending order of preference, or a combination of elements as may be necessary to effectively control the hazard:
 - 17.5.1. Engineering controls;
 - 17.5.2. Administrative controls;
 - 17.5.3. Personal protective equipment (PPE); and
 - 17.5.4. Personal Hygiene.

17.6. **ENGINEERING CONTROLS**

If eliminating a hazard is not practical or possible, consideration should be given to isolating the hazard from workers, or removing the hazard from the work area. One of the most effective means to isolate physical hazards is through the use of physical barriers, such as walls, mechanical guards, or acoustic panels, while airborne contamination may be removed from the work area by means of mechanical ventilation.

- 17.6.1. All mechanical controls should be suitably rated or tested to ensure adequate protection from the hazard, for instance:
 - 17.6.1.1. Physical barriers must be designed to withstand any process related forces as well as external forces such as those applied by a worker.
 - 17.6.1.2. Ventilation systems must be equipped to remove the intended contaminants and must maintain adequate flow rates.
- 17.6.2. Wherever mechanical controls are used, suitable preventive maintenance programs should be implemented to monitor performance of the equipment and ensure proper functioning to the approved specifications.

- 17.6.3. Preventive maintenance programs should be developed based upon the manufacturer's suggested tasks and frequencies. Specifically for ventilation systems, preventive maintenance tasks should include airflow testing, ductwork inspections and filter replacements.
- 17.6.4. The Recycler should maintain a program that defines when and how equipment is to be de-energized and locked out. The lockout program should be employed any time a mechanical control must be removed or otherwise deactivated such as for cleaning, setup or maintenance. The program should require that the equipment is de-energized, the energy source is physically locked in the off position and the equipment is tagged with the information of the individual responsible for the locked out condition of the equipment and the reason why the lockout is in effect.

17.7. ADMINISTRATIVE CONTROLS

If it is not possible to eliminate a hazard or suitably manage the hazard through engineering controls, the Recycler should implement administrative controls such as safe work procedures and training programs.

- 17.7.1. Safe work procedures are documented processes that clearly outline the potential hazards associated with performing a task, the approved steps for completing the task to prevent the occurrence of a hazard, as well as appropriate emergency response information in the event of an operational or procedural failure. At a minimum, safe work procedures or other work instructions should be provided for tasks or operations where their absence could result in improper operation leading to a breach in a regulatory requirement or a hazardous condition.
- 17.7.2. Safe work procedures should be communicated to all applicable workers, including contractors, and made available for reference at the point of use.
- 17.7.3. In addition to safe work procedures, workers should be provided with various training to identify and prevent workplace hazards, as is applicable to their responsibilities. Typical examples of training include Workplace Hazardous Materials Information System (WHMIS), Transportation of Dangerous Goods (TDG), as well as process and equipment specific training.
- 17.7.4. In addition to safe work procedures and training programs, the facility should employ appropriate signs and labels to clearly identify significant risks such as restricted or hazardous areas, equipment hazards, hazardous materials, and areas requiring personal protective equipment.

17.8. PERSONAL PROTECTION EQUIPMENT (PPE)

Where it is determined that engineering and/or administrative controls may not be sufficient to prevent worker or visitor exposure to a hazard, the use of personal protective equipment (PPE) may be required.

- 17.8.1. PPE may include the use of safety glasses or face shields where there is a danger of flying parts or debris; hearing protection in areas of elevated noise; steel toe shoes to protect from

dropped or falling objects; gloves for handling sharp or hazardous materials; smocks, uniforms or other specialized clothing for protection from chemicals, dusts and debris; and respiratory protection where airborne contaminants are present.

- 17.8.2. The Recycler should use the results of risk assessments and workplace sampling to determine the appropriate type of PPE as well as degree of protection required.
- 17.8.3. The Recycler must not only provide PPE to workers, but also train workers on the proper use and care for PPE, and enforce its use.
- 17.8.4. Where specialized or custom fit PPE such as respirators, prescription safety glasses, or custom hearing protection are used, workers should be initially assessed and periodically re-assessed for proper fit and function.
- 17.8.5. All areas requiring the use of PPE should be appropriately identified, and where regulated, exposure levels should be posted, such as noise levels exceeding permissible limits.

17.9. PERSONAL HYGIENE

In addition to other health and safety controls, a personal hygiene program should be implemented to define the hygiene practices in the workplace for workers and other visitors to reduce potential exposure to contaminants.

- 17.9.1. The hygiene program should specify areas of the facility identified as 'clean areas'. Clean areas should be enclosed environments, separate from processing areas that are independently ventilated from the processing area with fresh air makeup.
- 17.9.2. A transition area should be provided between clean areas and processing areas for workers and visitors to remove any contaminated clothing and wash hands after leaving the processing area and prior to entering a clean area.
- 17.9.3. Food and drink consumption should only be permitted in clean areas.

18.0 GUIDANCE FOR OPERATIONAL CONTROLS REQUIREMENTS

18.1. Adequate facilities and effective operational controls should be maintained to provide for the safe and secure receiving, storage, handling and processing of incoming and processed materials, including:

- 18.1.1. Ensuring the facility is adequately sized to hold all processed and unprocessed inventory;
- 18.1.2. Protecting materials and data from removal or other unauthorized access;
- 18.1.3. Ensuring that all dismantling and other processing operations, as well as storage areas for substances of concern, are located in an indoor area equipped with adequate containment systems such as impervious floors; and
- 18.1.4. Ensuring that any outdoor storage is covered and contained to prevent exposure or leaching.

- 18.2. Materials may not be over-accumulated or stored in a manner that leaves them susceptible to leaking, damage, fire or other release.
- 18.3. Only materials for which there is an approved Downstream Recycler are permitted to be handled and stored. Other materials must be transported in whole form to an approved Downstream Recycler for processing. For example, if the Recycler does not have an approved Downstream Recycler for mercury bulbs, the bulbs may not be removed from equipment, processed or collected in any way for future use. Instead, the whole unit, i.e. LCD screen, must be sent to an approved Downstream Recycler for processing.
- 18.4. Adequate fire suppression equipment for the type and size of the facility should be maintained, particularly in areas where mechanical processing such as grinding and shredding is undertaken, consideration should be given to the installation of sprinkler systems. At a minimum, the facility should be equipped with readily accessible and charged fire extinguishers suitable for the size and type of fire.
- 18.5. Material tracking processes should be used to demonstrate the chain of custody and account for and report to the Stewardship Program all received, in-process and processed materials. The tracking process should be able to identify system leakage or reporting inconsistencies and also be used to ensure that materials are not stored longer than the regulated or otherwise specified limits.
- 18.6. It is recognized that in-process and outbound material may be a combination of multiple input streams and thus while individual lots or batches of materials received are not required to be separated in the processing or shipping stages, they should be suitably accounted for in each stage of processing, such as: in receipt; in process; processed; and transported.
- 18.7. Chain of custody should include records of movement of the material as well as any transfers of ownership; i.e. what material is received, from whom and when, as well as when subsequent materials are shipped and/or transferred.
- 18.8. The Certificate of Recycling (CoR) is intended to be issued once the batch/lot of received material has been processed. The CoR should note the material identifier(s) (i.e. lot or batch number); type of material processed; quantity; and date processed. The CoR may only be issued after all material from the lot/batch has been processed.
- 18.9. The contingency plan should address any temporary interruptions in service that may prevent the Recycler from accepting or processing Stewardship Program materials, or from shipping these processed materials to a Downstream Recycler.
- 18.10. Situations to consider that could lead to a temporary interruption in service include planned facility shutdown, work stoppage, equipment failure, fire, or regulatory order.
- 18.11. The use of an alternate downstream recycler is an acceptable contingency plan to address temporary interruptions in service, as long as the recycler has been prior approved by the stewardship program for use by the upstream recycler.

18.12. The contingency plan should include at a minimum:

- 18.12.1. Details on how and when the interruption will be communicated to the Stewardship Program;
- 18.12.2. Any temporary solution to handle specific Stewardship Program materials;
- 18.12.3. An alternate approved Recycler in the event of extended interruptions; and
- 18.12.4. Detail on when alternate processing plans will be initiated.

18.13. The closure plan should define the steps required to close the facility, if the operations cease for any reason, to ensure that all products and materials onsite or otherwise under the ownership of the Recycler are properly handled in accordance with the requirements of the ERS. At minimum, the closure plan should detail the following:

- 18.13.1. The requirements to immediately cease acceptance of new materials, upon initiation of the closure plan;
- 18.13.2. A communication plan to notify all suppliers of the impending closure of the operations;
- 18.13.3. A process to identify and quantify any materials under the ownership of the Recycler that may be onsite, or in transit to or from the facility;
- 18.13.4. Roles and responsibilities for quantifying, tracking and transferring all materials to approved Recyclers; and
- 18.13.5. Roles and responsibilities for assessing site conditions and initiating any necessary remediation activities.

18.14. The closure plan should also identify and provide for adequate financial assurance equal to the cost of removing, transporting and processing all materials under the ownership of the Recycler in accordance with the requirements of the ERS. Financial assurance should be calculated based on the following:

- 18.14.1. The total amount of material permitted on-site, or if not specified in a permit or approval, the maximum storage capacity (including both processed and unprocessed materials), plus the maximum amount of weekly input that may be in transit to the facility.
- 18.14.2. The estimated cost to load, transport and process all materials in accordance with the requirements of the ERS.

18.15. The closure plan should also address financial costs associated with any site remediation including the following:

- 18.15.1. The proper clean up and removal of any materials and/or contaminants from processing equipment, air handling equipment, duct work, filter systems, etc.
- 18.15.2. Where materials are stored outdoors, the Recycler should also provide an assessment of and financial assurance for the cost of any remediation that may be necessary on site or at adjacent lands as a result of the operations. The assessment should be based on the size and use of the outdoor area (i.e. types, quantities and condition of materials stored outdoors), and associated

costs for the cleanup and remediation of soil and/or water from any release of material such as emissions, spills or leaks.

- 18.16. The financial instrument for the financing of the material handling and site remediation upon closure may include but is not limited to a: letter of credit; surety bond or insurance policy.
- 18.17. The Recycler should annually reassess the Closure Plan and financial assurance to ensure its adequacy, taking into account the types and volumes of materials accepted, stored and processed on site, as well as any known instances of release.
- 18.18. In the event of a sale or other change of ownership of the facility, either the closure plan should be initiated, or ownership of all products and materials should be contractually transferred to the new owner.

19.0 GUIDANCE FOR DATA SECURITY REQUIREMENTS

- 19.1. Data security requirements are applicable only to those Recyclers that handle data containing devices or materials. Where deemed not applicable, the Recycler must be able to demonstrate that controls are in place to ensure that data containing devices are not accepted at the facility.
- 19.2. Data security controls should be designed and implemented to protect whole electronic products, components (i.e. disk drives), and accessories (i.e. data cards), as well as any information contained on or within any of these items from unauthorized access or theft.
- 19.3. As part of data security controls, the Recycler should:
 - 19.3.1. Ensure that all workers are knowledgeable through both training and operating procedures, of those products potentially containing user data;
 - 19.3.2. Establish and limit access to secure areas for receiving and storing data containing products;
 - 19.3.3. Establish procedures for receiving and immediately moving data containing products to the secure storage area; and
 - 19.3.4. Ensure that only trained and approved workers have access to and handle data containing products.
- 19.4. Various processes to clear and sanitize data are available, however, some processes are only appropriate for and effective on specific devices. Recyclers must ensure that any process employed is adequate for the type of device and test to verify its effectiveness. For general information on the clearing, sanitizing and destruction of data containing devices, as well as security concerns surrounding these activities, Recyclers may consult *Clearing and Declassifying Electronic Storage Devices (ITSG-06)* by the Communications Security Establishment Canada.
- 19.5. Physical destruction of data containing devices should at a minimum include one of the following means: shredding, crushing, shearing, or perforating the memory resident material to render them unreadable through conventional means.

- 19.6. Periodic internal data security audits should be conducted to test and verify the effectiveness of the data destruction process. The audit program should consider the receiving, storage, handling and processing activities.
- 19.7. The procedure to investigate and follow up on any data security breaches should be used to determine the cause and extent of the breach, and initiate the necessary notification and corrective action processes.

20.0 GUIDANCE FOR SAMPLING, AUDITS, INSPECTIONS AND OTHER ASSESSMENTS REQUIREMENTS

- 20.1. Regulated requirements for sampling and other monitoring activities are dependent on both the jurisdiction of operation as well as the type of operations, i.e. manual vs. mechanical processing, however, the sampling, monitoring and assessment requirements outlined in the ERS are intended to represent typical minimum requirements of environmental, health and safety legislation and/or an EHS management system. As a result, recyclers are required to determine the need for sampling and measurement based in part on regulatory requirements but also the results of the risk assessment.
- 20.2. The purpose of sampling, audits, inspections and other assessment processes is to review on a regular basis, through a structured format, the various elements of the Recycler's operations, to determine if they are operating in compliance with regulatory requirements, and in conformance with the ERS and the Recycler's operating policies and procedures. Sampling and measurement activities should be used to test and verify the adequacy of the Recycler's EHS controls.
- 20.3. Sampling, audits, inspections and other assessments may be required by regulation or as an approval to operate, but may also be required where results of the EHS Risk Assessment reveal a possible risk of a particular hazard, emission or release in exceedance of permissible limits.
- 20.4. Although sampling, monitoring and evaluation programs for emissions, effluents, or wastes, may not be required, Recyclers should give particular consideration to establishing sampling, monitoring and worker evaluation programs for certain air contaminants, such as lead, or generally for dusts or fumes; noise; any process effluents; and worker blood samples for levels of lead and other heavy metals.
- 20.5. Sampling, audit, inspection and other assessment programs should be designed to ensure that the activity is scheduled and conducted on a periodic basis, and the results of the activity are used to assess the effectiveness of the health, safety and environmental controls. At a minimum, programs should define:
 - 20.5.1. The responsibility for undertaking the activity, including any training, knowledge or qualification requirements for those responsible;
 - 20.5.2. The process or procedure for undertaking the activity, including any pertinent assessment criteria;
 - 20.5.3. Requirements for recording, reporting and tracking results; and
 - 20.5.4. A schedule for conducting the activity on a regular basis.

- 20.6. Audits, inspections and other assessments may be undertaken by trained and competent internal workers or third party auditors or assessors however, sampling should only be undertaken by qualified individuals, such as an industrial hygienist, registered nurse or other professional as applicable to the type of sampling.
- 20.7. Any laboratory analysis of workplace or worker samples should be conducted by an accredited laboratory.
- 20.8. The process for assessing the results of any sampling, audits, inspections or other assessments should define: who is responsible for the assessment; when the assessment will take place; what standard or criteria the results will be compared against; and what will trigger the initiation of a corrective action.
- 20.9. Results of the EHS sampling should be evaluated against regulatory limits, if any, and recognized industrial hygiene standards to assess worker exposure levels and identify areas where control measures to reduce or eliminate exposure may be required.

21.0 GUIDANCE FOR CORRECTIVE ACTION PLANS

- 21.1. All noncompliance, nonconformances and other issues identified through sampling or monitoring; audits, inspections or other assessments; accident/incident reports; fines or regulatory orders; security breaches; complaints; or other programs that are deemed to be a potential risk to worker health or safety, or result in a release to the environment in exceedance of permissible limits should be promptly addressed and managed through the Recycler's corrective action process.
- 21.2. The Recycler's corrective action process should be designed to facilitate the development and implementation of actions to correct or mitigate any issues that may have already occurred as well as to prevent any further occurrences. The corrective action process should include mechanisms to:
 - 21.2.1. Assign responsibility for developing and implementing any corrective action plans to an individual capable of ensuring the plan is adequate and properly implemented;
 - 21.2.2. Define timing requirements for the development and implementation of corrective action plans, taking into consideration the magnitude of the issue and any imminent hazard;
 - 21.2.3. Review the actions to ensure that the plan has been implemented and is effective in controlling and/or preventing the issue; and
 - 21.2.4. Communicate to workers any changes in operations as a result of corrective action plans.

22.0 GUIDANCE FOR EMERGENCY PLANNING AND RESPONSE

- 22.1. Notwithstanding the overall environmental, health and safety controls, Recyclers should identify and maintain procedures to respond to potential emergency situations. Emergency situations will typically be identified through the risk assessment process, and may include but are not limited to spills, accidents, worker injury and fire.

- 22.2. Recyclers should establish documented procedures and provide training for all workers on the proper steps to respond to an emergency situation.
- 22.3. Recyclers should ensure that an appropriate number of individuals are trained in fire response, spill response and in the administration of first aid, and are available on site during normal operating hours.
- 22.4. Recyclers should maintain a stock of the necessary supplies for emergency response, including fire extinguishers, first aid supplies and spill cleanup materials.
- 22.5. In areas where workers may be exposed to eye injuries from contact with dust, debris or chemical splashes, emergency eye wash stations should be provided (preferably plumbed and maintained units to ensure adequate flow). Safety showers should also be provided where workers may be exposed to skin hazards from exposure to hazardous or other irritating substances.
- 22.6. The emergency response plan should provide details on when and how to contact external emergency response assistance such as fire or ambulance if required, and also provide information on transportation to the nearest hospital or other location for external medical support.
- 22.7. All facilities should be equipped with an emergency notification system, such as pull stations, horns, bells or lights to notify workers in the event of an emergency.
- 22.8. Emergency exits should be clearly identified, including illuminated signs, and clear and unencumbered access to emergency exit routes should be maintained at all times.
- 22.9. Where required, emergency response procedures should be reviewed and approved by the appropriate local regulatory authority.

23.0 GUIDANCE FOR TRANSPORTATION REQUIREMENTS

- 23.1. EOLE, components, and some materials generated from processing EOLE may be considered hazardous or controlled substances and thus subject to regulation for transportation. The Recycler should identify the materials they transport, both directly as well as through third-party, and determine any requirements for transport and ensure compliance with any such requirements. Specifically, requirements should be identified for materials that contain lead or mercury, as well as batteries that may have specific transportation and labelling requirements.
- 23.2. Consideration should be given to the transportation requirements in the jurisdiction of the Recycler, any regions the material is transported through, as well as the destination location.
- 23.3. Where regulated, the material should not be transported unless in compliance with all prescribed safety requirements, and the material is:
 - 23.3.1. Properly packaged to prevent breakage or release, and the package and transportation vehicle are equipped with the necessary labels and/or other safety marks;
 - 23.3.2. Accompanied by all applicable movement documents;

- 23.3.3. Offered for transport and/or transported by a worker trained and knowledgeable in the transportation requirements;
- 23.3.4. Transported by an authorized carrier to an approved Recycler; and
- 23.3.5. Suitable emergency response plans are in place.
- 23.4. Shipments of regulated material should never exceed the maximum allowable quantities specified in permits or approvals and mixed loads of regulated materials may only be shipped where permitted.
- 23.5. In addition, certain material transfers or shipments may require prior informed consent from the destination jurisdiction to approve. The Recycler should determine where prior informed consent is required and maintain a process to obtain such prior to transfer of any materials.
- 23.6. Training for workers offering hazardous or other regulated material for shipment should include details on packaging, labelling and other special transportation requirements, as well as applicable emergency response information.
- 23.7. The evaluation process for third-party transporters should be designed to assess and ensure that transporters are knowledgeable of and operate in compliance with regulatory requirements, and have appropriate emergency response plans and adequate insurance to address any potential accidents or other incidents during transport.
- 23.8. Individual shipments may also be periodically evaluated to ensure that the transporters are properly licensed, and trucks and trailers appear to be in good working condition and are suitable for the shipment.
- 23.9. At a minimum the Recycler should maintain records of the shipment for any hazardous or other regulated materials with the following information:
 - 23.9.1. The nature and quantity of the material;
 - 23.9.2. The addresses and the sites of the exporter, the importer, and any carriers;
 - 23.9.3. Proof of written contracts between exporters, importers and carriers;
 - 23.9.4. The point of final disposition for the material; and
 - 23.9.5. Proof of receipt of the material at the intended location.

24.0 GUIDANCE FOR DOWNSTREAM RECYCLER REQUIREMENTS

- 24.1. Recyclers are responsible for ensuring that all materials associated with the processing of EOLE are handled in a safe and environmentally sound manner, and in accordance with regulatory requirements until the point of final disposition as defined in Table 1.
- 24.2. The process to evaluate downstream recyclers should be designed to assess and ensure that :
 - 24.2.1. The Recycler is able to handle the material in a safe and environmentally sound manner, according to applicable regulatory requirements;

- 24.2.2. Materials are not stockpiled, dumped or exported to processors or jurisdictions without adequate facilities to handle them; and
 - 24.2.3. OECD member countries that have not ratified the Basel convention are not used as transit country for material destined for non-OECD/EU member countries.
- 24.3. Copies of all applicable permits and approvals for Downstream Recyclers should be maintained to demonstrate compliance.
- 24.4. The flow of all materials from the point of primary processing until the point of final disposition should be documented and the approximate quantities of each material stream should be indicated. This may be completed in chart or flow diagram format, indicating the material accepted; the process method, and resultant materials and approximate quantities; and the approved Downstream Recycler for each material.

PART C

RECYCLER ASSESSMENT AND APPROVAL PROCESS

25.0 OVERALL ASSESSMENT AND APPROVAL PROCESS FLOW

- 25.1. The Recycler Assessment and Approval Process consists of the following steps:
 - 25.1.1. Recycler Application;
 - 25.1.2. Application Review and Verification;
 - 25.1.3. Recycler Audit;
 - 25.1.4. Submission of the Audit Report; and
 - 25.1.5. Stewardship Program Approval.
- 25.2. Recycler approvals are based on an entire material stream and are only granted following the complete assessment and approval of all recyclers associated with the processing of the material until it reaches the point of final disposition as detailed in Table 1.
- 25.3. Recycler audits will be conducted in reverse order to the material flow; upstream recycler audits will only be initiated after the audit and approval of all Downstream Recyclers.
- 25.4. All recyclers must consent to the sharing of final audit reports amongst the Stewardship Programs, to permit the recognition of approval across programs auditing to the same version of the ERS.

26.0 RECYCLER APPLICATION

- 26.1. Recyclers seeking approval for use under the Provincial Stewardship program are responsible for completing the *Recycler Application Form* and submitting to the Stewardship Program along with necessary documentation providing supporting evidence to the application.
- 26.2. The Primary recycler must define and document the downstream flow of all materials.
- 26.3. The downstream material flow must account for all materials and components segregated from the source materials and indicate one Downstream Recycler per material stream.
- 26.4. A completed application form and necessary supporting documentation must be submitted for each Downstream Recycler identified in the downstream flow.
- 26.5. Once the recycler application has been submitted, no changes to the downstream flow of materials will be permitted unless otherwise approved by the Stewardship Program and in accordance with the *Request for Amendment to an Application* process.

27.0 APPLICATION REVIEW AND VERIFICATION

- 27.1. The Stewardship Program will perform an initial review of the recycler application package to determine if the application is complete and the required background evidence has been provided.

- 27.2. Applicants that have not addressed all requirements or have not provided suitable supporting evidence with the application will be notified that the application is incomplete and that further information is required prior to proceeding with an audit. Applicants will have 3 months from the time of notification to properly complete the application, after which the application will be closed and any further consideration of the recycler would be required under a complete new application.
- 27.3. The Stewardship Program will determine the need for an on-site audit for each recycler identified in the material flow, based on the audit applicability factors outlined in *Table 1* of the ERS, and existing approval, if any, taking into account the scope of the existing approval, including the specific facility assessed, the materials and processes covered under the assessment, the last date of approval, and the version of the ERS audited and verified to.
- 27.4. Acceptable processes and points of final disposition that are deemed not to require an on-site audit will be subject to a documentation review and verification. The documentation review may be conducted by the Stewardship Program or a third-party auditor, and will be used to determine if the Recycler is suitably permitted and approved to undertake the process identified in the application.
- 27.5. Where a process or point of final disposition that is not permitted under the ERS is identified, the applicant will be notified and required to submit the necessary information for an acceptable alternative prior to further consideration of the application.
- 27.6. Acceptable processes and points of final disposition, as well as the need for on-site audits will be at the sole discretion of the Stewardship Program.

28.0 INITIATION OF THE RECYCLER AUDIT

- 28.1. The Stewardship Program will contact an approved ERS Auditor to initiate the audit process by providing the complete application package and a summary of on-site audits required.
- 28.2. The Auditor will commence the audit process beginning at the point of final disposition for each material stream identified on the summary of on-site audits required.
- 28.3. The Auditor will contact the Primary Recycler and each Downstream Recycler to notify them of the commencement of the audit process and will schedule audits directly with Auditee.
- 28.4. The Auditor will maintain a current audit schedule for the entire material flow noting each Recycler and the planned or completed audit dates as applicable.
- 28.5. The audit schedule will be communicated to the Stewardship Program and the Primary Recycler on an ongoing basis.
- 28.6. Following the completion of audits and approval of all Downstream Recyclers, the Auditor will initiate the on-site audit of the Primary Recycler.

29.0 ON-SITE AUDIT

- 29.1. The Auditor will conduct a process-based audit focusing on significant aspects and risks associated with the processes, covering both operational activities and process controls.
- 29.2. The audit methods employed will include interviews, observations of activities, and reviews of documentation and records.
- 29.3. Through detailed site, operational and documentation reviews, the Auditor will assess procedural information and operational activities against the criteria of the ERS, taking in to account where applicable the direction provided by the Implementation Guide.
- 29.4. The Auditor will verify the incoming and outgoing material flow, and confirm or revise the scope of the audit based on the materials accepted and processing activities undertaken, to ensure the audit scope adequately defines the method of processing; the material type; and the result of the process.
- 29.5. The assessment will cover all obligated electronic products and materials handled by the facility for the on-site audit, but will only cover the designated program materials as indicated in the Recycler's application for the downstream review.
- 29.6. The Auditor will classify all audit findings in accordance with Part E - *Audit Protocols*, and immediately notify the Stewardship Program of any instances of a Major Nonconformance.
- 29.7. Where a Major Nonconformance is issued to a Recycler approved and operating under the Stewardship Program, the Stewardship Program will immediately cease shipment of material to the Recycler unless suitable corrective actions can be demonstrated by the Recycler.

30.0 INITIAL AUDIT REPORT

- 30.1. Following the audit, the Auditor will complete the *Recycler Audit Report* form detailing a summary of the audit process and results of the audit including, key observations, nonconformances and an assessment of conformance to the ERS for recycler at the time of the assessment, and submit to the Stewardship Program for initial review.
- 30.2. The Stewardship Program will review the Auditor's report and may request additional follow-up or clarification of any issues or concerns identified in the report.
- 30.3. Following acceptance by the Stewardship Program, the Auditor will issue a copy of the audit report to the Auditee.

31.0 CORRECTIVE ACTION PLANS

- 31.1. All nonconformances identified in the Audit Report shall be addressed through the Recycler's corrective action process, and shall include suitable actions to both correct the nonconformance, as well as to prevent reoccurrence.

- 31.2. An action plan to address any major nonconformances must be submitted to the auditor within 15 days of the auditor issuing the audit report.
- 31.2.1. Following acceptance of the corrective action plan by the Auditor, the recycler will have 60 days to implement the controls identified in the corrective action plan.
 - 31.2.2. Evidence of actions taken shall be forwarded to the auditor for review within the allotted time period.
 - 31.2.3. Inability of the recycler to provide a satisfactory resolution to a major nonconformance within the 60 day corrective action period will result in the closure of the audit, with the final audit status indicated as 'not approved' and a subsequent complete on-site audit will be required prior to any further consideration of the recycler, unless otherwise approved by the Stewardship Program.
 - 31.2.4. The 60 day corrective action period is intended to provide the Recycler ample time to properly address a major nonconformance, however, recyclers must maintain suitable interim controls during the corrective action plan development and implementation for any items that pose risk of worker injury, release to the environment or regulatory noncompliance.
- 31.3. An action plan to address any minor nonconformances must be submitted to the auditor within 15 days of the auditor issuing the audit report.
- 31.3.1. Following acceptance of the corrective action plan by the Auditor, the recycler will have 30 days to implement suitable controls identified in the corrective action plan.
 - 31.3.2. Evidence of actions taken shall be forwarded to the auditor for review within the allotted time period.
 - 31.3.3. Inability of the recycler to provide a satisfactory resolution to a minor nonconformance within the 30 day corrective action period will result in the escalation of the issue to a major nonconformance and an additional 30 days will be provided to resolve the escalated issue, after which, if it has not been satisfactorily resolved, the final audit report will be issued, with the final audit status indicated as 'not approved' and a subsequent complete on-site audit will be required prior to any further consideration of the recycler, unless otherwise approved by the Stewardship Program.
- 31.4. All nonconformances must be satisfactorily addressed to prevent reoccurrence prior to any further consideration by the Stewardship Program.
- 31.5. Records of all corrective action plans and evidence of completed actions shall be maintained by the recycler for tracking purposes and future follow up.

- 31.6. Audit observations do not require formal follow up action plans to the Auditor however an observation may be re-evaluated during a surveillance review, the re-verification audit or any other subsequent assessment by the Stewardship Program to ensure that it does not escalate into a nonconformance.

32.0 CLOSURE OF NONCONFORMANCES

- 32.1. The Auditor will review and assess the adequacy of proposed corrective action plans and any additional information/evidence provided, in effectively addressing the identified nonconformance.
- 32.2. All Auditor assessments of the effectiveness of the corrective actions and decisions will be recorded on the Recycler Audit Report form as a means to track the progress and closure of the nonconformance.

33.0 FINAL AUDIT REPORT

- 33.1. Once all corrective action plans have been suitably implemented to the Auditor's satisfaction, the Audit Report will be updated and issued to the Stewardship Program, providing a final assessment of the Recycler's conformance to the Standard.
- 33.2. The Stewardship Program will review the Auditor's final report and recommendation, and may request the auditor clarify or follow-up on additional issues in order to make a final decision on the approval of the Recycler under the RQP.
- 33.3. Following acceptance by the Stewardship Program, the Auditor will issue a copy of the final Audit Report to the Auditee, and notify the Primary Recycler of the status of the audit.
- 33.4. If the Downstream Recycler is not approved to the ERS, the Primary Recycler must initiate a Request for Amendment to a Recycler Application or Approved Process.
- 33.5. Recyclers verified to the ERS are required to maintain their approved processes, including all Downstream Recyclers during the term of approval, unless an amendment to the approval has been approved by the Stewardship Program.

34.0 STEWARDSHIP PROGRAM APPROVAL

- 34.1. Once all Recycler audits have been completed for the entire material stream, including the Primary Recycler and all Downstream Recyclers, and satisfied that all program requirements have been addressed, the Stewardship Program may provide approval to a Primary Recycler for use under the program for a term of up to three years, subject to reporting and any other surveillance requirements established by the Stewardship Program.
- 34.2. Any approval granted by the Stewardship Program is valid on the approved scope and processes only.
- 34.3. Failing to meet any of the requirements of the Stewardship Program or the ERS will result in the revocation of the Recycler's approval.

35.0 MULTI-SITE APPROVALS

- 35.1. At the Stewardship Program's discretion, Recyclers with multiple locations may be considered for a multi-site approval. Multi-site approval will still require the assessment and approval of each location, but will allow for a single assessment of common corporate-wide requirements such as the EHSMS programs and procedures.
- 35.2. Failure to demonstrate that corporate-wide programs and procedures have been adequately implemented will result in complete audits being required at each location.

36.0 REQUEST FOR AMENDMENT TO A RECYCLER APPLICATION

- 36.1. In the event that a Downstream Recycler is not verified to the ERS, or where a Primary Recycler seeks to amend an application that has been submitted, a request must be submitted in writing to the Stewardship Program detailing the proposed process modification or Downstream Recycler change along with the necessary application and supporting information for the requested change.
- 36.2. The Primary Recycler may be responsible for any audit costs associated with the application amendment.

37.0 REQUEST FOR AMENDMENT TO AN APPROVED PROCESS

- 37.1. Where a Recycler seeks to amend an approved process, or change a Downstream Recycler, a request must be submitted in writing to the Stewardship Program detailing the proposed process modification or Downstream Recycler change along with the necessary application and supporting information for the requested change.
- 37.2. At the Stewardship Program's discretion, a full on-site audit and re-approval of the Recycler may be required.
- 37.3. The Recycler may be responsible for any audit costs associated with the process amendment.

38.0 RECOGNITION OF APPROVAL FROM ANOTHER STEWARDSHIP PROGRAM

- 38.1. Recycler approval under one Stewardship Program may be recognized by another Stewardship Program, conditional upon the following:
 - 38.1.1. The scope of the approval, i.e. the location, processing method, and material are identical;
 - 38.1.2. The approval was granted based on the same version of the ERS; and
 - 38.1.3. Verification to the ERS occurred within the past 3 years.
- 38.2. If the scope of the existing approval and proposed process are identical, the Stewardship Program will obtain a copy of the final Audit Report from the originating program and the approval will be recognized.

- 38.3. If the approval was granted based on a different scope or version of the ERS, or the audit was conducted prior to the last 3 years, the Stewardship Program will notify the Recycler that the approval cannot be recognized and the full Recycler Assessment and Approval Process is required.

39.0 AUDIT COMMUNICATION PROTOCOLS

- 39.1. For any audit related issues, the ERS Auditor will be the first point of communications with the Recycler.
- 39.2. Issues that are unable to be resolved between the Auditor and the Recycler will be forwarded by the Auditor and/or the Recycler to the Stewardship Program for consideration.
- 39.3. Should the Auditor require technical support or other clarification on any audit issues not identified in the RQP, the Auditor will consult the Stewardship Program to ensure that consistency is maintained between audits and Auditors.
- 39.4. All audit results will be considered confidential and shared amongst the Stewardship Programs and the Auditee only.
- 39.5. All external inquiries regarding the ERS or audit process will be directed to the Stewardship Program.

40.0 FORFEITURE OF APPROVAL

- 40.1. If for any reason a Recycler is deemed by the Stewardship Program to have provided false information or misrepresented any part of the recycling operations or processes undertaken, the Recycler's approval will immediately be forfeited and any contract with the Stewardship Program will be deemed null and void.
- 40.2. Falsified information may include but is not limited to:
- 40.2.1. Deliberately false or misleading information in a Recycler Application;
 - 40.2.2. Misrepresentation of the recycling processes undertaken, materials handled or downstream vendors used as part of the recycling process;
 - 40.2.3. Nondisclosure of pertinent site information including off-site material storage, regulatory inspections, or regulatory fines or orders; and
 - 40.2.4. Withholding any information specifically requested or otherwise pertinent to the application, audit, approval or good standing of the Recycler from the Stewardship program or Auditor.
- 40.3. Forfeiture of approval will be at the sole discretion of the Stewardship Program.

PART D

ONGOING RECYCLER SURVEILLANCE AND RE-VERIFICATION

41.0 RECYCLER SURVEILLANCE

- 41.1. The Stewardship Program may at its discretion conduct interim reviews or assessments to ensure approved Recyclers continue to operate in accordance with the requirements of the ERS.
- 41.2. The Recycler Surveillance Program will be determined in part by the Audit Assessment Criteria and Scoring from the recycler's final Audit Report.
- 41.3. The Recycler Surveillance Program may include but is not limited to:
 - 41.3.1. Site reviews;
 - 41.3.2. Document / record reviews; or
 - 41.3.3. Recycler reporting.
- 41.4. Site reviews may be conducted by Stewardship Program staff or third-party Auditor and may be used to confirm items such as operation within the approved process scope, proper storage and handling of materials, and processing of program materials within the Stewardship Program's acceptable time frame.
- 41.5. Document and/or record reviews may cover a variety of information including:
 - 41.5.1. Recycler procedures and process records;
 - 41.5.2. Environmental notifications, fines or complaints; or
 - 41.5.3. Insurance or workers compensation claim history.
- 41.6. Document and/or record reviews may be used to confirm items such as:
 - 41.6.1. Audits, inspections, assessments, sampling or monitoring are completed according to schedule;
 - 41.6.2. Corrective action plans have been implemented;
 - 41.6.3. Material flow to downstream recyclers;
 - 41.6.4. Spills, releases, workplace or transportation accidents;
- 41.7. Recycler reporting may be required to facilitate the Stewardship Program's tracking of material quantities and disposition, as well as operational efficiencies and effectiveness. Reporting may cover a variety of metrics such as the following:
 - 41.7.1. Quantity of program material received, awaiting processing, processed and shipped downstream;
 - 41.7.2. Average time to process program materials from time of receipt;
 - 41.7.3. Percent of material streams attributed to different EOLE products; or
 - 41.7.4. EHS complaints, incidents, accidents or releases.
- 41.8. Inability to demonstrate continued operation in accordance with the requirements of the ERS may result in the revocation of the Recycler's approval.

42.0 RE-VERIFICATION PROCESS

- 42.1. Recycler verification to the ERS is for a maximum period of 3 years, but may be required sooner in the event of a change in the Recycler's operations, such as the materials processed, method of processing or a revised Downstream Recycler.
- 42.2. Re-verification to the ERS may require a complete assessment and approval or may be a targeted approval at the Stewardship Program's discretion based upon factors such as the frequency of usage of the recycler and history of performance.

PART E

AUDIT PROTOCOLS

43.0 ERS AUDIT OBJECTIVE

- 43.1. The objectives of the ERS audit process are to:
 - 43.1.1. Provide an independent assessment of the Recycler's conformance to the ERS;
 - 43.1.2. Evaluate the ability of the Recycler to identify and comply with regulatory requirements; and
 - 43.1.3. Determine if the Recycler operates in accordance with its established programs and procedures.
- 43.2. The ERS Auditor will audit according to the requirements of the ERS and in line with the direction of the Implementation Guide, and provide a professional assessment of the ability of the Recycler to satisfy each of the audit objectives.
- 43.3. The audit will be conducted based on objective evidence available through on-site visual observations, conversations/interviews with workers, as well as through documented evidence maintained by the Recycler.
- 43.4. Objective evidence may include, but is not limited to policies, procedures, work instructions, shipping records, training materials, training records, communication materials, permits, certificates, worker interviews and general observations.
- 43.5. Auditors will review information provided by the Recycler and where necessary may request additional information to assess conformance to the ERS.
- 43.6. The Auditor will use the minimum acceptable examples provided in the Implementation Guide as the basis for assessment of the suitability or adequacy of the information provided. Where implementing an element of the ERS other than as defined in the Implementation Guide, it is Recycler's responsibility to demonstrate an equal alternative.
- 43.7. The Auditor may provide examples such as those identified in the Implementation Guide as suitable means to demonstrate conformance to the ERS, however, the onus is on the Recycler to ensure that evidence is adequate, as the Auditor is required to maintain a separation of duties and is not permitted to consult the Recycler.

44.0 AUDIT SCOPE

- 44.1. The Auditor is responsible for conducting the audit within the defined audit scope, however, the scope must be appropriate to the facility and operations, and not limit the audit from assessing all applicable operations.

- 44.2. The Auditor is responsible for confirming the scope of operations, including the facility, processes, materials, etc., and determining if the scope adequately addresses the operations, or if there need for the audit scope to be expanded or reduced.
- 44.3. The auditor will note any changes in the audit scope in the Audit Report and promptly notify the Stewardship Program.
- 44.4. The assessment should cover all obligated electronic products and materials handled by the facility for the on-site audit, but will only cover the designated program materials as indicated in the Recycler's application for the downstream review.
- 44.5. Where the audit scope covers only a portion of the Recycler's operations, the material and process specific operations should be assessed completely, while general requirements should be assessed across the organization.

45.0 CLASSIFICATION OF AUDIT FINDINGS

- 45.1. Where suitable evidence of conformance cannot be presented to satisfy the Auditor that an element of the ERS has been met, the Auditor will note the issue in the Audit Report and attribute one of the following audit finding classifications:
 - 45.1.1. Observation;
 - 45.1.2. Minor nonconformance; or
 - 45.1.3. Major nonconformance.

46.0 OBSERVATIONS

- 46.1. Observations are general opportunities for improvement for items that do not pose a threat the environment or worker safety, and are not a contravention of any element of the ERS.
- 46.2. Typically the observation classification will be used to note general comments on the facility or to outline suggested improvements for items such as housekeeping or other similar issues that do not meet current industry best management practices.

47.0 MINOR NONCONFORMANCE

- 47.1. Minor nonconformances are typically isolated incidents represented by a single observed lapse in the Recycler's programs or procedures that do not pose an immediate threat to the environment or worker health or safety.
- 47.2. Examples of minor nonconformances include:
 - 47.2.1. An instance where a process or operational activity that is undertaken is not in conformance with an approved procedure; or

- 47.2.2. Evidence of a process implemented in conformance with ERS but not adequately documented.

48.0 MAJOR NONCONFORMANCE

- 48.1. Major nonconformances are often systematic issues and may be represented by multiple occurrences of a nonconformance or examples of the similar nonconformances across different operational or functional areas.
- 48.2. Major nonconformances represent significant issues in scale by either:
 - 48.2.1. The potential impact or hazard of a single occurrence;
 - 48.2.2. The number of lapses identified; or
 - 48.2.3. The wide scope of functions or operational areas affected by the issue.
- 48.3. Examples of major nonconformances include:
 - 48.3.1. Any issue that has the potential to pose an immediate threat to the environment or worker health or safety;
 - 48.3.2. A regulatory noncompliance or the inability to demonstrate regulatory compliance;
 - 48.3.3. Not adequately controlling a hazardous substance or material;
 - 48.3.4. Failure to implement an element of the ERS;
 - 48.3.5. Inability to demonstrate that corrective action has been taken in cases of nonconformance with the ERS or noncompliance with relevant regulatory requirements; or
 - 48.3.6. Failure to adequately address a minor nonconformance within the specified time.

49.0 AUDIT VERIFICATION

- 49.1. Following the audit and consideration of the evidence reviewed, the Auditor will provide a professional assessment of the ability of the Recycler to satisfy each of the audit objectives and indicate one of the following statements in regard to the overall verification to the ERS:
 - 49.1.1. Verification to the ERS is withheld until satisfactory evidence of closure is provided to the Auditor for the identified nonconformance(s).
 - 49.1.2. The facility is recommended for 30 day conditional approval during which the identified minor nonconformance(s) must be satisfactorily addressed and closed out by the Auditor.
 - 49.1.3. The facility is recommended for approval to the ERS without any outstanding nonconformances.
- 49.2. Unresolved or outstanding critical audit findings, which may be any major nonconformance or several minor nonconformances, will result in verification to the ERS being withheld until the satisfactory closure of the issue by the Recycler and approval by the Auditor.
- 49.3. Where only a noncritical audit finding remains outstanding, the Recycler may be recommend for conditional approval for a period of 30 days to address the minor nonconformance.

PART F

APPROVED RECYCLER RECOGNITION

50.0 PURPOSE OF THE APPROVED RECYCLER RECOGNITION PROCESS

- 50.1. The Approved Recycler Recognition process is intended to facilitate the Recycler's application requirements when seeking approval under another Stewardship Program operating to the same version of the ERS, or when seeking approval from the Stewardship Program to operate under a different Primary Recycler, without having to share final audit reports or other program specific information which may contain confidential information.
- 50.2. The Approved Recycler Recognition process is designed to acknowledge those recyclers that have successfully completed the ERS audit process, been verified by the independent third-party Auditor to be operating in conformance with the ERS and are approved for use under the Stewardship Program.
- 50.3. Approved Recycler Recognition is based in part on the results of the third-party audit commissioned for the Stewardship Program and is limited to the confirmation of approval for use under the Stewardship program, for the specific material(s), processing method(s) and location covered under the scope of the audit.
- 50.4. Recognition does not constitute a certificate of conformance to the ERS, and third-parties may not rely on this recognition as such certification.

51.0 TERM OF RECOGNITION

- 51.1. Recognition is provided for a maximum period of 3 years from the date of approval and for the version of the ERS audited and verified to only.
- 51.2. By recognizing a Recycler, the Stewardship Program does not make any representations, guarantees or warranties with regard to the Recycler and assumes no liability for any losses sustained by any person arising from the granting of approval of any Recycler, nor the recognition of the Recycler.

52.0 RECYCLER RECOGNITION

- 52.1. Approved Primary Recyclers will be recognized by the Stewardship Program in three ways:
 - 52.1.1. Provided a letter of recognition from the Stewardship Program;
 - 52.1.2. Noted in the Stewardship Program's Annual Report as an approved Primary Recycler; and
 - 52.1.3. The name of approved Primary Recyclers will be posted on the Stewardship Program's website.
- 52.2. Upon request from a Downstream Recycler, the Stewardship Program will provide a letter of confirmation of approval for use under the Stewardship Program, for the specific material(s), processing method(s) and location audited.

52.3. Recyclers may not misrepresent the terms of approval under the Stewardship Program or suggest any guarantees or other reliance upon the approval, recognition, or audit results.

PART G

TERMS AND DEFINITIONS

Chain of Custody (CoC): Records of movement and transfer of ownership of program material.

Certificate of Recycling (CoR): Documented evidence from the Recycler that the received material has been processed through the approved process. CoR should detail the material identifier(s) (i.e. lot or batch number); type of material processed; quantity; and date processed.

EOLE Material: Any component or material separated from EOLE.

Data Destruction: The process of clearing and preventing any copying or other reproduction of any remnants of data from memory devices to ensure that the data is no longer accessible in whole or part.

Disposition Hierarchy: The preferential order of treatment of materials at end-of-life, beginning with material recovery; secondarily energy recovery; and lastly other approved methods of management.

Downstream Recycler: An entity that receives material from a Primary Recycler or other Downstream Recycler for the purpose of additional processing, refining and/or approved disposition of the material.

Electronic Scrap: Includes cables and wires, printed circuit boards, metal and plastic laminates, and other electronic components such as chips and hard drives.

Electronics Recycling Standard (ERS): Part A of the *Recycler Qualification Program* that defines the minimum requirements for Recyclers used by the Stewardship Program.

End-of-life Electronics (EOLE): Unwanted or discarded electronic equipment obligated under the Stewardship Program that is designated for recycling.

Energy From Waste (EFW) Incineration: The heat treatment of material to reclaim energy that is used to produce electricity or steam or reduce the energy already required in a process. This includes the use of plastics as a fuel substitute, but does not include direct incineration. Other than ash, materials are typically not reclaimed through EFW incineration.

Environmental, Health and Safety Management System (EHSMS): A system of policies and procedures used to identify and control the impact of the Recycler's activities, products, and services on workers and the environment to reduce the risk of injury or uncontrolled releases to the environment.

ERS Auditor: An individual trained and certified through an authoritative body to be an environmental auditor, that possesses a strong understanding of the *ISO 19 011 Standard*, the regulatory requirements in the jurisdiction of the Recycler, and the *Recycler Qualification Program*, including the *Electronics Recycling Standard*, *Implementation Guide* and the *Audit Protocols*.

First Responder: Police, Fire or Ambulance

Hazardous Material: Any material that poses a risk to the worker or the environment if not maintained under suitable control. Hazardous material includes substances of concern, toxic materials, as well as other potential contaminants, such as dusts and fumes, which may or may not be regulated but could pose a risk to worker health or the environment.

Implementation Guide: Part B of the *Recycler Qualification Program* that provides additional guidance and resources to Recyclers and ERS Auditors on the application of the ERS, as well as examples of suitable evidence that demonstrates conformance with the ERS.

OECD Member Country: A country that is a recognized member of the *Organization for Economic Co-operation and Development* (www.oecd.org).

Point of Final Disposition: The final acceptable step in handling or processing of an EOLE material. It is also the last step of processing a reclaimed material before it is transformed into a usable commodity.

Primary Recycler: An entity that receives EOLE and initiates the recycling process by dismantling the EOLE and sorting the materials through manual and/or mechanical means into various streams for the purpose of reclaiming recyclable materials and other approved management of residuals by Downstream Recyclers. This does not include consolidation, cross-docking, or brokering of received material without processing.

Processing: The dismantling and sorting of electronic products and/or materials into various materials for the reclaim of recyclable materials and other approved management of residuals.

Raw Material: Single stream of non-contaminated material this is being introduced into a manufacturing process for the creation of a new product or material, where all of the input material is consumed in the process. Raw material is considered to have surpassed the point of final disposition and is not subject to audit or assessment.

Recycler Qualification Program (RQP): Eight part publication that defines the Stewardship Program's requirements and approach to auditing and approving EOLE Recyclers to ensure that EOLE are handled in an environmentally sound and socially acceptable manner that protects the environment and safeguards worker health and safety.

Recycling: The recovery of materials from end-of-life electronics for use in manufacturing new products.

Regulated Material: A recyclable material or waste subject to regulatory control by the local governing authority or in the destination jurisdiction. Regulated material may be classified as Toxic, Dangerous Goods, Hazardous Materials or other similar terminology.

Smelting: The process of heat treating metal containing materials to reclaim metal. Through the smelting process some non-metal materials such as plastics may be consumed.

Spill: An uncontrolled release to the natural environment.

Stewardship Program: The organization that operates the provincial end-of-life electronics recycling program and utilizes the Recycler Qualification Program to audit and assess Recyclers prior to use.

Substance of Concern: Materials or components making up EOLE products that in their normal state and under normal conditions of handling by a consumer pose little or no risk to human health or the environment but when handled and processed at a recycling facility merit special environmental and safety controls, and may be subject to specific regulatory requirements. These materials include: CRT tubes and other leaded glass; phosphor powder; ethylene glycol; mercury and mercury bearing materials; batteries; and ink and toner cartridges.

Worker: Any full time, part time or contract worker.

H.1 RECYCLER APPLICATION FORM

Company Name:		Site/Facility:	
Address:			
City:		Contact Name:	
Province:		Phone:	
Postal Code:		Email:	

Description of Operations:	[Description on the method(s) of Processing, materials accepted and processed, and resultant materials]		
Recycler Type:	<input type="checkbox"/> Primary Recycler	<input type="checkbox"/> Downstream Recycler	
If currently or previously approved for use under a Provincial program, please indicate the program and approval date:			
Number of Employees:		Years in Operation:	

Indicate all applicable permits, approvals, certificates and insurance held by the Recycler and any details of coverage. Attach a copy of each.			
Permit/Insurance/Certificate:		Certificate/registration number or other details of coverage	
<input type="checkbox"/>	Regulatory permits (waste generator / disposal)		
<input type="checkbox"/>	Insurance coverage		
<input type="checkbox"/>	Worker compensation coverage		
<input type="checkbox"/>	ISO 9001/14001 certification		
Has your organization received any fines or regulatory orders received within the last 5 years, or had any other incident that required the notification or dispatch of first responders?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, describe:			

Primary Processor Products Accepted:			
<input type="checkbox"/>	CRT Displays	<input type="checkbox"/>	Portable Audio/Video Equipment
<input type="checkbox"/>	Projection Displays	<input type="checkbox"/>	Home Audio/Video Equipment
<input type="checkbox"/>	LCD Displays	<input type="checkbox"/>	Speakers
<input type="checkbox"/>	Plasma Displays	<input type="checkbox"/>	Vehicle Audio & Video Systems
<input type="checkbox"/>	Desktop Computers	<input type="checkbox"/>	Non-cellular Telephones and Answering Machines
<input type="checkbox"/>	Portable Computers	<input type="checkbox"/>	Cellular Devices
<input type="checkbox"/>	Desktop Printers		
<input type="checkbox"/>	Floor Standing Copy and Printer Devices	<input type="checkbox"/>	Other:

Downstream Processing Information		
Materials Generated by Primary Recyclers / Accepted by Downstream Recyclers	Description of Processing Method	Downstream Recycler & Final Disposition
<input type="checkbox"/> CRT Yokes		
<input type="checkbox"/> CRT Panel		
<input type="checkbox"/> CRT Funnel (leaded)		
<input type="checkbox"/> Mercury Bulbs (LCD, scanner, etc.)		
<input type="checkbox"/> Ethylene Glycol (Projection TV CRT)		
<input type="checkbox"/> LCD Panels		
<input type="checkbox"/> Plasma Panels		
<input type="checkbox"/> Circuit Boards		
<input type="checkbox"/> Wires and Cables		
<input type="checkbox"/> Rechargeable Batteries		
<input type="checkbox"/> Non-rechargeable Batteries		
<input type="checkbox"/> Components (Hard drives, chips, etc.)		
<input type="checkbox"/> Toner and Inks		
<input type="checkbox"/> Steel		
<input type="checkbox"/> Aluminum		

<input type="checkbox"/>	Copper		
<input type="checkbox"/>	Brass/Bronze		
<input type="checkbox"/>	Copper bearing materials		
<input type="checkbox"/>	Metal Fines		
<input type="checkbox"/>	Wood		
<input type="checkbox"/>	Glass (non-leaded)		
<input type="checkbox"/>	Plastics		

All materials are processed in accordance with **Material Disposition Hierarchy** and meet the **Acceptable Processes and Points of Final Disposition**, as defined in **Table 1** of the ERS.

☐ Yes

☐ No

Policies and Procedures - Attach a copy of the following:

<input type="checkbox"/>	EHS Policy
<input type="checkbox"/>	EHS Training Program
<input type="checkbox"/>	Summary of training requirements
<input type="checkbox"/>	Policies and procedures for safeguarding the environment and worker health & safety
<input type="checkbox"/>	Procedure for identifying regulatory requirements
<input type="checkbox"/>	Summary of legal requirements and their applicability
<input type="checkbox"/>	EHS risk assessment process
<input type="checkbox"/>	Air, effluent and/or waste sampling programs
<input type="checkbox"/>	Current inventory of hazardous materials
<input type="checkbox"/>	Air, noise and/or medical sampling programs
<input type="checkbox"/>	Worker hygiene policies
<input type="checkbox"/>	Procedure for tracking and reporting program materials
<input type="checkbox"/>	Site closure plan
<input type="checkbox"/>	Evidence of a security/performance bond or similar financial instrument in the event of a site closure
<input type="checkbox"/>	Contingency plan for interruptions in service
<input type="checkbox"/>	Procedure for secure storage and handling of data containing products
<input type="checkbox"/>	Procedure to schedule and conduct audits
<input type="checkbox"/>	Audit schedule
<input type="checkbox"/>	Emergency Response Procedures
<input type="checkbox"/>	Process to evaluate Transporters
<input type="checkbox"/>	Process to identify when TDG or equivalent regulation applies to shipments
<input type="checkbox"/>	Process to evaluate Downstream Recyclers

Confirmation of data and sign-off

<input type="checkbox"/>	Check to confirm that all data provided in the application and associated documents is current and valid for your organization at the time of submission of the application.
<input type="checkbox"/>	Check to confirm that your facility currently operates, and will continue to operate, in compliance with all applicable regulatory requirements and the requirements of the ERS.

Application Submitted by:

Date:

H.2 RECYCLER AUDIT REPORT

Recycler Name:		Site/Facility:	
Address:			
City:		Contact Name:	
Province:		Phone:	
Postal Code:		Email:	

The objectives of this audit were to:

- *Assess the conformance of the facility and operations to the requirements of the Electronics Recycling Standard;*
- *Evaluate the ability of the Recycler to identify and comply with regulatory requirements; and*
- *Determine if the Recycler is operating in accordance with its established programs and procedures.*

1.0 BACKGROUND

Audit Date: _____

Auditor: _____

Type of Audit:	Previous Audit Dates:
<input type="checkbox"/> Document	
<input type="checkbox"/> Document Follow Up	
<input type="checkbox"/> Combined Document & On Site	
<input type="checkbox"/> On Site	
<input type="checkbox"/> On Site Follow Up	

Standard Audited To: ☐ EPSC Electronics Recycling Standard 2010

Program Audited By: ☐ ACES ☐ ARMA ☐ ESABC ☐ OES ☐ SWEEP

2.0 AUDIT SCOPE

[Method of Processing – Material Type – Result]

Examples:

- Manual dismantling of EOLE for segregation into component parts / materials for further downstream processing.
- Manual removal of hazardous components and mechanical processing of EOLE for segregation into constituent materials for material reclaim and further downstream processing.
- Shredding of circuit boards for separation of metals from plastics for material reclaim and further downstream processing.
- Heat treatment of plastics for energy recovery.
- Smelting of leaded glass for lead recovery.

Recycler Type:	<input type="checkbox"/> Primary Recycler	Indicate programs used by:
	<input type="checkbox"/> Downstream Recycler	List all program related upstream material suppliers:

Has there been a change in audit scope during or as a result of this audit?
If yes, explain:

☐ Yes

☐ No

Is the Recycler currently approved for use under a Provincial Program?
If yes, indicate program and Standard verified to and date of approval:

☐ Yes

☐ No

3.0 PRIMARY RECYCLER INFORMATION

Products Accepted:

<input type="checkbox"/>	CRT Displays	<input type="checkbox"/>	Portable Audio/Video Equipment
<input type="checkbox"/>	Projection Displays	<input type="checkbox"/>	Home Audio/Video Equipment
<input type="checkbox"/>	LCD Displays	<input type="checkbox"/>	Speakers
<input type="checkbox"/>	Plasma Displays	<input type="checkbox"/>	Vehicle Audio & Video Systems
<input type="checkbox"/>	Desktop Computers	<input type="checkbox"/>	Non-cellular Telephones and Answering Machines
<input type="checkbox"/>	Portable Computers	<input type="checkbox"/>	Cellular Devices
<input type="checkbox"/>	Desktop Printers		
<input type="checkbox"/>	Floor Standing Copy and Printer Devices	<input type="checkbox"/>	Other:

4.0 DOWNSTREAM RECYCLER INFORMATION

Materials Generated by Primary Recyclers / Accepted by Downstream Recyclers		Processing Method	Downstream Vendors & Final Disposition	
<input type="checkbox"/>	CRT Yokes			
<input type="checkbox"/>	CRT Panel			
<input type="checkbox"/>	CRT Funnel (leaded)			
<input type="checkbox"/>	Mercury Bulbs (LCD, scanner, etc.)			
<input type="checkbox"/>	Ethylene Glycol (Projection TV CRT)			
<input type="checkbox"/>	LCD Panels			
<input type="checkbox"/>	Plasma Panels			
<input type="checkbox"/>	Circuit Boards			
<input type="checkbox"/>	Wires and Cables			
<input type="checkbox"/>	Rechargeable Batteries			
<input type="checkbox"/>	Non-rechargeable Batteries			
<input type="checkbox"/>	Components (Hard drives, chips, etc.)			
<input type="checkbox"/>	Toner and Inks			
<input type="checkbox"/>	Steel			
<input type="checkbox"/>	Aluminum			
<input type="checkbox"/>	Copper			
<input type="checkbox"/>	Brass/Bronze			
<input type="checkbox"/>	Copper bearing materials			
<input type="checkbox"/>	Metal Fines			
<input type="checkbox"/>	Wood			
<input type="checkbox"/>	Glass (non-leaded)			
<input type="checkbox"/>	Plastics			
All materials are processed in accordance with the <i>Materials Disposition Hierarchy</i> and meet the <i>Acceptable Processes and Points of Final Disposition</i> , as defined in Section 16 of the ERS.				<input type="checkbox"/> Yes <input type="checkbox"/> No

5.0 AUDIT ASSESSMENT CRITERIA AND SCORING

Factor		Assessment	Score
1	Nature of Materials	Choose an item.	
2	Processing Method	Choose an item.	
3	Regulatory Oversight	Choose an item.	
4	Years in Operation	Choose an item.	
5	Processing Volume	Choose an item.	
6	Regulatory Compliance	Choose an item.	
7	ERS Conformance	Choose an item.	
8	Previous On Site Audit	Choose an item.	
TOTAL SCORE =			

6.0 DOCUMENTS / RECORDS SAMPLED

Document		Date / Version / Findings
<input type="checkbox"/>	Environment / Health and Safety Manual	
<input type="checkbox"/>	Environment / Health and Safety Policy	
<input type="checkbox"/>	Organizational Chart	
<input type="checkbox"/>	Job Descriptions and Responsibilities	
<input type="checkbox"/>	Training Matrix	
<input type="checkbox"/>	Training Programs	
<input type="checkbox"/>	Orientation Checklist / Training	
<input type="checkbox"/>	Employee Handbook	
<input type="checkbox"/>	EHS Communication Materials	
<input type="checkbox"/>	Training Records / Certificates	
<input type="checkbox"/>	Visitor Information Package	
<input type="checkbox"/>	Contractor Training / Agreements	
<input type="checkbox"/>	Hazard / Incident / Accident Reports	
<input type="checkbox"/>	Hazard / Incident / Accident Investigations	
<input type="checkbox"/>	EHS Committee Meeting Minutes	
<input type="checkbox"/>	EHS Annual Review Meeting Minutes	
<input type="checkbox"/>	List of Legal and Other Requirements	
<input type="checkbox"/>	Certificate of Insurance	
<input type="checkbox"/>	Certificate of Workers Compensation	
<input type="checkbox"/>	Risk Assessment Procedure & Schedule	
<input type="checkbox"/>	Risk Assessment Ratings & Results	
<input type="checkbox"/>	Sampling program & Schedule	
<input type="checkbox"/>	Sampling Results (Air, Noise, Lead, etc.)	
<input type="checkbox"/>	Hazardous Material Inventory	
<input type="checkbox"/>	MSDS Inventory	
<input type="checkbox"/>	Program Material Tracking	
<input type="checkbox"/>	Closure Plan	
<input type="checkbox"/>	Program Material Contingency Plan	
<input type="checkbox"/>	Audit / Inspection Procedures & Schedule	
<input type="checkbox"/>	Audit Report / Inspection Records	
<input type="checkbox"/>	Emergency Response Plan / Procedures	
<input type="checkbox"/>	Emergency Drill Records	
<input type="checkbox"/>	Transporter Assessment & Approval Records	
<input type="checkbox"/>	TDG Process	
<input type="checkbox"/>	Material Shipment Records	
<input type="checkbox"/>	Recycler Assessment & Approval Records	
<input type="checkbox"/>	Downstream Material Flow	
<input type="checkbox"/>	Work Instructions / Operating Procedures	
<input type="checkbox"/>	Preventive Maintenance Program / Records	
<input type="checkbox"/>	EHS Objectives and Targets	
<input type="checkbox"/>	EHS Statistics	

7.0 AUDIT OBSERVATIONS

Provide a description of the facility and processes. Indicate the audit process, significant audit trails followed and examples of evidence reviewed.

8.0 NONCONFORMANCES

All nonconformances shall be addressed through the organization's corrective action process and any evidence of actions (corrective and preventive) undertaken to address the nonconformance shall be forwarded to the auditor for review within the allotted time period.

Nonconformance # of ##	<input type="checkbox"/> Major nonconformance	<input type="checkbox"/> Minor nonconformance
Details of Nonconformance:		ERS Reference:
Follow Up Actions: [Date – Details]		
<input type="checkbox"/> Nonconformance satisfactorily closed on [Date]		

Nonconformance # of ##	<input type="checkbox"/> Major nonconformance	<input type="checkbox"/> Minor nonconformance
Details of Nonconformance:		ERS Reference:
Follow Up Actions: [Date – Details]		
<input type="checkbox"/> Nonconformance satisfactorily closed on [Date]		

Nonconformance # of ##	<input type="checkbox"/> Major nonconformance	<input type="checkbox"/> Minor nonconformance
Details of Nonconformance:		ERS Reference:
Follow Up Actions: [Date – Details]		
<input type="checkbox"/> Nonconformance satisfactorily closed on [Date]		

9.0 AUDIT CONCLUSION

Based on the information assessed, the Recycler has provided satisfactory objective evidence to demonstrate that the organization:

- | | | |
|---|------------------------------|-----------------------------|
| • Operates in conformance and possesses the ability to continue operating in conformance to the ERS. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| • Maintains the ability to identify and comply with regulatory requirements on an ongoing basis. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| • Operates in accordance with its established environmental, health and safety programs and procedures. | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

As a result,

<input type="checkbox"/>	Verification to the Standard is withheld until satisfactory evidence of closure is provided to the Auditor for the identified nonconformance(s).
<input type="checkbox"/>	The facility is recommended for 30 day conditional approval during which the identified minor nonconformance(s) must be satisfactorily addressed and closed out by the Auditor.
<input type="checkbox"/>	The facility is recommended for approval to the ERS without any outstanding nonconformances.



ELECTRONIC PRODUCTS RECYCLING ASSOCIATION (EPRA)

**END-OF-LIFE ELECTRONICS
COLLECTION SITE APPROVAL PROGRAM**

- MAY 10, 2012 -

COLLECTION SITE APPROVAL PROGRAM

MAY 10, 2012

The *Electronic Products Recycling Association (EPRA) Collection Site Approval Program (CSAP)* defines the minimum operational, environmental, health, safety and data security requirements for organizations seeking to operate as an EPRA collection site; as well as the assessment and approval process.

The CSAP is intended to ensure that all approved program materials are handled in a responsible manner that adequately safeguards the environment and worker health and safety, and further provides for the security of data containing products and their data against any unauthorized access or use.

The CSAP does not replace any regulatory requirements, nor absolve any collection site from the responsibility of compliance under these requirements. Where the CSAP conflicts with a regulatory requirement, the regulatory requirement shall apply.

All collection sites are subject to assessment in accordance with the requirements of the CSAP prior to being authorized to operate on behalf of an EPRA program, and periodic re-verifications will be conducted to ensure continued conformance with the CSAP.

The CSAP may be revised or updated at EPRA's discretion to provide for the adequate handling of program materials and to prevent unauthorized access, theft, environmental releases or safety hazards.

The CSAP is comprised of the following parts:

PART A COLLECTION SITE STANDARD (CSS):

Defines the auditable criteria that collection sites must demonstrate conformance with in order to be considered for use under the Stewardship Program.

PART B IMPLEMENTATION GUIDE:

Provides additional guidance and resources to collection sites on the application of the CSS, as well as examples of suitable evidence of conformance to the CSS.

PART C ASSESSMENT AND APPROVAL PROCESS:

Defines the steps for collection sites to be assessed and verified to the CSS.

PART D AUDIT PROTOCOLS:

Defines the process for classifying and addressing audit findings.

PART E TERMS AND DEFINITIONS:

A glossary of key terminology.

PART F FORMS:

F.1 Collection Site Application Form

F.2 Collection Site Audit Report Form

PART A

COLLECTION SITE STANDARD

1.0 General Requirements

All Collection sites shall:

- 1.1. Be open to the public and permit free of charge collection of any approved program material generated within the province.
- 1.2. Possess valid permits, approvals and other business licenses as required to operate in the jurisdiction.
- 1.3. Possess Comprehensive or Commercial General Liability Insurance including coverage for bodily injury, property damage, complete operations and contractual liability with combined single limits of not less than \$1 million per occurrence, \$1 million general liability.
- 1.4. Possess evidence of valid workers compensation coverage.
- 1.5. Maintain an employee theft deterrent policy that defines at minimum the recourse for any incidents of theft or data security breaches, up to and including immediate dismissal.

2.0 Site Requirements

All Collection sites shall be appropriately maintained to ensure the safe access for users and secured storage of materials, including:

- 2.1. A material drop off area separate from truck loading docks and other material handling areas generally occupied by mobile equipment.
- 2.2. A covered and secured material sorting and storage areas with restricted access to employees only.
- 2.3. Appropriate security measures to prevent the unauthorized access to the premises and storage areas including during non-operational hours.

3.0 Environmental, Health and Safety Controls

All Collection sites shall maintain suitable environmental, health and safety (EHS) controls to prevent accidents, injuries or releases to the environment. At a minimum, the collection sites shall:

- 3.1. Maintain documented standards for the safe and secure storage, stacking, packaging and shipping of materials.
- 3.2. Maintain a documented process to conduct at minimum monthly inspections of the facility to identify any EHS risks or hazards, as well as potential data security issues, and a process to record and follow up on any issues identified.
- 3.3. Identify where the use of personal protection equipment (PPE) is required and enforce its proper use.
- 3.4. Maintain readily accessible and unobstructed access to fire escape routes and doors at all times.
- 3.5. Maintain adequate fire suppression equipment for the size/type of facility as required by regulation.
- 3.6. Maintain appropriate first aid program and supplies.

- 3.7. Maintain a documented procedure to provide notice to EPRA of any regulatory orders, fines, data security breaches, or other incidents that require the assistance of first responders (i.e. accidents or spills) within 24 hours of the occurrence.

4.0 Training

All collection sites shall provide at minimum annual, documented employee training, including the following topics:

- 4.1. The identification of materials accepted by the program.
- 4.2. The proper handling, storage and packaging of materials, including the handling of broken materials.
- 4.3. Requirements for tracking material receipt and shipments.
- 4.4. Safety and emergency response procedures, including first aid; accident response; fire safety; emergency evacuation; and spill response.
- 4.5. Mobile equipment operator training.

5.0 EOLE Handling

All collection sites shall maintain adequate processes to ensure the safe and secure handling of materials, including the following:

- 5.1. Maintain a documented process to ensure that all incoming materials are immediately moved to a covered and secured storage area upon receipt.
- 5.2. Maintain a documented process for tracking incoming material to suitably account for all program material separate from other non-program materials and prevent program material from being handled or otherwise disposed outside of the program.
- 5.3. Maintain procedures to identify the maximum quantity of material that is capable of being stored on site in a safe manner, in accordance with health and safety requirements and fire regulations, and ensure that limits are not exceeded.
- 5.4. Maintain suitable inspection and maintenance programs for any material handling equipment including, lift trucks, pallet carts and weigh scales.

PART B

IMPLEMENTATION GUIDE

The following information provides further guidance and detail on the requirements of the Collection Site Standard, as well as examples of suitable evidence of conformance to the Standard. Where the collection site does not maintain controls as defined in the Implementation Guide, an equivalent alternative must be demonstrated.

6.0 General Resources

- 6.1. The collection site must be open to the general public and may not impose any restrictions, such as consumer handling fees, on the collection of approved program material.
- 6.2. Permits and other approvals to be considered by collection sites include:
 - 6.2.1. Business / operating permits
 - 6.2.2. Waste handling permits / registrations
- 6.3. Comprehensive or general liability insurance coverage in the amount of \$1 000 000 is considered the minimum acceptable coverage to suitably mitigate the potential risks associated with the collection of EOLE, however, consideration should also be given to maintaining environmental pollution liability coverage.
- 6.4. Adequate worker's compensation coverage is dependent on the size of the work force and the type of operations undertaken. Coverage must be sufficient to insure all workers in the event of need. Coverage may be obtained through provincial program or through a private insurance policy, and evidence of coverage may be in the form of an insurance certificate from the Recycler's insurance company or broker, or confirmation of participation in the provincial workers' compensation plan, or equivalent.
- 6.5. The employee theft deterrent policy should clearly define the expectations for the secure handling of EOLE to prevent theft or access to data, and the consequences of any deviation from the policy.

7.0 Site Resources

Adequate facilities and effective operational controls must be maintained to provide for the safe and secure receiving, storage and handling of EOLE.

- 7.1. Material drop off areas accessible by the general public must be clear of hazards and moving equipment, and properly equipped to facilitate the receiving of EOLE.
- 7.2. The facility should be adequately sized and equipped to provide enclosed material storage areas to prevent exposure to the weather and unauthorized access to the material.
- 7.3. Appropriate security measures must be in place to protect any materials or data from removal or other unauthorized access.

8.0 Environmental, Health and Safety Resources

- 8.1. Work instructions or other operating procedures should be developed and communicated to workers to define the requirements for storage, stacking and packaging of materials.
- 8.2. Facility inspections should cover all aspects of the facility and operations and should be used to identify any potential environmental, health, safety or security risks or hazards. Inspections should be documented and all results of the inspections tracked to identify any trends in risks and confirm that identified issues have been adequately addressed.
- 8.3. Where personal protective equipment (PPE) is required, workers should be trained on the need for the PPE; all areas/operations requiring the use of PPE should be suitably identified; and the usage of the PPE must be enforced.
- 8.4. Emergency exits should be clearly identified and exit routes should be maintained clear of obstructions at all times.
- 8.5. Facilities may be equipped with fire extinguishing sprinkler systems but at a minimum must contain a sufficient number of readily accessible and charged fire extinguishers suitable to the potential size and type of fires.
- 8.6. An adequate first aid program should be maintained and include detailed emergency response procedures, worker training, and a suitable stock of the necessary first aid supplies.
- 8.7. Procedures should be established and documented, detailing the responsibility and appropriate contact information for responding to and reporting any emergency situations or other reportable incidents.

9.0 Training resources

- 9.1. The training program should define the qualifications and training requirements by job function as well as the frequency for any subsequent refresher training courses, and should consider the need for a participant assessment or other evaluation tool to determine the effectiveness of the training and knowledge retention.
- 9.2. Records of all completed training and assessments should be appropriately maintained.

10.0 EOLE Handling Resources

- 10.1. Adequate facilities and effective operational process controls should be maintained to provide for the safe and secure receiving, storage and handling of incoming materials.
- 10.2. Materials must be suitably identified, tracked and moved to defined storage areas upon receipt.
- 10.3. Controls should be maintained to ensure that materials are not over-accumulated or stored in a manner that creates a hazard or leaves them susceptible to theft.

PART C

ASSESSMENT AND APPROVAL PROCESS

11.0 Eligibility

In order to be considered as a collection site, the organization shall:

- 11.1. Operate under the Stewardship Program solely as a collector;
- 11.2. Not reuse, refurbish or otherwise manage program material outside of the Stewardship Program; and
- 11.3. Continue to operate in accordance with the minimum requirements of the CSS and all applicable regulatory requirements, and maintain documented evidence of such.

12.0 Assessment Process

The CSAP Assessment Process consists of the following steps:

- 12.1. Application review;
- 12.2. On-site operational audit; and
- 12.3. Submission of the Final Audit Report.

13.0 Application Review

- 13.1. The perspective organization is responsible for completing the *Collection Site Application Form* and submitting it to the Stewardship Program along with any necessary supporting documentation.
- 13.2. The Stewardship Program will determine if the application is complete and sufficient background evidence has been provided in order to initiate the On-site Operational Audit.
- 13.3. Applications considered complete will be assigned to an approved Auditor to begin the audit process; applicants that have not met the requirements will be notified that their application is incomplete and that further information is required prior to proceeding with an audit.

14.0 On-Site Operational Audit

- 14.1. The Auditor will conduct a site review and assess operational and procedural information against the criteria of the CSS, taking in to account where applicable the direction provided by the Implementation Guide.
- 14.2. Based upon visual observations and the objective evidence provided by the organization, the Auditor will prepare an assessment report detailing a summary of findings, and provide a list of any nonconformances identified.
- 14.3. All identified deficiencies must be addressed prior to recommending the collection site for approval.

15.0 Submission of the Final Audit Report

- 15.1. Following the audit process, and the submission and assessment of any corrective action plans, the auditor will compile a summary of audit information and prepare a final report to the Stewardship Program. The final report will include:
 - 15.1.1. General observations from the audit;
 - 15.1.2. The results of the On-site Operational Audit including any identified deficiencies and the actions taken to address them; and
 - 15.1.3. A statement of conformance to the requirements of the CSS at the time of the assessment.

16.0 Stewardship Program Review and Approval

- 16.1. The Stewardship Program will review the Auditor's final report and recommendation, and may request the auditor follow-up on additional issues once the final report has been issued in order to make a final decision on the approval of the organization.
- 16.2. Once satisfied that all program requirements have been addressed, it is at the Stewardship Program's discretion to offer a contract to the organization for the provision of collection services.

17.0 Surveillance and Reporting

- 17.1. At its discretion, the Stewardship program may conduct interim reviews or assessments in order to confirm that the organization continues to operate in accordance with the requirements of CSS. Reviews or assessments may include but are not limited to, site reviews, document reviews, and/or record reviews.
- 17.2. Failing to meet any of the requirements of the Stewardship Program or the CSS will result in the revocation of the organization's approval.

18.0 Communication of Audit Results

- 18.1. All application and audit information will be shared with the Stewardship Program.
- 18.2. The Auditor will report all audit results and observations to the Stewardship Program in writing on the approved Collection Site Audit Report Form, and will provide a final copy of the report to the auditee.

PART D

AUDIT PROTOCOLS

19.0 Audit Objective

19.1. The objectives of the CSAP audit are to:

19.1.1. Assess the conformance of the organization and its operations to the requirements of the Collection Site Standard (CSS); and

19.1.2. Determine if the organization operates in accordance with its established programs and procedures.

19.2. The audit will involve a review and assessment of objective evidence which may include, but is not limited to policies, procedures, work instructions, shipping records, training records, permits, certificates, memos, employee interviews and general observations.

20.0 Classification of Audit Findings

Issues identified during the audit will be classified by the Auditor as one of the following:

20.1. Observation – where the item does not pose a threat the environment, worker safety, or data security and is not a contravention of any element of the CSAP, but does represent an opportunity for improvement; or

20.2. Nonconformance – where the operations do not conform to an element of the CSAP; do not comply with a regulatory requirement; or do not conform to the organization's established programs or procedures.

21.0 Corrective Action Plans

21.1. Audit observations do not require formal follow up with the Auditor however they will be subject to review during any subsequent assessment or re-verification.

21.2. An action plan to address any nonconformances must be submitted to the Auditor within 15 days of the Auditor issuing the final audit report.

21.2.1. All nonconformances must be satisfactorily addressed to prevent reoccurrence prior to any further consideration by the Stewardship Program.

21.2.2. Inability of the organization to provide a satisfactory resolution to a nonconformance within 60 days of being issued will result in the closure of the audit, with the final audit status indicated as unapproved and any further consideration of the applicant must be addressed under a new application.

PART E

TERMS AND DEFINITIONS

Approved Program Material: End-of-life electronics generated within the Province and covered under the Provincial Stewardship Program.

Collection: Receiving, sorting, packaging and storing of obligated program materials for shipment to program approved consolidation points and/or recyclers. Collection does not include any processing or reuse/refurbishing functions.

Collection Site: A facility approved and contracted under the Provincial Stewardship Program to collect approved program materials.

Collection Site Approval Program: A six part publication that defines the minimum requirements and approval process for the Provincial Stewardship Program collection sites.

Collection Site Standard (CSS): Defines the minimum operational, environmental, health, safety and data security requirements for organizations seeking operate as a collection site under the Provincial Stewardship Program.

End-of-Life Electronics (EOLE): Unwanted or discarded electronic equipment.

First Responder: Police, Fire or Ambulance

Implementation Guide: Provides additional guidance and resources to Collection Sites on the application of the CSS.

Processing: Dismantling and sorting of electronic products and/or materials into various material streams for the reclaim of recyclable materials and other approved management of residuals.

Primary Recycler: An entity that receives intact end-of-life electronics and initiates the recycling process through dismantling and other material separation processes.

Spill: An uncontrolled release to the natural environment.

Refurbishing: Any disassembly of electronics for the purpose of internal testing or troubleshooting; or, replacement or repair of non-functioning parts, not including consumable items such as batteries, toners, fusers, etc.

Reuse: The provision of functioning electronics to another user for its intended purpose, without hardware repair or modification. The reuse activities are limited to non-intrusive operation verification; cleaning; replacement of consumable items such as batteries, toners, etc.; data and other information clearing; and software installation.

Worker: Any full time, part time or contract worker

PART F FORMS

F.1 COLLECTION SITE APPLICATION FORM

Company Name:			
Address:			
City/Town:		Site Contact:	
Province:		Phone:	
Postal Code:		email:	

Description of Current Operations and Site Uses:			
Site Size:		Building Size:	
Years in Operation:		# of Employees:	
		Site ownership:	<input type="checkbox"/> Leased <input type="checkbox"/> Owned
Has the organization received any fines or regulatory orders within the past 5 years; or Had any other incident that has required the notification or dispatch of first responders?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, describe:			

Insurance & Approvals	Reference Number	Details (term, expiry, coverage, etc.)
Insurance:		
Worker Compensation:		
Operating Permits:		

Policies and Procedures – Provide a copy of each of the following:	
<input type="checkbox"/>	Employee theft deterrent policy
<input type="checkbox"/>	Standards for the safe and secure storage, stacking, packaging and shipping of materials
<input type="checkbox"/>	Facility inspection procedure(s) – environment, health, safety and security
<input type="checkbox"/>	Procedure to provide notice to EPRA of any orders, fines, data security breaches, etc.
<input type="checkbox"/>	Process for tracking and accounting for all program material
<input type="checkbox"/>	Calculation for the maximum quantity of material that is capable of being stored on site

Confirmation of Data and Sign-Off	
<input type="checkbox"/>	Check to confirm that all data provided in the application and associated documentation is current and

	valid for your organization at the time of submission of the application.		
<input type="checkbox"/>	Check to confirm that your facility operates, and will continue to operate, in compliance with all applicable regulatory requirements and the requirements of the CSS.		
Application Submitted By:			Date:

F.2 COLLECTION SITE AUDIT REPORT FORM

Company Name:			
Address:			
City/Town:		Site Contact:	
Province:		Phone:	
Postal Code:		email:	

The objectives of this audit were to:

- *Assess the conformance of the organization and its operations to the requirements of the Collection Site Standard (CSS); and*
- *Determine if the organization operates in accordance with its established programs and procedures.*

Audit Date: _____

Auditor: _____

Standard Audited To: ☐ - *Collection Site Standard*
(End-of-Life Electronics Collection Site Approval Program – May 10, 2012)

SCOPE OF THE AUDIT

--

AUDIT OBSERVATIONS

--

NONCONFORMANCES

Details of the nonconformance:	1	of	##
[CSS Element # – Description]			
Follow up actions: [Date – Details]			
<input type="checkbox"/> - Nonconformance satisfactorily closed on [Date]			

Details of the nonconformance:	2	of	##
[CSS Element # – Description]			
Follow up actions: [Date – Details]			

☐ - Nonconformance satisfactorily closed on [***Date***]

AUDIT CONCLUSION

Based on the information assessed, the organization has provided satisfactory objective evidence to demonstrate that it:

- | | | |
|---|------------------------------|-----------------------------|
| • Operates in conformance and possesses the ability to continue operating in conformance with the CSS | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| • Operates in accordance with its established programs and procedures | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

As a result,

- ☐ Verification to the CSS is withheld until satisfactory evidence of closure is provided to the auditor for the identified nonconformances.
- ☐ The facility is recommended for approval to the CSS with no outstanding nonconformances.

‘Appendix D’

An Industry-led Stewardship Approach for End-of-Life Electronic Products in Newfoundland and Labrador

Prepared for:
Atlantic Canada Electronics Stewardship (ACES)

Prepared by:
Jupia Consultants Inc.

November 2011

Table of Contents

	<u>Page</u>
Introduction	2
Benefit #1: Recycling consumer electronics is an important part of environmental stewardship	4
Benefit #2: Fostering transparency relating to environmental stewardship.....	5
Benefit #3: Ensuring a healthy, competitive electronic products marketplace.....	6
Benefit #4: Communicating the economic impact	9
Conclusion.....	12
Appendix A: Economic Impact Example - <i>Waste Management and Remediation Services</i>	13
Appendix B: Source List.....	15
Appendix C: About Jupia Consultants Inc.	16

Introduction

This report explores some of the benefits associated with implementing an industry-led, consumer paid¹ end-of-life electronic products recycling program with a visible environmental handling fee. This is the approach that has been adopted in all but one other province in Canada and is starting to be looked at in Newfoundland and Labrador as a means to reduce the amount of waste material going to landfills.

Electronic products recycling in Canada is primarily undertaken by regulated, industry-led, not-for-profit entities providing environmental compliance to roughly 2,000 manufacturers, producers, retailers and distributors of regulated electronic products. In each of the six provinces currently operating stewardship programs for end-of-life electronics in Canada (Alberta, Ontario, British Columbia, Nova Scotia, Prince Edward Island and Saskatchewan) an Environmental Handling Fee (EHF) is used to provide the funding required to manage these programs. Manitoba is rolling out a similar program in 2012. Quebec has also introduced electronic stewardship legislation but it is currently unclear how it will be implemented and its direction on this issue needs to be clarified. This leaves Newfoundland & Labrador and New Brunswick as the two provinces yet to implement an industry-led program.

The industry-led, consumer-paid, EHF approach to the responsible recycling of electronic products is becoming the standard not only in Canada but elsewhere as well.

As a testament to the effectiveness of the electronics recycling program run by the Atlantic Canada Electronics Stewardship (ACES), Nova Scotia is developing an Extended Producer Responsibility Action Plan for waste management that will be based on the ACES model.

The Newfoundland and Labrador government has stated its intentions to use industry-led programs to recycle waste in specific categories. Former Minister of Environment and Conservation, Charlene Johnson recently said in a departmental press release that industry-led, financed and operated waste diversion and recycling programs will help the province achieve the 50 per cent waste reduction goal of the Provincial Solid Waste Management Strategy.

In its 2009-2010 annual report, the Multi Materials Stewardship Board targeted other sectors for industry-led waste management programs including:

- A voluntary industry-led program for the diversion of waste pharmaceuticals and medical sharps.
- A proposed regulation for the recycling of electronic waste, based on an Extended Producer Responsibility (EPR) framework.

¹ The consumer pays for recycling whether the costs are hidden or visible. This paper makes the case for a visible and transparent approach to the recycling costs.

This report looks at four main benefits from Newfoundland and Labrador adopting the EHF approach to the recycling of electronic products:

1. To foster environmental benefits from electronic products recycling and **the importance of having the consumer directly involved in environmental stewardship**. There is considerable evidence the public prefers transparency regarding the costs they have to pay for environmental stewardship.
2. To provide **transparency and accountability in the recycling process**. The visible EHF approach provides transparency to consumers about what they are paying for recycling and it provides a clear and open way to track the costs of the program. It also is clear to the public that it is not a tax – rather it is levied by the industry to cover the costs of effective recycling.
3. To ensure the **recycling program doesn't distort the market and lead to unintended, harmful consequences for the consumer**. Hidden recycling fees could end up costing the public more for recycling and/or pushing market participants out of Newfoundland and Labrador.
4. To ensure the **public understands the direct economic benefits to the province from a recycling program such as this**. The visible EHF is a reminder to the public not only are they contributing to environmental stewardship in the province but are also supporting jobs, economic development and environmental protection. Showing the economic activity generated from all recycling programs is an additional benefit that needs to be communicated to the public.

Benefit #1: Recycling consumer electronics is an important part of environmental stewardship

Diverting end-of-life electronic products away from landfills and into recycling programs is an important step in efforts to limit long term environmental impacts and build more sustainable communities. Implementing an end-of-life electronic products recycling program has very important environmental benefits. It also has a direct benefit to municipalities by removing the risk associated with potential remediation costs.

Provincial and national survey data confirm a growing interest among Newfoundlanders and Labradorians and Canadians to better manage their environmental footprint. This manifests itself in a wide variety of ways and recycling has become an important part of this commitment.

The Newfoundland and Labrador government also takes this objective seriously and has strengthened its investment and effort in recent years. The government already has environmental fees associated with several products and services where there are direct costs associated with environmental stewardship including:

- Recyclable cans and bottles have a visible recycling fee that shows up on the merchandise receipt with each purchase.
- Vehicle tires in Newfoundland and Labrador have a visible recycling fee.

Newfoundlanders and Labradorians understand the importance of electronic products recycling as part of an overall commitment to environmental stewardship. In a 2010 Corporate Research Associates, 85 percent of respondents said that an electronics recycling program was either critically important or important to the province while only seven percent said it was not important at all.

Three-quarters of residents responding to the survey had a favourable opinion of recycling programs for electronic products.

Benefit #2: Fostering transparency relating to environmental stewardship

One of the most important benefits of a visible Environmental Handling Fee (EHF) is that it is consistent with the public's growing expectation of accountability and transparency related to government mandated programs.

Residents of Newfoundland and Labrador understand there are costs associated with environmental stewardship. According to the CRA survey, 92 percent of residents believe they are personally responsible for their impact on the environment². One of the best ways to ensure people feel they are doing their part for the environment is by making the costs of environmental stewardship visible and transparent to the consumer.

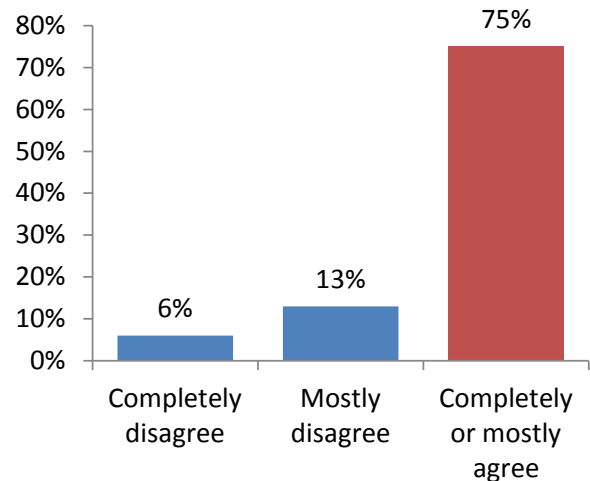
A clear majority of Newfoundlanders and Labradorians want to see the electronic product's environmental handling fee identified separately from the price of the product. In the Corporate Research Associates survey, 75 percent wanted the fee visible compared to 19 percent who wanted it included in the price of the product (mostly or completely agree with a visible fee compared to mostly or completely disagree).

People want transparency. By a wide margin, the number one reason why Newfoundlanders and Labradorians want a visible fee indicated on their receipt is precisely to know the exact amount of the fee.

A visible environmental handling fee would ensure the consumer clearly understands how much they are paying for the recycling program and, even more importantly, they will know when the costs of the program are changing. For example, the industry reviewed the EHF program in August 2009 and that process ended with most fees dropped or stayed the same in Nova Scotia³. This transparency itself is a mechanism to keeping the costs of recycling low as consumers will balk if the costs rise too high.

Having a visible EHF would also make it clear to the public that it is not a tax – rather it is levied by the industry to cover the costs of effective recycling.

Retailers should display the EHF separately from the price of the product



Source: CRA survey of 400 Newfoundland and Labrador residents in August 2010.

² Percentage of survey respondents saying they completely or mostly agree with the statement "You are personally responsible for your own impact on the environment".

³ Environmental Handling Fees (EHF's) for Phase I products (Intergroup Consultants – April 2009)

Benefit #3: Ensuring a healthy, competitive electronic products marketplace

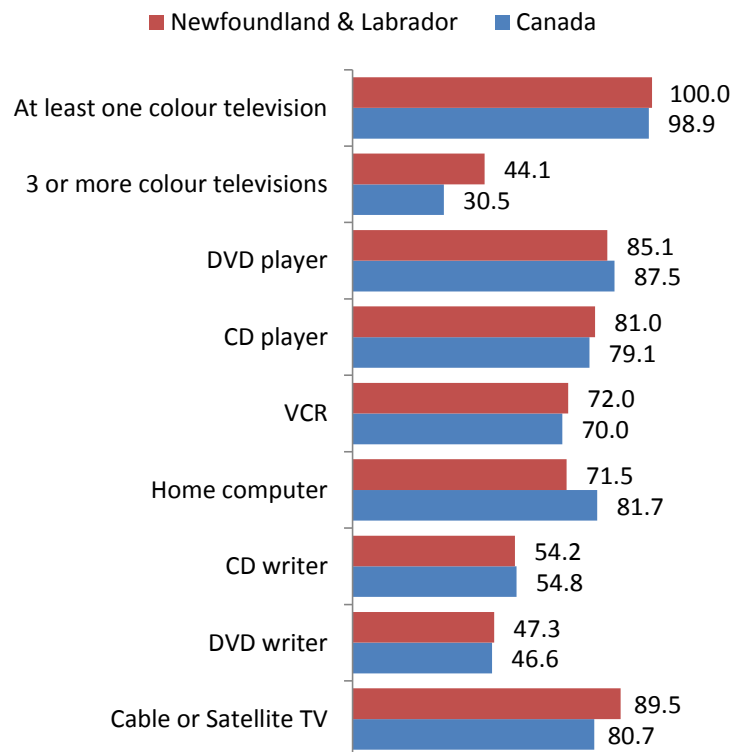
Electronic products are an integrated and important part of life for Newfoundland and Labrador families. In the 21st century, households are integrating technology into their day to day lives. The average household in Newfoundland and Labrador spends over \$1,600 per year on electronics and computer equipment and related services.

According to Statistics Canada household survey data, over 70 percent of Newfoundland and Labrador households own at least one home computer and more than 70 percent still own video cassette recorders. Further, 100 percent of households have at least one colour television and over 44 percent have three or more colour televisions – well above the national average.

The vast majority of Newfoundlanders and Labradorians own DVD and CD players.

A much higher percentage of Newfoundland and Labrador families purchase either cable or satellite television services. In 2009, nearly 90 percent of households either had satellite or cable TV services and the associated electronics equipment.

Electronics Equipment Use in Newfoundland and Labrador
Percent of households reporting (2009)



Source: Statistics Canada. Table 203-0020 - Survey of household spending (SHS), household equipment.1

Newfoundland and Labrador has a competitive marketplace

Despite its distance from the Canada's large population centres, there is no evidence that Newfoundlanders and Labradorians pay considerably more, on average, for electronic products. Despite having a more intensive ownership profile (i.e. the amount of electronic products in the home), Newfoundlanders and Labradorians spent a lower percentage of their household income on computer, photographic and home entertainment equipment and services than the average household across Canada⁴.

⁴ Source: Statistics Canada. Table 203-0010 - Survey of household spending on recreation.

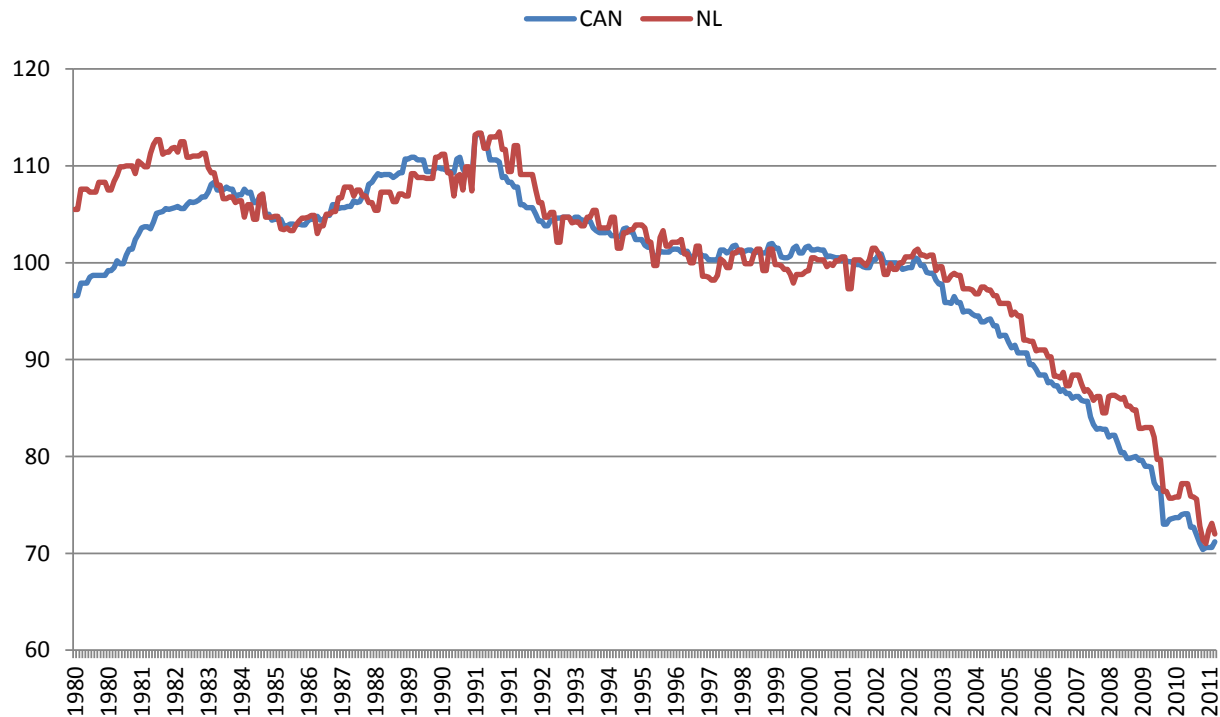
In 2009, the average Newfoundland and Labrador household spent 1.9 percent of its disposable income on these products compared to 2.0 percent across Canada.

Another source that confirms the competitiveness of the electronic products marketplace in Newfoundland and Labrador is the consumer price index over time on related products.

In the early 1980s, inflation (the increase in the Consumer Price Index - CPI) on the cost of home entertainment equipment and related products in Newfoundland and Labrador was considerably above the national average. However, increasing competition in the provincial market (specialty retailers and general merchandise companies) combined with the emergence of online shopping has led to consumer price trends that have mostly mirrored the national average for more than a decade.

Consumer Price Index (2002=100)

Home entertainment equipment, parts and services



Source: Statistics Canada. Table 326-0020 - Consumer Price Index (CPI), 2009 basket (2002=100)

In fact, the CPI on home entertainment equipment, parts and services has been steadily declining across Newfoundland and Labrador and Canada for the past 20 years.

EHFs for electronic products are used across Canada

The visible Environmental Handling Fee (EHF) has been widely adopted in Canada and elsewhere and the industry has developed a model that is effective for the consumer and the industry. Forcing companies to adopt a different model in Newfoundland and Labrador that includes the hidden recycling costs could distort the market and eventually lead to higher prices for consumers. Smaller companies might pull their products out of the provincial market altogether and larger firms might force up prices over time.

According to Atlantic Canada Electronics Stewardship, the flexible management of the EHF program already in place on PEI and in Nova Scotia effectively accommodates the needs of small, large, national, regional and local firms. In addition, it is much easier to track throughout the supply chain, and thus is less likely to be artificially inflated as it is passed onto the eventual consumer.

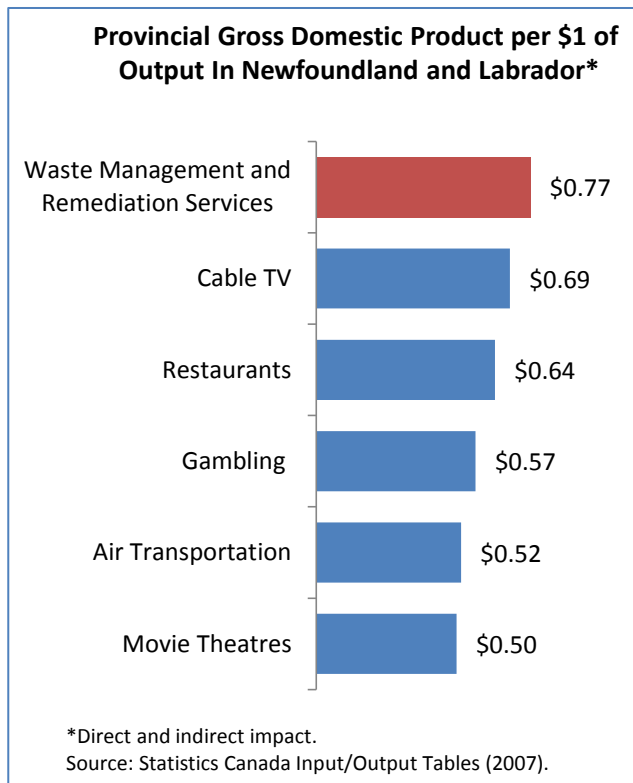
In support of interprovincial regulatory harmonization

There is growing consensus that interprovincial trade and regulatory barriers hurt the economy in Canada and in particular Atlantic Canada. The four governments have spent considerable time and effort looking at ways to harmonize their approach to trade, tax and regulatory policy. The visible Environmental Handling Fee (EHF) for electronic products has been adopted and is working well in Nova Scotia and on Prince Edward Island. Alignment with other Atlantic Provinces on this issue would be another positive example of harmonization and send a positive signal to the business community in the region.

Benefit #4: Communicating the economic impact

Money spent on recycling and remediation is not only good for the environment but it has positive economic impacts as well. Most of the money spent on waste management and remediation activities stays in Newfoundland and Labrador. As the figure shows, according to Statistics Canada, every dollar of spending in the waste management and remediation sector, creates 77 cents worth of provincial gross domestic product (GDP) (direct and indirect)⁵. Money spent on recycling has a much greater impact in Newfoundland and Labrador compared to such activities as eating in restaurants, gambling or going to the movies.

One of the important advantages of a visible EHF is that it can be linked to the economic benefits in the province. Tying the economic activity in Newfoundland and Labrador to the environmental handling fee will show residents at the same time as being good environmental stewards they are also helping support jobs and economic activity in the province.



Estimating economic impact

According to Atlantic Canada Electronics Stewardship, the fees for recycling electronic products range from 40 cents on a computer mouse to \$40.00 for a large television. The recycling program in Nova Scotia collects about 4,300 metric tons – or a collection rate of 4.61 kg/per person/year. This level of collection activity in Nova Scotia generates about \$7 million in revenue.

The fee structure and revenue from the EHF in Newfoundland and Labrador program has yet to be developed but for the purposes of estimating economic impact, the following analysis assumes the same per capita cost as Nova Scotia would be associated with the recycling of electronic products in Newfoundland and Labrador. This would amount to \$3.8 million per year.

Statistics Canada does not have a specific industry code for electronic products recycling but it does analyze the economic impact in Newfoundland and Labrador of the broader Waste Management and Remediation Services industry.

⁵ Based on the Statistics Canada M Level industry classifications.

This sector includes the *direct* activity associated with the collection of waste, storage and remediation activities and all associated overhead. It also includes any *indirect* economic activity through the supply chain.

An economic impact assessment of waste management and remediation activities can be developed using Statistics Canada's analysis of the direct and indirect impacts at the provincial level for the industry⁶.

The \$3.8 million worth of spending in the Waste Management and Remediation Services industry in Newfoundland and Labrador generates an estimated **\$2.9 million worth of gross domestic product (GDP)** in the province and **support 50 jobs** across the province (direct and indirect impacts).

The **\$1.6 million worth of employment income** generated from these 50 direct and indirect jobs supports **\$1.2 million worth of consumer spending** each year in the Newfoundland and Labrador economy on such things as housing, food, transportation, etc. Governments receive **an estimated \$390,000 worth of taxes** – personal income tax, property tax and harmonized sales tax (HST).

Annual Economic Impact from \$3.8 Million Worth of Spending in the Waste Management and Remediation Services Industry in Newfoundland and Labrador

Annual Output	\$3,800,000
Total Gross Domestic Product (GDP)	\$2,900,000
Total Employment (FTEs)	50
Employment Income	\$1,600,000
Consumer Spending	\$1,200,000
Taxation (income, HST, property)	\$390,000

See Appendix A for details on the model.

Visible fees can be more easily tied to local economic activity

It is more difficult to explain the economic benefits from an electronic products recycling program where the costs are hidden in the price of the product because they cannot be easily decoupled from the overall price of the product. As in the example shown above, because there is clear and transparent accounting of the direct costs, the economic impacts from waste management and remediation be developed using standard Statistics Canada economic multiplier models.

⁶ See Appendix A for details on the methodology.

Each year the Multi Materials Stewardship Board (and/or the Atlantic Canada Electronics Stewardship) could report to the public on the direct and indirect economic impact of the electronics recycling program (and other waste management) using the Statistics Canada model.

The direct economic activity from electronic product recycling will come from several areas. In Nova Scotia, the Atlantic Canada Electronics Stewardship program has 36 depots throughout the province based on a distance and population density formula. There would likely be an estimated 20 permanent depots across Newfoundland and Labrador. There would also be three consolidation centres, plus the trucking to move the material from the depots to consolidation centre. The program also generates a considerable amount of advertising and promotion activity through television, radio and print media.

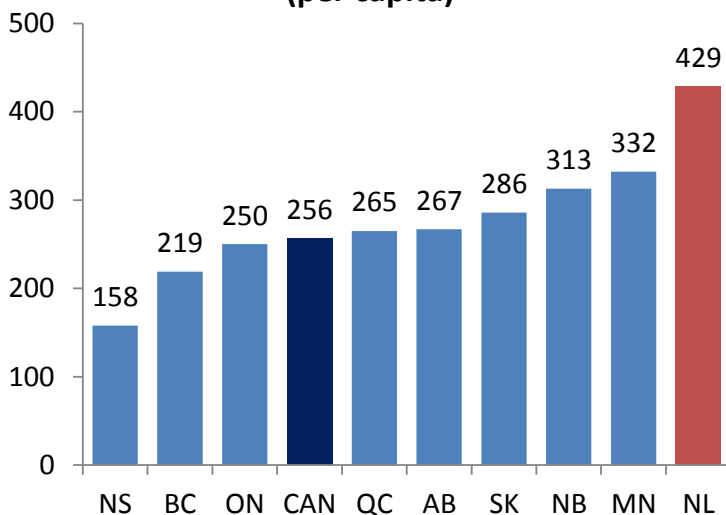
Initial demand will be strong

Even though the recycling fees are attached to new purchases, the program will apply to existing electronic products and there is evidence the demand will be high. According to research conducted by Corporate Research Associates in 2010 for Atlantic Canada Electronics Stewardship, 31 percent of Newfoundlanders and Labradorians have VHS recorders/players that either do not work or are not being used. More than one fourth of households have televisions, telephones, DVD players, computer monitors and/or printers that either do not work or are not being used.

The most recent Statistics Canada data (for 2008), shows that Newfoundland and Labrador households send more waste to landfills or incinerators than any other province in Canada - by a wide margin.

The provincial government is making significant investments to rectify this problem and the ACES EHF program is one more tool to help it do so.

Residential waste disposed of in 2008 - Kilograms (per capita)



Source: Statistics Canada CANSIM tables 051-0001 and 153-0041.

Conclusion

Like other costs, those associated with the safe and effective recycling of electronic products ultimately are borne by the consumer. The question is whether or not these fees should be integrated into the product end price or should be visible and a separate line item for the consumer to see.

Following the approach of the Canadian Council of Ministers of the Environment, Extended Producer Responsibility models such as the Atlantic Canada Electronics Stewardship allow industry to take a full cycle approach— from design to fabrication to the sales cycle through to recycling. Government should allow industry to decide the best model.

There are many benefits to adopting a visible approach to Environmental Handling Fees (EHF) on electronic products in Newfoundland and Labrador. Newfoundlanders and Labradorians want to see what they are paying for recycling. The visible approach also ensures a competitive market for electronic products in the province. Hidden fees could lead to higher prices and could also push smaller market participants out of Newfoundland and Labrador. Consumers will be better able to tie the cost of the program to the economic benefits. Having the visible environmental fee also helps promote social adoption of recycling programs and the principles of environmental sustainability.

In addition, joining the ACES model would bring Newfoundland and Labrador in line with the rest of Canada adopting an industry standard approach to electronic products recycling.

The Newfoundland and Labrador government is making substantial investments into its waste management objectives and it has clearly stated its interest in industry-led recycling programs.

Adopting an industry-led stewardship approach for end-of-life electronic products in Newfoundland and Labrador would be an important step to help the province meet its objectives and would divert an estimated 2,300 tonnes of electronic waste per year from municipal landfills⁷.

⁷ Assuming similar diversion rates as witnessed in Nova Scotia.

Appendix A: Economic Impact Example - *Waste Management and Remediation Services*

Economic Impact Multiplier Effects (Direct and Indirect)

Industry: *Waste Management and Remediation Services*

Multipliers and ratios per \$1 of exogenous industry output shock

Jobs effects per million dollars of output

Direct effect within Newfoundland and Labrador	<i>GDP components</i>	Indirect Taxes on Products	0.03
		Subsidies on Products	-0.06
		Subsidies on Production	-0.01
		Indirect Taxes on Production	0.03
		Wages and Salaries	0.29
		Supplementary Labour Income	0.03
		Mixed Income	0.00
		Other Operating Surplus	0.29
		Total GDP	0.61
		Output	1.00
		International Imports	0.03
		International exports	0.03
		Jobs (per million \$) *	9.75
Direct and indirect effects within Newfoundland and Labrador	<i>GDP components</i>	Indirect Taxes on Products	0.03
		Subsidies on Products	-0.06
		Subsidies on Production	-0.01
		Indirect Taxes on Production	0.03
		Wages and Salaries	0.37
		Supplementary Labour Income	0.05
		Mixed Income	0.01
		Other Operating Surplus	0.34
		Total GDP	0.77
		Output	1.27
		International Imports	0.05
		Jobs (per million \$) *	13.03
Direct and indirect effects all provinces	<i>GDP components</i>	Indirect Taxes on Products	0.04
		Subsidies on Products	-0.06
		Subsidies on Production	-0.01
		Indirect Taxes on Production	0.04
		Wages and Salaries	0.43
		Supplementary Labour Income	0.05
		Mixed Income	0.01
		Other Operating Surplus	0.38
		Total GDP	0.89
		Output	1.54
		International Imports	0.11
		Inventories and other leakages	0.00
		Sum of GDP, imports, and leakages	1.00
		Jobs (per million \$) *	14.65

Source: Statistics Canada Industry Accounts Division / System of National Accounts Input-Output Tables
Provincial Input-Output Multipliers, 2007 (Newfoundland and Labrador)

Statistic:**Source/Methodology:**

Estimated annual revenue from the electronic products recycling program

Atlantic Canada Electronics Stewardship

Direct and indirect employment, employment income and GDP estimates

Uses Statistics Canada Input-Output multiplier and impact estimates at the M industry level – Waste Management and Remediation Services.

Estimated consumer spending impacts

Derived using Statistics Canada Table 203-0001 - Survey of household spending (SHS) for 2009.

Personal income taxes paid

Derived using several sources including Statistics Canada Table 202-0501 - Income tax, by economic family type and after-tax income quintiles and Table 202-0707 and Statistics Canada Table 203-0001 - Survey of household spending (SHS) for 2009.

Property taxes paid

Derived using Statistics Canada Table 203-0001 - Survey of household spending (SHS) for 2008.

HST paid

Based on the ratio of HST collected to total provincial personal income in 2010 (Source: provincial budget documents).

Appendix B: Source List

- Nova Scotia electronic product recycling program data - Atlantic Canada Electronics Stewardship.
- Corporate Research Associates survey and analysis, 2010. Commissioned by Atlantic Canada Electronics Stewardship.
- Statistics Canada CANSIM Table 203-0020 - Survey of household spending on household equipment.
- Statistics Canada CANSIM Table 203-0010 - Survey of household spending on recreation.
- Statistics Canada CANSIM Table 326-0020 – Consumer Price Index (CPI), 2009 basket, monthly (2002=100).
- Statistics Canada CANSIM Tables 051-0001 and 153-0041 - Residential waste disposed of in 2008 (per capita).
- Statistics Canada Industry Accounts Division / System of National Accounts Input-Output Tables.
- Provincial Input-Output Multipliers, 2007 (Newfoundland and Labrador).
- Statistics Canada Table 202-0501 - Income tax, by economic family type and after-tax income quintiles.
- Intergroup Consultants - Environmental Handling Fees (EHF's) for Phase I products in Nova Scotia (April 2009).
- Waste Management Task Force - Municipal Consultation Summary Report on the Provincial Waste Management Strategy. Municipalities Newfoundland and Labrador (2010).
- Waste Management Strategy for Newfoundland and Labrador (2002).

Appendix C: About Jupia Consultants Inc.

New Brunswick, Canada-based Jupia Consultants Inc. is a full service research and planning support consultancy specializing in the area of economic development. Specific focus areas include:

- Economic impact assessments
- Strategic planning
- Socio-economic and industry profiling
- Labour market studies and people attraction strategies
- Competitive intelligence briefings
- Economic assets portals and analysis
- Business retention strategies
- Community branding/marketing
- Community capacity building
- Best practices in economic development
- Downtown development strategies
- Corporate and competitor profiling
- Industry reviews
- Market assessments (geographic and socio-demographic)

Our lead consultant, David Campbell, has over 20 years' experience working with companies, communities, economic development agencies and government departments in six Canadian provinces and four U.S. states.

David authors a daily online blog entitled "It's the Economy, Stupid" as well as a twice weekly economic development column in the New Brunswick Telegraph-Journal. He is also a published author. David is a frequent commentator on radio and TV and guest lectures at several Maritime universities.

For more information visit www.jupia.ca or contact David Campbell at 506-874-3797. You can also follow our Twitter feed at www.twitter.com/jupia.

‘Appendix E’

EPRA Newfoundland and Labrador Communications Launch Plan and Sustaining Activities

Communication Goals and Strategic Approach

The following section outlines communications strategies and tactics designed to support key objectives of the EPRA program plan for Newfoundland and Labrador.

To maximize success and outcomes, we are recommending the development and implementation of an integrated marketing and communications program that emphasizes education, awareness building and engagement of target audiences by strategically focusing on the following two areas:

1. **Corporate Communications** designed to deliver timely and relevant information on EPRA program requirements, plan implementation and ongoing developments by targeting:
 - Stewards to ensure they fulfill their obligations under the Newfoundland and Labrador regulations;
 - Frontline staff – retail and collection facilities/depot employees who will be instrumental in communicating with consumers at the point of purchase and during the disposal of electronic products; and,
 - Stakeholders and service providers who have an interest or role in operations and administration.
2. **Public and Stakeholder Awareness and Education** designed to support all objectives of the EPRA program through broad awareness and education, by targeting audiences who will actively participate in electronics waste diversion in Newfoundland and Labrador including:
 - Consumers / Industrial, Commercial and Institutional sector (ICI) – owners and users of electronic products;
 - News Media – credible and timely sources of ongoing news and information; and,
 - Stakeholders – advisers, advocates and influencers.

Goals and Objectives

Communications goals for the EPRA program include:

1. Environmental Education and Program Awareness
 - Educating residential and business consumers about the benefits of diverting electronic waste from Newfoundland and Labrador landfills, and creating and sustaining public awareness of the EPRA Program, with emphasis on how the program works and products to be accepted.
 - Ensuring that brand owners and retailers of regulated products are aware of their obligations related to the expansion of the EPRA program into Newfoundland and Labrador.
2. Positive Fee Perception
 - Explaining the need for the Environmental Handling Fee (EHF) on the purchase of new electronic products, emphasizing it is an industry-levied charge and that 100% of the revenue is used for the collection and responsible recycling of NL’s end-of-life electronics.

3. Stakeholder Engagement

- Establishing timely and accessible information and resources for frontline stakeholders – retailers and drop-off centres – to ensure consistent, accurate and meaningful communications with consumers about the EPRA program.

4. End-of-Life Electronics Program Leader

- Positioning ERPA as the primary industry-led electronics recycling program in Newfoundland and Labrador, delivering industry-leading collection standards and top-quality customer service.

Primary Target Audiences:

1. Consumers
2. Industrial, Commercial and Institutional Sector (ICI)
3. Stewards – brand owners and retailers of obligated electronic products materials
4. Service Providers – depots, transporters and recycling companies
5. Stakeholders – Government (including municipalities), industry associations, and environmental non-government organizations.
6. News Media

Each audience group will be considered against key objectives to be identified in the strategic communications plan as outlined below. Appropriate information and key messages will be important for each audience to enable them to engage in the program plan implementation process and to sustain communications outreach.

Strategic Approach and Key Considerations

To launch the EPRA program in Newfoundland and Labrador, we will develop an integrated marketing and communications program that includes a three-phased strategic approach.

Phase 1 - Pre-launch Preparation (*Plan Approval – Launch (Targeting August 1, 2013)*)

Upon approval of the program plan, the pre-launch period will require a series of communication activities that relate specifically to preparing for the launch and rollout of the diversion program. These will include:

1. Integrated Strategic Communications Plan and Key Messaging

The strategic approach will identify overall campaign positioning and measurable marketing and communications objectives with launching the EPRA program and sustaining awareness in Newfoundland and Labrador. The messaging strategy will take each audience and the appropriate approach into consideration when identifying key messages, including priority messages by audience. Within each key message the tone will also be described to provide guidance for the creative development.

2. Creative and Tactical Campaign Development

Creative concept development will include priority messages, design and a look and feel of communication materials tailored to meet the needs of Newfoundlanders and Labradorians. Creative materials and tactical campaign elements potentially could be adapted from the public education and awareness program for the EPRA program already launched in Nova Scotia and Prince Edward Island. Best practices and any areas of alignment will be identified and incorporated into all planning and program implementation, as appropriate and where it is deemed to enhance success of the program.

2. Creative and Tactical Campaign Development (cont.)

Elements may include, but may not be limited to:

- updating the EPRA website and toll-free helpline service to reflect the expansion of the program into Newfoundland and Labrador, outlining all of the materials acceptable for recycling, as well as drop-off centre locations;
- program advertising strategically targeted/timed to launch in Phase 2 and 3
- media relations – news releases, fact sheets, FAQ's, outreach and interviews;
- brochure or similar information publication to be available at municipal and other information distribution points;
- point-of-sale information including counter cards and posters;
- depot signage and brochures;
- plans for launch kick-off event; and,
- event/depot collections days promotions.

3. Issue Management Preparation

An issue and risk assessment will identify appropriate approaches for proactive public relations, reputation management, issue management and risk mitigation. Key considerations may include, but may not be limited to: EHF education and immediate gaps in access.

4. Stakeholder Consultation

Communications will support information and key message requirements to support stakeholder consultation and follow up, as required.

5. Steward Outreach

To ensure all stewards are provided appropriate notice of EPRA program requirements in Newfoundland and Labrador, a targeted communications plan will be implemented prior to the launch of the public marketing program (at a time that does not conflict with seasonal/peak retail sales period), and will be ongoing. This may include, but may not be limited to:

- e-bulletins;
- comprehensive and dedicated website information for stewards; and,
- information sessions, e.g. meetings/webcasts/conference calls, as needed.

6. Retail and Collection Facility/Depot Staff Communications

To ensure frontline staff at retail and collection facilities/depots receive timely and relevant information about the launch of the EPRA program, a turnkey communication toolkit with consumer messaging and collateral materials will be developed and distributed prior to the launch of the public marketing program. All materials will be updated on an ongoing basis to align with program developments and incorporate feedback from retailers and collection facilities/depots, as required. This may include, but may not be limited to:

- Employee communications toolkit including: program overview, key messaging, FAQ, and posters;
- POS materials including posters, counter card and collection facility/depot signage;
- 1-800 hotline/email inquiry service accessible prior to program launch; and,

6. Retail and Collection Facility/Depot Staff Communications (cont.)

Note: To ensure the delivery of consistent program messaging and reduce demand for program communication at the point of purchase and collection facilities/depots, pre-launch communications activities will include targeted advertising and public relations activities to establish awareness among consumers and businesses prior to their retail and collection/depot experience.

Phase 2 – Program Launch (*August 1, 2013*)

Public commencement of awareness and education will encompass activities that:

- promote e-waste diversion province-wide with a strong focus on reuse and recycling activities; educate the public on the benefits of diversion of e-waste from the landfill;
- educate the public about the range of options available to ensure the proper management of e-waste;
- provide information about where to find drop-off depots, special collection events and take back opportunities; and,
- continue to inform the public and retailers about EHF.

Other activities may include, but may not be limited to:

- a public launch event, possibly with the Minister, EPRA President and/or senior MMSB officials designed to officially kick-off the EPRA diversion program;
- advertising including print (daily, community and targeted business verticals) and digital/online, out-of-home (OOH) - targeting both rural and urban centres;
- Point-of-Sale (POS) information;
- social media activity;
- public, media and stakeholder relations;

Phase 3 – Sustaining Outreach (*Annual/Ongoing*)

As part of the integrated marketing and communications strategy, an annual communications calendar of activities will be developed to ensure that outreach is targeted and sustained.

Activities may include, but not be limited to:

- leveraging peak seasons for targeted media campaigns – fall clean up, Christmas/holiday season and spring clean up;
- celebrating program milestones – e.g. first 1000 tonnes of electronics waste collected;
- special events programs that will provide direct and indirect support to organizations that promote EPRA collection. This could include, but may not be limited to:
 - ✓ voluntary retailer special EPRA collection programs;
 - ✓ municipal events; and
 - ✓ other collectors that agree to promote collection events.

This will involve developing a comprehensive tool kit of education and awareness materials and activities especially designed for these round-up events. To implement the concept of the special event program, EPRA will explore options to help coordinate communications and marketing support, and where organizations or retailers prefer to develop it's own event or promotional campaign, EPRA will provide communication materials. These activities could potentially tap into and cost-share with MMSB initiatives, where appropriate; and,

Phase 3 – Sustaining Outreach (*Annual/Ongoing*)

Activities may include, but not be limited to (cont.):

- Monitoring and evaluation mechanisms built into the integrated strategic communications plan including key performance indicators (KPI) and annual consumer survey results will measure the effectiveness of year-one tactics against objectives, providing the basis for adjustments in messages and delivery vehicles for subsequent years.

Other factors that will influence the type, content and frequency of ongoing awareness and education may include, but may not be limited to:

- the addition of new drop-off centres; and,
- implementation of new electronics products into the program.

Overall, ongoing areas of opportunity and growth will be identified and incorporated into an annual communications plan in tandem with program priorities.

***Atlantic Quarterly*® - Autumn 2011**

Newfoundland and Labrador Results

Final Report

Confidential

Reproduction in whole or in part is not permitted
without the express permission of
Atlantic Canada Electronics Stewardship
ATLQTR-1017

Prepared for:



January 2012



1-888-414-1336



Table of Contents

	Page
Introduction	1
Executive Summary.....	2
Conclusions	3
Detailed Analysis	5
Environmental Impact	5
Recycling.....	7
Familiarity with Recycling Programs.....	8
Electronic Devices.....	9
ACES Program	11
Responsible Recycling	12
Environmental Handling Fee	14
Displaying Environmental Handling Fees	17
Study Methodology.....	21
Questionnaire Design	21
Sample Design and Selection.....	21
Survey Administration	21
Completion Results.....	21
Sample Distribution	23
Sample Size and Tolerances	23

Introduction

Corporate Research Associates Inc. (CRA) is pleased to present Atlantic Canada Electronics Stewardship (ACES) with this Report and Tabular Results of commissioned questions from the Autumn 2011 *Atlantic Quarterly*®, the authority on public opinion in Atlantic Canada. Since 1989, the *Atlantic Quarterly*® has been tracking consumer trends and public opinion on pivotal economic, political, social, and other issues across the region on a quarterly basis.

This customized Autumn 2011 Report is based on telephone interviews with a representative sample of 400 adult residents of Newfoundland and Labrador (18 years and older), conducted from November 9 to November 28, 2011. A sample of 400 can be expected to yield a margin of sampling error of ± 4.9 percent in 95 out of 100 samples. A complete description of the methodology used in this survey is provided at the back of this report.

This report presents public opinion data concerning the following topics of interest to ACES:

- Attitude toward the environment;
- Awareness of recycling programs;
- Awareness of electronics recycling;
- Likelihood of recycling old electronics; and
- Opinion of Environmental Handling Fees.

Appended is a copy of the survey questionnaire (Appendix A) and comprehensive banner tables (Appendix B) that present the results for each question by key demographic subgroups. For easy reference the tables are noted by number throughout the report. Unless otherwise stated, all results in this report are expressed as a percentage.



Executive Summary

This year's findings indicate improvement over 2010 results in a number of ways. Specifically, NL residents are significantly more likely to state they would take old or unwanted electronics to an ACES drop off centre, and they are increasingly likely to support responsible recycling. For most other measures under consideration, residents continue to offer extremely high opinion ratings regarding various components of electronics recycling.

Similar to previous results, residents are either passionate about trying to help the environment, or are trying to be more aware of their environmental impact. In addition, most NL residents agree they are personally responsible for their own impact on the environment.

In 2010, residents were only somewhat likely to dispose of old or unwanted electronics in one of the four ways considered in this study (ACES depot, donate to charity, give to friends and family, or sell the items). This year there has been a considerable shift in opinion in this regard, with a greater percentage of residents stating they would use an ACES depot, donate to charity, or give to friends and family.

There has been little change in awareness of the various recycling programs currently available in the province. Specifically, the majority of residents are aware of the Beverage Container Return Program, and a majority are aware of the Used Tire Management Program or the Multi Materials Stewardship Board. There is limited awareness of the Used Oil Management Association. In general, familiarity with these organizations has not shifted compared with 2010.

Seven in ten residents have an electronic that is no longer working or being used. This is generally consistent with last year's findings. The most common types of devices include VHS recorders, televisions, printers, land line telephones, DVD players and computers. Residents are also increasingly likely to have cell phones and stereo components that no longer work or are no longer being used.

There is a high level of agreement that an ACES program would contribute to recycling and waste diversion in the province. In addition, nearly all residents believe that responsible recycling is important in an electronics recycling program, and believe that a third party should audit these program to ensure they are compliant.

There is moderate awareness that an Electronics Handling Fee (EHF) is used to support regulated recycling programs. Understanding the EHF, the majority of residents hold a favourable opinion of recycling programs and most would be receptive to such a program in their area. In terms of displaying the EHF, residents would like the amount displayed separately from the price of the product on the receipt, as well as displayed separately in the retail store.

Finally, very few NL residents are aware of organizations that are currently accepting old or unwanted electronics for recycling, and when asked to name these organizations, residents mention community or charitable organizations, schools, or computer or electronics stores.



Conclusions

NL residents are concerned with the environment, and most believe they are personally responsible for their impact on the environment.

Similar to 2010 results, the majority of residents in Newfoundland and Labrador state they are either passionate about the environment, or are trying to be more aware of their environmental impact. In addition, nearly all residents agree that they are personally responsible for their own impact on the environment.

This year, residents are significantly more likely to dispose of their unwanted or old electronics at an ACES depot or to a charity.

There has been a significant increase in the likelihood of NL residents undertaking various measures to dispose of unwanted or old electronics. Specifically, nearly all residents *definitely* or *probably* would dispose of old or unwanted electronics by dropping them off at an ACES depot. Additionally, the vast majority report they would donate to a charity or similar program, and many would give to friends and family. Notably, the likelihood of disposing electronics using any of the four methods under consideration has increased compared with last year's results.

There is moderate awareness of various recycling programs.

Similar to previous findings, most residents in NL are familiar with the Beverage Container Return Program, and a majority are familiar with the Used Tire Management Program or Multi Materials Stewardship Board. A minority are familiar with the Used Oil Management Association.

Most residents agree that an ACES program would help contribute to recycling and waste diversion in the province.

The majority of residents agree that an ACES program would contribute to recycling and waste diversion, and very few disagree in this regard.

Residents are increasingly likely to believe responsible recycling is important.

The vast majority of Newfoundland and Labrador residents think it is important for an electronics recycling program to ensure responsible recycling, that is, practices that eliminate issues surrounding the management of waste electronics such as illegal dumping, shipping offshore to developing countries, improper handling or disposal of toxic materials, and inadequate health and safety systems for workers handling and processing this equipment. This marks a slight increase in agreement when compared with 2010 results. In addition, most residents think it is important that an electronics recycling program be audited by a third-party to ensure compliance with responsible recycling standards.



There is moderate awareness of Environmental Handling Fees, and residents are generally in favour of an EHF.

The number of residents who are aware that environmental fees are used to support electronics recycling programs is stable, resting at just over six in ten residents who are aware. Understanding that an EHF would apply, the majority of residents are in favour of recycling programs, and many would support such a program in their area.

Residents would prefer that the EHF is indicated separately on their receipt, and displayed separately from the price of the product in the retail store.

Most Newfoundlanders and Labradorians would prefer that the EHF is indicated on the receipt when they purchase an electronic product. Furthermore, residents would also like to see the amount of the EHF displayed separately in the retail store.

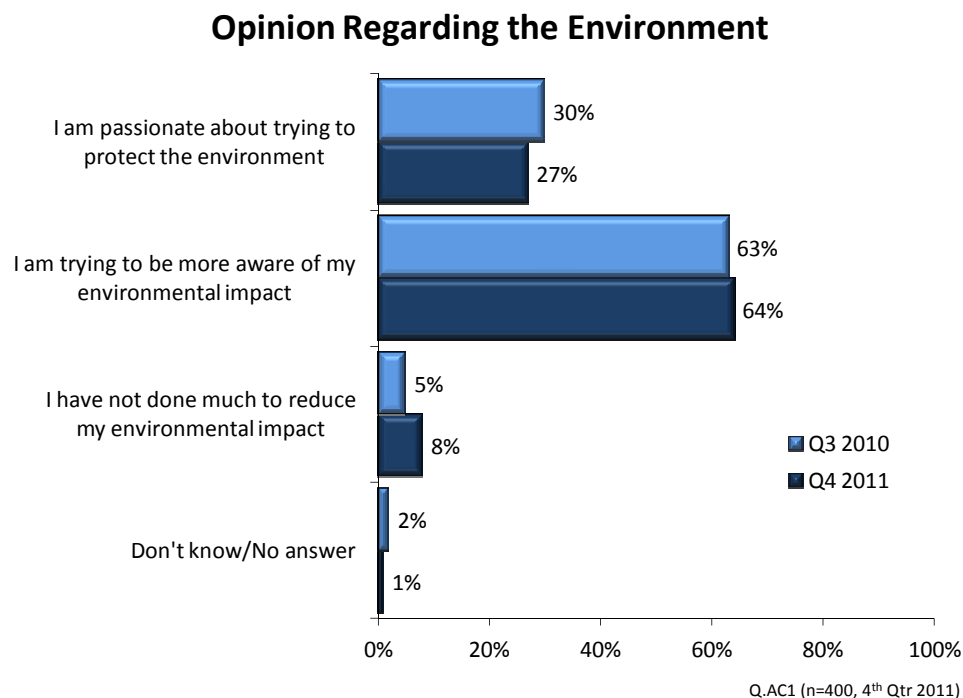


Detailed Analysis

Environmental Impact

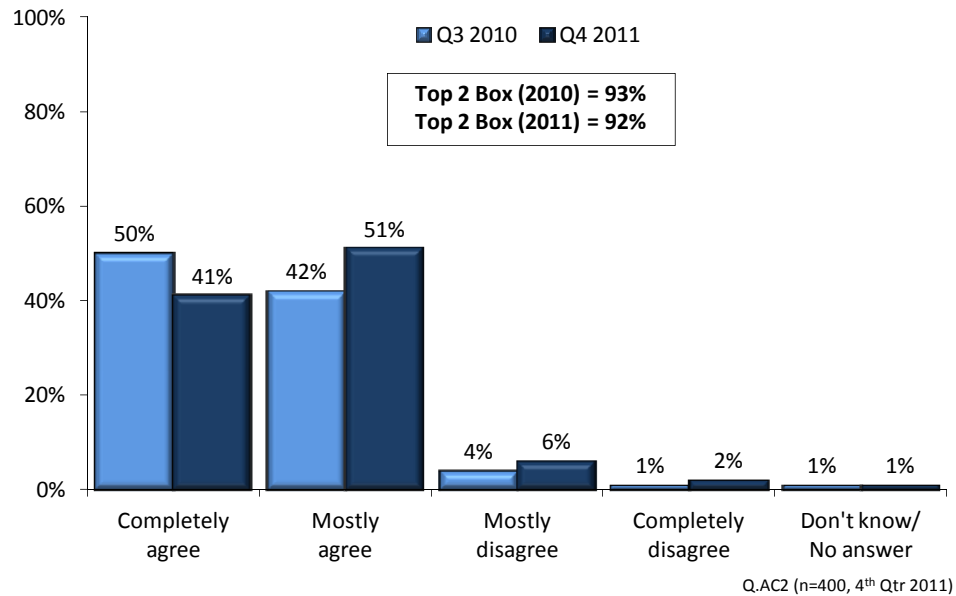
NL residents are concerned with the environment, and most believe they are personally responsible for their impact on the environment.

The majority of NL residents indicate they are passionate about trying to protect the environment or are trying to be more aware of their environmental impact. Very few indicate they have not done much to reduce their environmental impact. These findings are generally consistent with 2010 results. Across the population, women, those in the middle or upper income categories, and younger residents are more likely to state they are passionate about trying to protect the environment or they are trying to be more aware of their environmental impact. (Table AC1)



Nearly all NL residents agree they are personally responsible for their own impact on the environment, which is consistent with 2010 findings. Results are generally consistent across the population. (Table AC2)

Agreement Rating that You Are Personally Responsible for Your Own Impact on the Environment



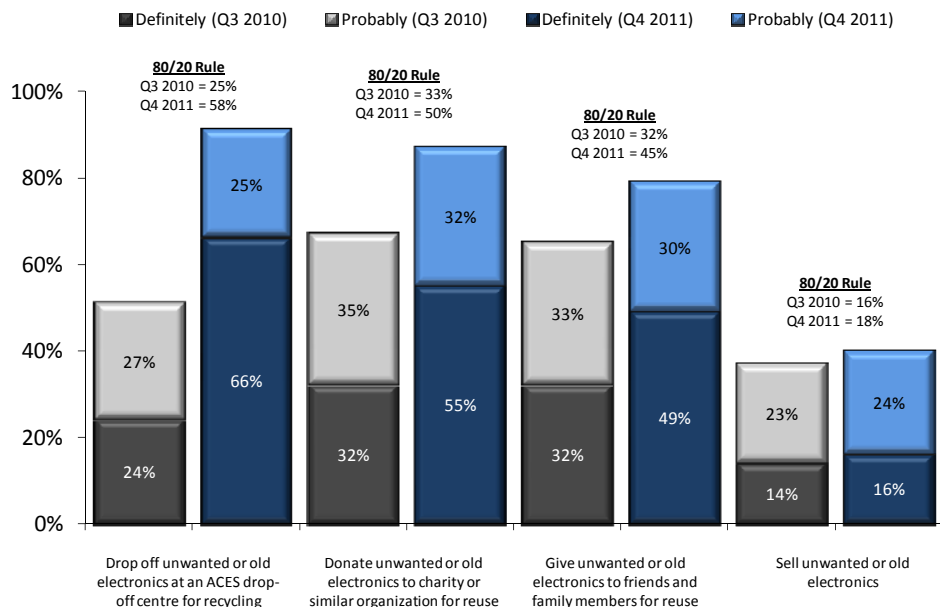
Recycling

This year, residents are significantly more likely to dispose of their unwanted or old electronics at an ACES depot or to a charity.

There has been a significant increase in the likelihood of NL residents undertaking various measures to dispose of unwanted or old electronics. Specifically, nearly all residents state they would definitely or probably drop off unwanted or old electronics to an ACES depot, compared with approximately one-half of residents in 2010. Furthermore, nearly nine in ten state they would definitely or probably donate old or unwanted electronics to charity, compared with just two-thirds in 2010. Finally, eight in ten would give old or unwanted electronics to a friend or family member, compared with two-thirds in 2010. Results for using an ACES drop-off centre are generally consistent across the region and across the population.

CRA recommends applying the 80/20 rule to questions that have a scale of definitely/probably. This provides a more realistic view of intentions, in this case, likelihood of dropping off electronics at various locations. The 80/20 rule suggests that 80 percent of those who offered a rating of 'definitely' and 20 percent of those who offered a rating of 'probably' would actually undertake the activity under consideration. Applying the 80/20 rule suggests that six in ten NL residents would likely drop off unwanted or old electronics to an ACES drop-off centre, while one-half would donate old or unwanted electronics to a charity for reuse. Over four in ten would give unwanted or old electronics to friends and family members. (Tables AC6a-d)

Likelihood Rating to Do the Following in the Next 12 Months



Q.AC6a-d (n=400, 4th Qtr 2011)

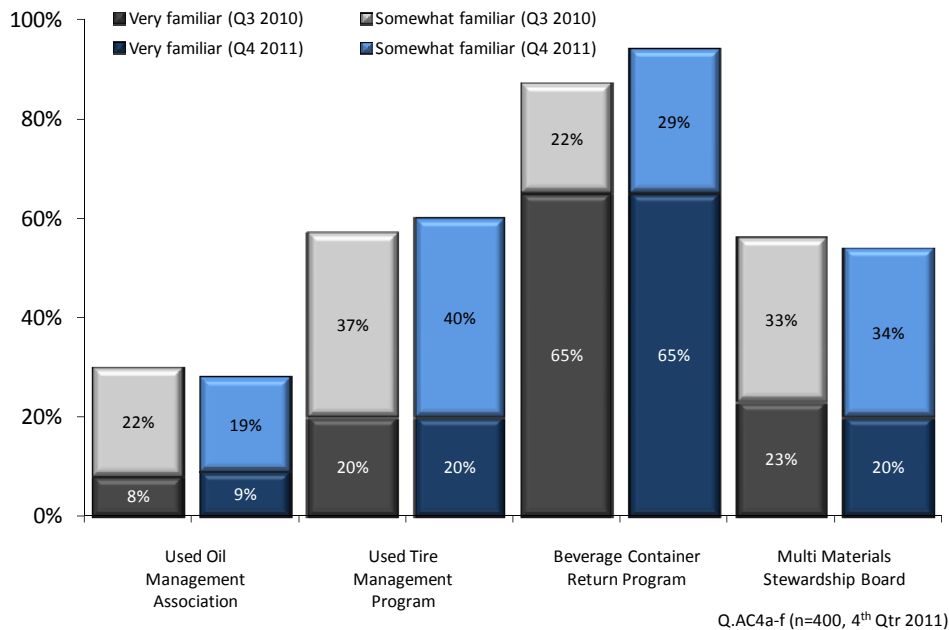


Familiarity with Recycling Programs

There is moderate awareness of various recycling programs.

Familiarity with the recycling programs evaluated are generally consistent with 2010 findings. Nearly all residents are familiar with the Beverage Container Return Program, while a majority are familiar with the Used Tire management Program or the Multi-Materials Stewardship Board. A minority are familiar with the Used Oil Management Association. (Tables AC4a-e)

Familiarity Level With the Following Recycling Programs



Beverage Container Return Program: Those in the West are somewhat less likely to be aware of this program. Across the population, results are generally consistent, although those with lower levels of education are less likely to be familiar in this regard.

Multi Materials Stewardship Board: Residents in the St. John's/Avalon area are more likely to be familiar with this program. In addition, men, those in the middle and upper income categories, residents aged 35 to 54, and those with higher levels of education are more likely to be familiar.

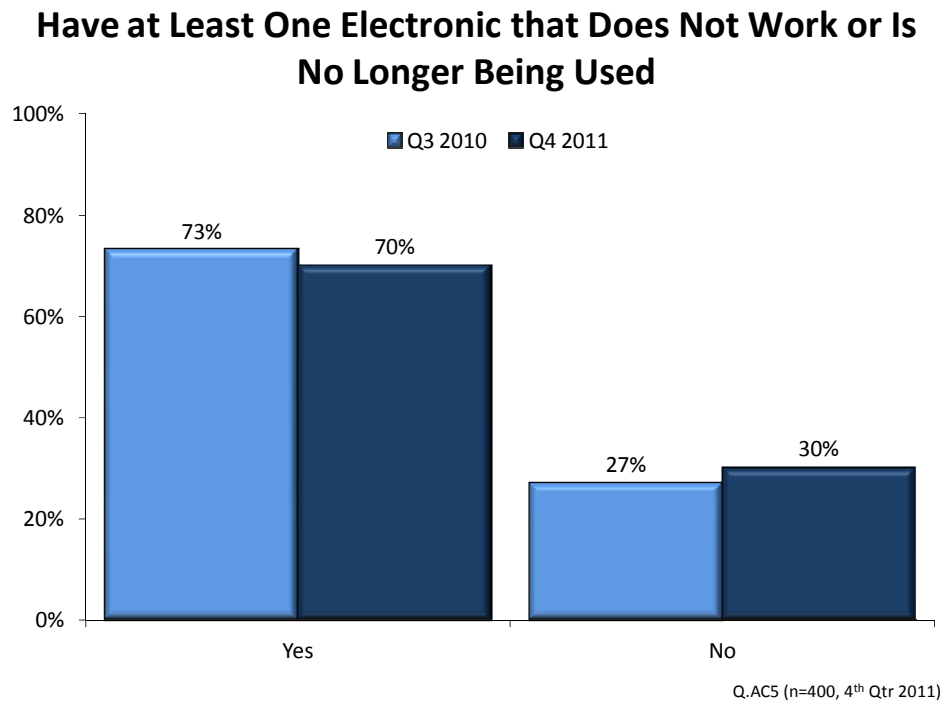
The Used Tire Management Program: Regionally familiarity with this program is consistent. Across the population, men, residents 35 years of age or older, and those with at least a high school diploma are more likely to be familiar with this program.

The Used Oil Management Association: Residents in the Eastern part of the province are more familiar with this program than those in other regions. Men, those in the middle income category, and residents 35 years of age or older are more likely than their counterparts to be familiar with this program.



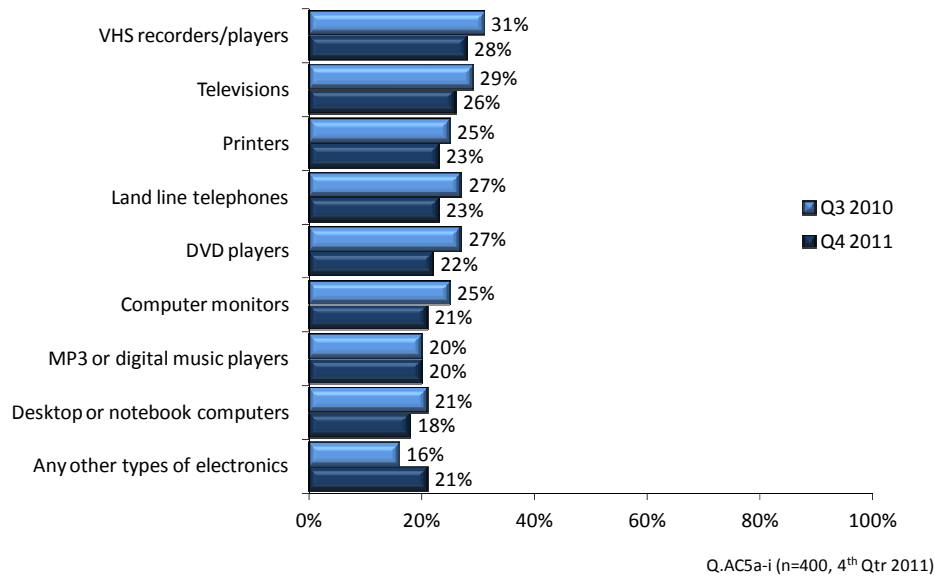
Electronic Devices

Seven in ten residents in Newfoundland and Labrador have at least one electronic device in their household that does not currently work or is no longer being used. (Table AC5)



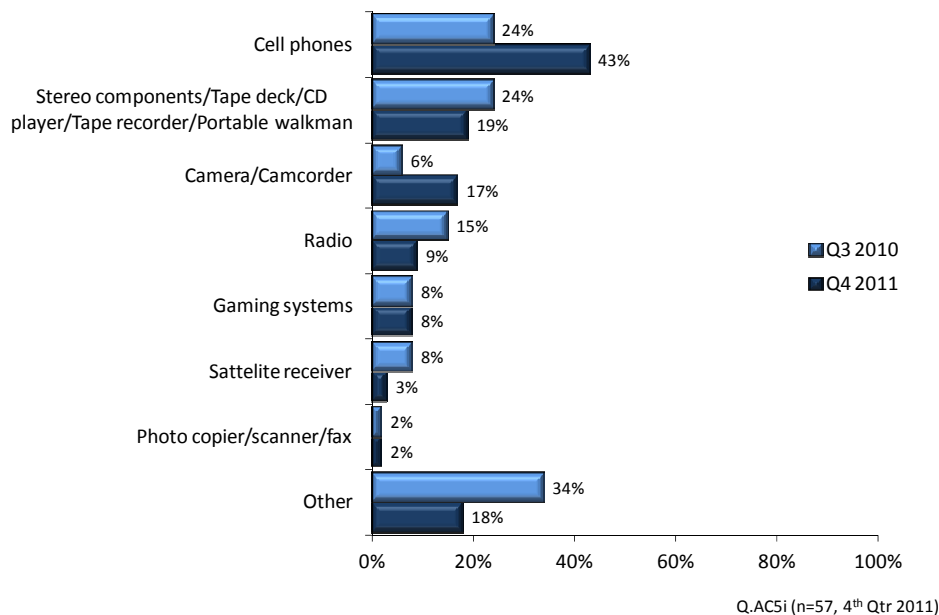
Again this year, VHS recorders and televisions are the most common of these electronic devices. Printers, land line telephones, DVD players, computer monitors, MP3 players and computers are also mentioned. (Tables AC5a-i)

Electronics You Have That Do Not Currently Work or Aren't Being Used (% saying Yes)



Other mentions of electronics that do not currently work or are not being used include cell phones, stereo components, cameras, radios, and gaming systems. (Table AC5i)

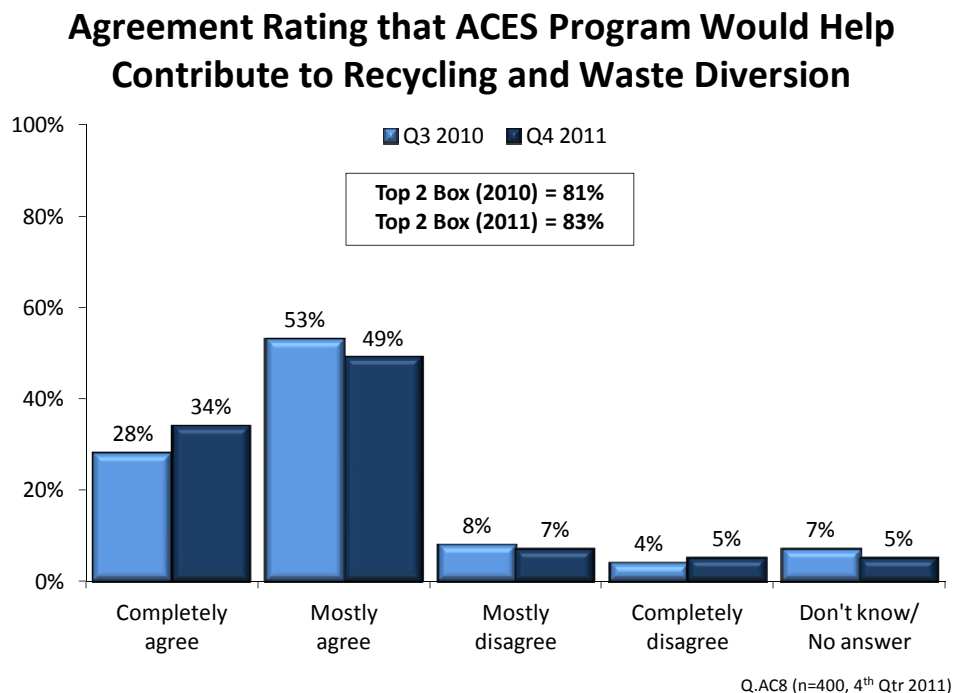
Other Types of Electronics That Do Not Currently Work or Aren't Being Used



ACES Program

Most residents agree that an ACES program would help contribute to recycling and waste diversion in the province.

Over eight in ten NL residents believe that the ACES Program would be effective in the province, which is consistent with 2010 findings. There is little difference in opinion regionally. Across the population, women, those in the middle income category, and those with a high school diploma or university degree are more likely to agree that an ACES program would contribute to recycling and waste diversion. (Table AC8)

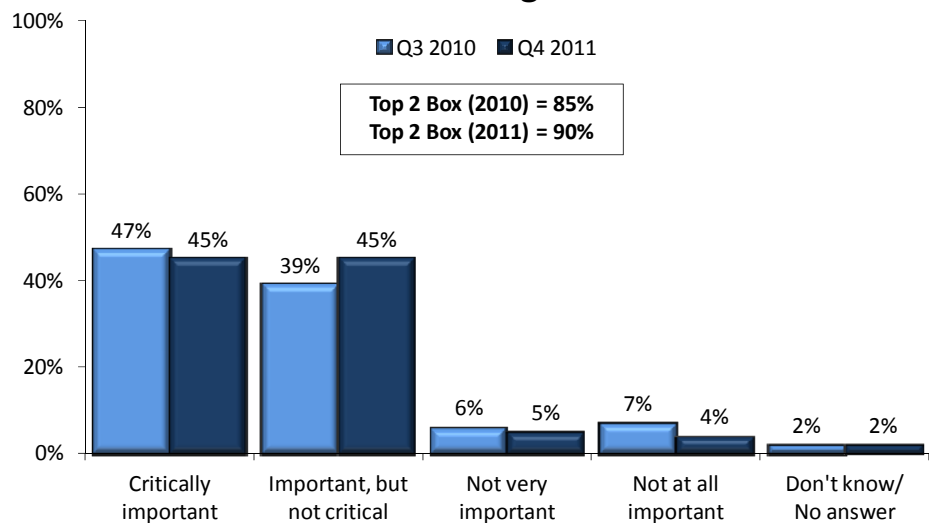


Responsible Recycling

Residents are increasingly likely to believe responsible recycling is important.

Nine in ten NL residents believe it is important for an electronics recycling program to ensure responsible recycling, which is a slight increase compared with 2010 findings. Across the province results are generally consistent. Women, those in the middle income category, younger residents, and those with higher levels of education are more likely to deem this important. (Table AC9)

Importance Rating that the Electronics Recycling Program Ensures Responsible Recycling Given Your Understanding of EHF

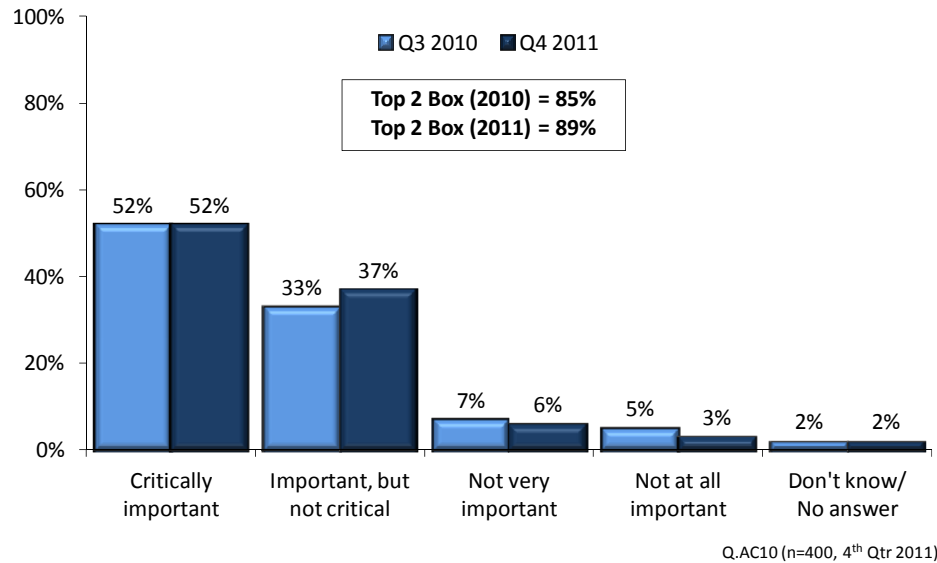


Q.AC9 (n=400, 4th Qtr 2011)



Nine in ten residents believe it is important for an electronics recycling program to be audited by a third-party to ensure compliance with responsible recycling standards established in Canada, which is consistent with 2010 findings. There is little difference in opinion across the province. Women, those in the middle and upper income categories, younger residents, and those with higher levels of education are more likely to rate this as important. (Table AC10)

Importance Rating that Participants in the Electronics Recycling Program Are Audited by an Independent Third Party to Ensure Compliance

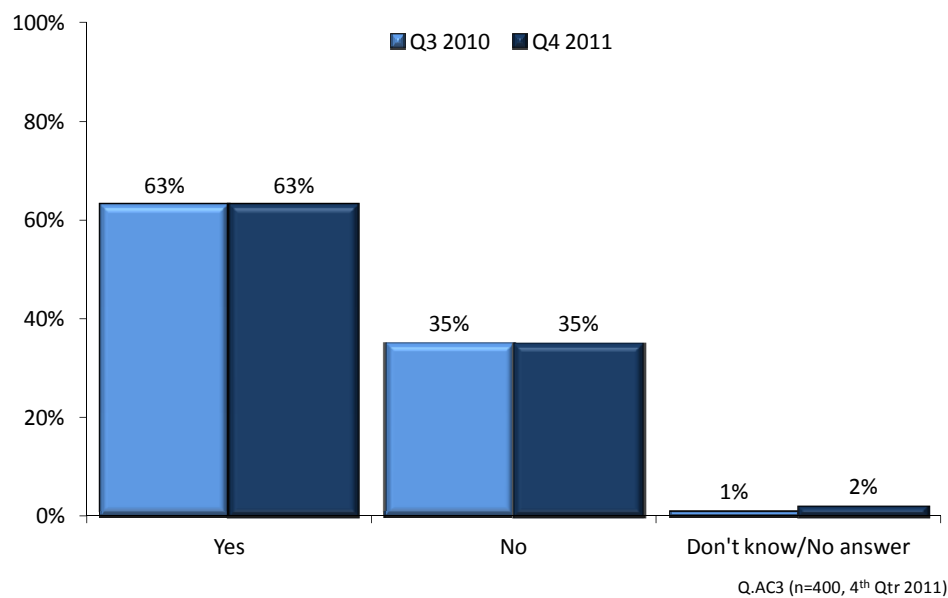


Environmental Handling Fee

There is moderate awareness of Environmental Handling Fees, and residents are generally in favour of an EHF.

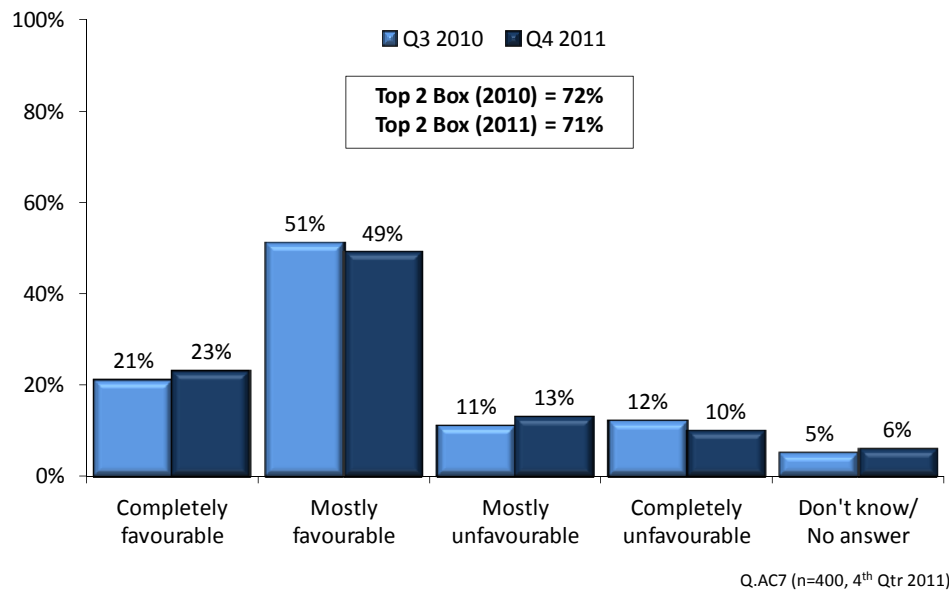
The number of NL residents who are aware that Environmental Handling Fees (EHF) are used to support recycling programs is stable, resting at 63 percent. Results are generally consistent across the province. Across the population, men, those in the middle income category, and younger residents are more likely to be aware of the use of environmental fees. (Table AC3)

Awareness that Environmental Fees Are Used to Support Regulated Recycling Programs



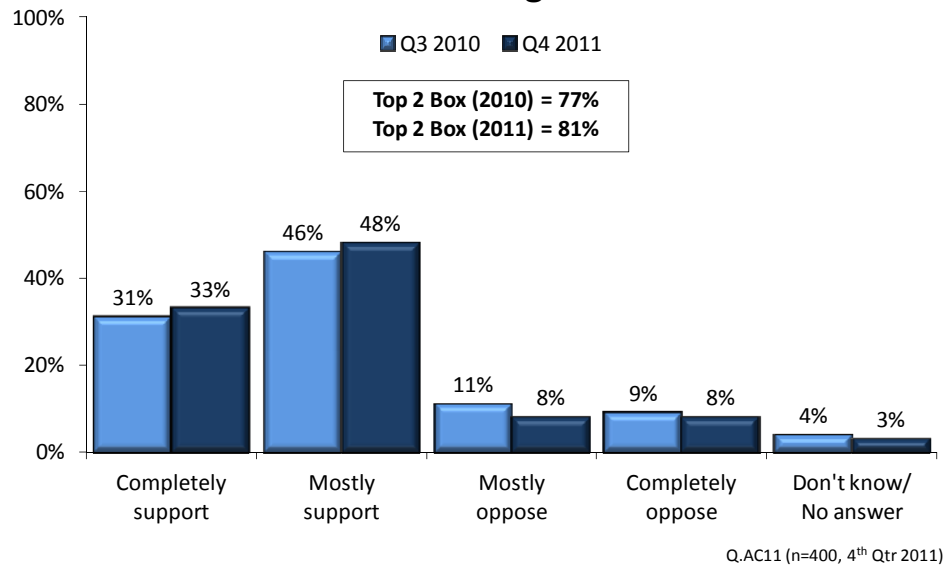
Seven in ten NL residents have a favourable opinion of recycling programs for electronic products, which is consistent with 2010 findings. Regionally, those in the East are slightly more likely than those elsewhere to hold a favourable opinion. Across the population, women, those in the middle income category, younger residents, and those with a high school diploma are more likely to offer a favourable opinion in this regard. (Table AC7)

Opinion Rating of Recycling Programs for Electronic Products Given Your Understanding of EHF



Understanding that an EHF would apply, eight in ten Newfoundland and Labrador residents would support the introduction of an electronics recycling program in their area, which is stable compared with 2010 findings. Results are consistent across the province. Across the population, women, those in the middle income category, younger residents, and those with a high school diploma or a university degree are more likely to support an electronics recycling program in their area. (Table AC11)

Support Rating of an Electronics Recycling Program Being Introduced in Your Area Given Your Understanding of EHF

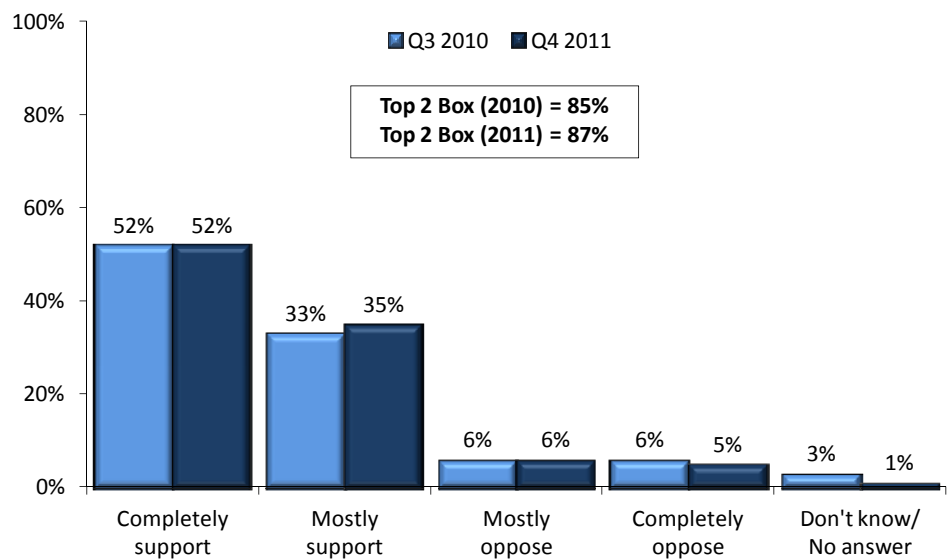


Displaying Environmental Handling Fees

Residents would prefer the EHF indicated separately on their receipt, and displayed separately from the price of the product in the store.

Just under nine in ten NL residents support the notion of having the Environmental Handling Fee displayed on the receipt when buying an electronic product, which is consistent with 2010 findings. Results are consistent across the province. Those in the middle income category, and younger residents are more likely to support this initiative. (Table AC14)

Support Rating for Having the EHF Amount Indicated on the Receipt When You Buy an Electronic Product



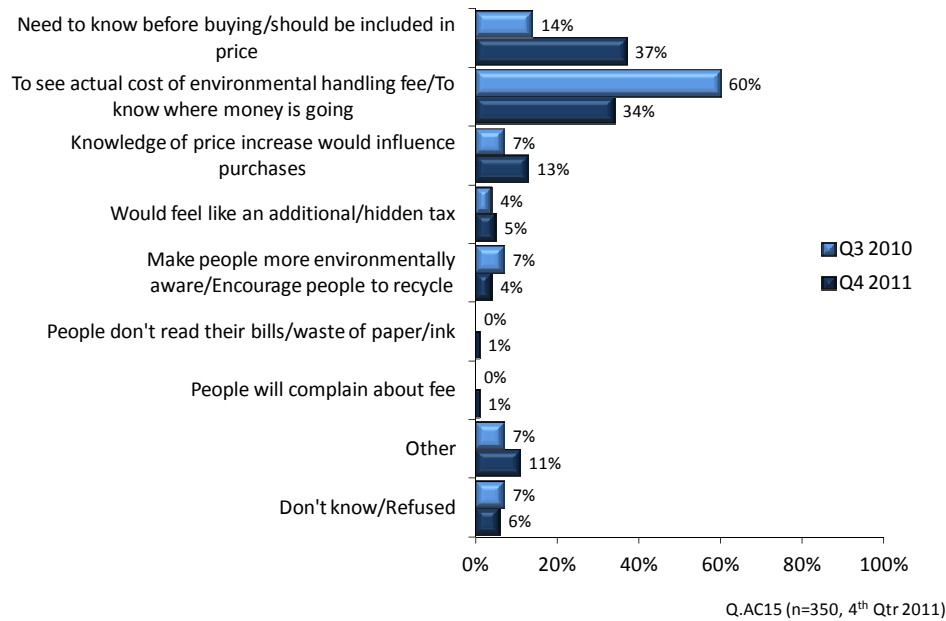
Q.AC14 (n=400, 4th Qtr 2011)

Those who support having the EHF amount displayed on their receipts were then asked why they were in support of such a policy. The need to know the amount prior to purchasing a product, or to see the actual cost of the EHF are the top reasons. (Table AC15a)



Reasons for Supporting Having the EHF Indicated on Receipt

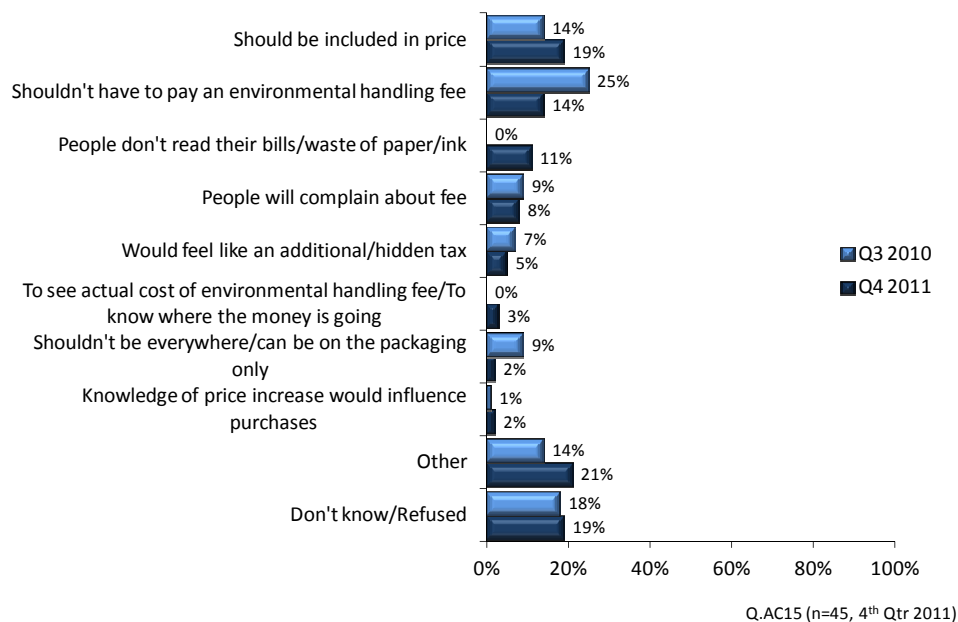
(Among those who said completely/mostly support in Q.AC14)



Among the small number of residents who opposed having the EHF amount displayed on their receipts (n=45), reasons for this opinion are that they believe it should be included in the price, or they oppose paying an environmental handling fee. (Table AC15b)

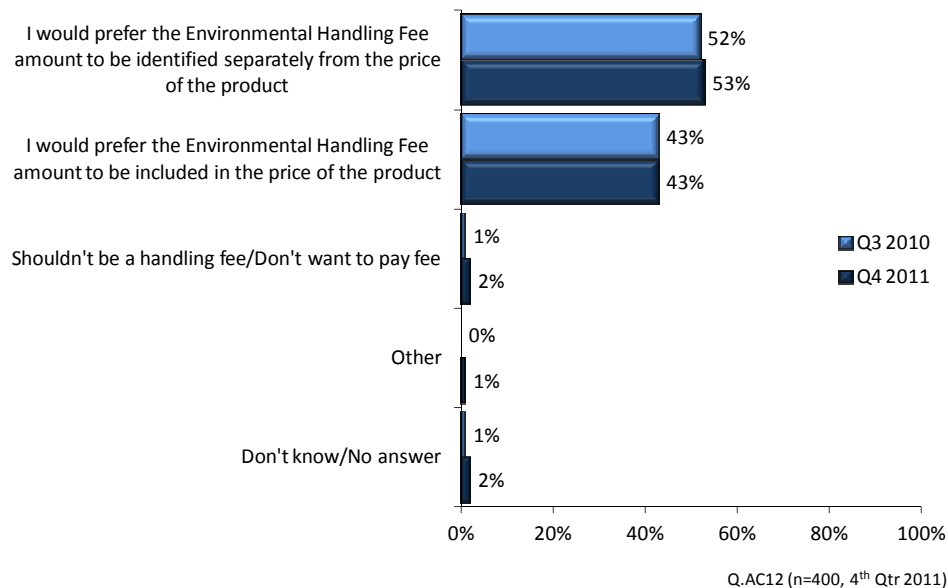
Reasons for Opposing Having the EHF Indicated on Receipt

(Among those who said mostly/completely oppose in Q.AC14)



Again this year, slightly more Newfoundlanders and Labradorians would prefer the EHF be identified separately from the price of the product, with just over one-half preferring this option. Just over four in ten indicate they would prefer that the fee is included in the price of the product. (Table AC12)

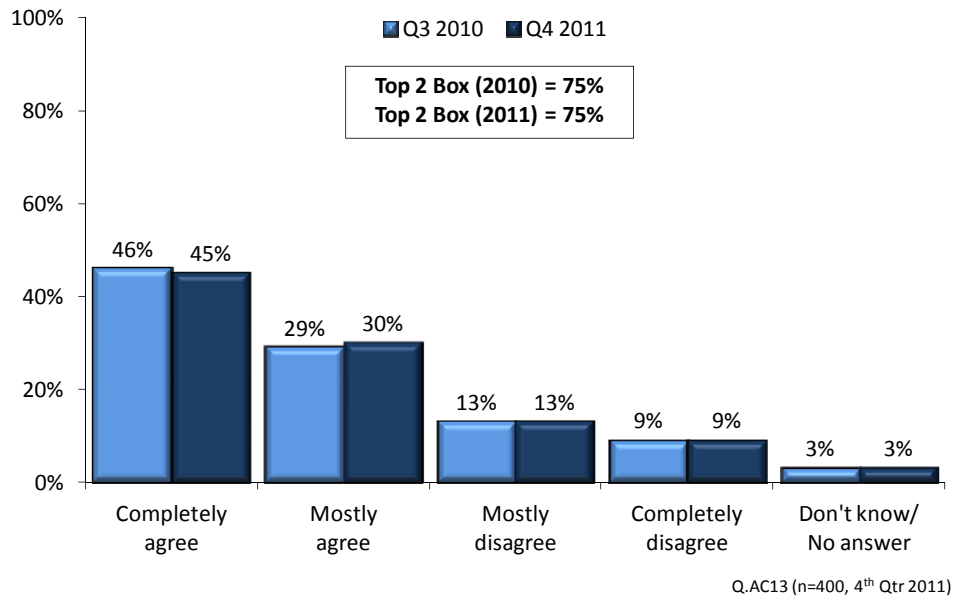
Preference for How Recycling Fees on Electronic Products Are to Be Displayed in the Stores



Three-quarters of residents agree that retailers should display the EHF separately from the price of electronic products. Results are relatively consistent across the province and demographic sub-groups, although residents over the age of 34, and those with less than a high school education or those with a post-secondary degree are more likely to agree when compared with others. (Table AC13)

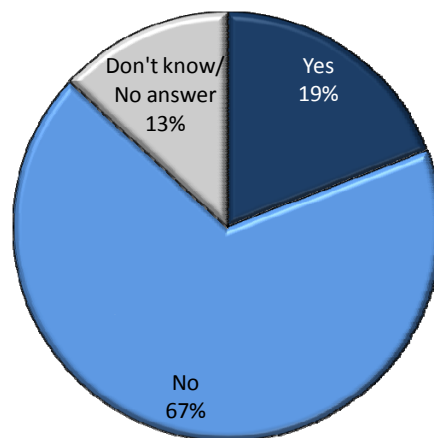


Agreement Rating that Retailers Should Display the EHF Separately from the Price of the Product



Two in ten NL residents are aware of organizations in their local area that currently accept old or unwanted electronics for recycling. (Table AC16)

Organizations in Local Area that Currently Accept Old or Unwanted Electronics for Recycling



Q.AC16 (n=400, 4th Qtr 2011)

When asked to name the specific organization that currently accepts old or unwanted electronics for recycling (n=77), community or charitable organizations are named by two in ten residents, followed by schools or computer and electronics stores. (Table AC17)



Study Methodology

Questionnaire Design

The questions commissioned by Atlantic Canada Electronics Stewardship utilized in this study were designed by Corporate Research Associates Inc., in consultation with Atlantic Canada Electronics Stewardship staff.

Sample Design and Selection

The sample for this study was drawn using systematic sampling procedures from a list of randomly-selected households compiled from listed telephone numbers in Newfoundland and Labrador, drawn from a database that is updated quarterly. The sample was selected to match the geographical distribution of the population within the region and was designed to complete interviews with a representative sample of 400 adult residents 18 years of age or older of Newfoundland and Labrador.

Survey Administration

The survey was conducted by telephone from November 9 to November 28, 2011. All interviewing was conducted by fully trained and supervised interviewers and a minimum of 10 percent of all completed interviews were monitored or subsequently verified.

Completion Results

Among all eligible Newfoundland and Labrador residents contacted, the response rate was 16 percent. Response rate is calculated as the number of cooperative contacts (804) divided by the total number of eligible telephone numbers called (4 961).

The final disposition of all telephone numbers called is shown below according the Marketing Research and Intelligence Association's (MRIA) Standard Record of Contact Format.

Completion Results	
A. Total Numbers Attempted	5 807
Not in Service/Blocked Number	544
Fax/Modem	87
Cell Phone/Pager	2
Incorrect/Business Number	212
Duplicates	1



B. Total Eligible Numbers	4 961
Busy	35
Answering Machine	1 268
No Answer	626
Illness, Incapable	41
Language Barrier	14
Selected/Eligible Respondent Not Available/Callbacks	399
C. Total Asked	2 578
Never Call List	14
Gatekeeper Refusal	1 085
Respondent Refusal	18
Terminated/Hang up	657
D. Co-operative Contacts	804
Disqualified/Quota Full	404
Complete	400



Sample Distribution

The overall results are based on 400 interviews with the population of Newfoundland and Labrador. A sample of 400 respondents would be expected to provide results accurate to within plus or minus 4.9 percentage points in 95 out of 100 samples.

Sample Size and Tolerances

As margins of error for various sub-samples will vary based on sample size and proportion of the obtained result, a selection of sampling tolerances is presented in the following table:

Sample Size	Proportion				
	90% 10%	80% 20%	70% 30%	60% 40%	50% 50%
50	8.3%	11.1%	12.7%	13.6%	13.9%
100	5.9%	7.8%	9.0%	9.6%	9.8%
200	4.2%	5.5%	6.3%	6.8%	6.9%
300	3.4%	4.5%	5.2%	5.5%	5.7%
400	2.9%	3.9%	4.5%	4.8%	4.9%



Survey Questions

Final Commissioned Questions For *ACES*

Newfoundland and Labrador (n=400)

1. Which of these three statements best describes your opinion regarding the environment? **[READ AND ROTATE, CODE ONE ONLY]**
 - 1 I am passionate about trying to protect the environment
 - 2 I am trying to be more aware of my environmental impact
 - 3 I have not done much to reduce my environmental impact

VOLUNTEER

 - 4 Other **[SPECIFY:]** _____
 - 8 Don't know/No answer
2. Do you completely agree, mostly agree, mostly disagree, or completely disagree that you are personally responsible for your own impact on the environment? **[CODE ONE ONLY]**
 - 1 Completely agree
 - 2 Mostly agree
 - 3 Mostly disagree
 - 4 Completely disagree

VOLUNTEERED

 - 8 Don't know/No answer
3. Prior to today, were you aware that environmental fees are used to support regulated recycling programs? **[DO NOT READ, CODE ONE ONLY]**
 - 1 Yes
 - 2 No
 - 8 Don't know/No answer
4. How familiar are you with the following recycling programs? Are you very familiar, somewhat familiar, not very familiar, or not at all familiar with ... **[READ AND ROTATE, CODE ONE ONLY]**
 - A The Used Oil Management Association
 - C The Used Tire Management program
 - D Beverage Container Return Program
 - F Multi Materials Stewardship Board (MMSB)
 - 1 Very familiar
 - 2 Somewhat familiar
 - 3 Not very familiar
 - 4 Not at all familiar
 - 8 Don't know/No answer



5. I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. To begin... **[READ AND ROTATE, EXCEPT ALWAYS READ 'A' BEFORE 'B' AND READ 'H' LAST]**

- a. Computer Monitors
- b. Desktop or notebook computers
- c. Printers
- d. Televisions
- e. DVD players
- f. VHS recorders/players
- g. MP3 or digital music players
- h. Land Line telephones
- i. Any other types of electronics that do not work or are not being used? **[SPECIFY: _____]**

- 1 Yes
- 2 No
- 8 Don't know/No answer

6. In the next 12 months how likely, if at all, would you be to do the following... Would you **[READ SCALE, READ AND ROTATE OPTIONS]**

- a. Drop off unwanted or old electronics at an ACES drop-off centre for recycling if it was available
- b. Donate unwanted or old electronics to charity or similar organization for reuse
- c. Give unwanted or old electronics to friends or family members for reuse
- d. Sell unwanted or old electronics

- 1 Definitely
- 2 Probably
- 3 Probably not, or
- 4 Definitely not

VOLUNTEERED

- 7 Depends where the depot is located
- 8 Don't know/No answer

SECTION 2:

Atlantic Canada Electronics Stewardship (ACES) is an industry-led, not-for-profit electronic recycling program where residents and businesses can drop off unwanted electronics free of charge at approved locations. The ACES program is currently discussing a possible expansion to include **Newfoundland and Labrador**. If so, an environmental handling fee (EHF) will be charged on the sale of new electronic products that are regulated under provincial law. These fees will cover costs solely related to the collection, transportation, administration and responsible recycling of these electronic items.



7. Understanding that an Environmental Handling Fee, or EHF would be charged on the sale of all new electronic products, do you have a completely favourable, mostly favourable, mostly unfavourable or completely unfavourable opinion of recycling programs for electronic products? **[CODE ONE ONLY]**

- 1 Completely favourable
- 2 Mostly favourable
- 3 Mostly unfavourable
- 4 Completely unfavourable

VOLUNTEERED

- 8 Don't know/No answer

8. In your opinion, do you completely agree, mostly agree, mostly disagree, or completely disagree that the ACES Program would help contribute to recycling and waste diversion in your province? **[CODE ONE ONLY]**

- 1 Completely agree
- 2 Mostly agree
- 3 Mostly disagree
- 4 Completely disagree

VOLUNTEERED

- 8 Don't know/No answer

Responsible recycling practices eliminate issues surrounding the management of waste electronics such as illegal dumping, shipping offshore to developing countries, improper handling or disposal of toxic materials, and inadequate health and safety systems for workers handling and processing this equipment.

9. Realizing that an Environmental Handling Fee (EHF) would be charged on the sale of all new electronic products, how important is it for you that the electronics recycling program ensures "responsible recycling"? Would you say it is ... **[READ IN ORDER, CODE ONE ONLY]**

- 1 Critically important
- 2 Important, but not critical
- 3 Not very important
- 4 Not at all important
- 8 Don't know/No answer

10. How important is it for you that participants in the electronics recycling program are audited by an independent third-party to ensure compliance with "responsible recycling" standards that have been established in Canada? Would you say this is ... **[READ IN ORDER, CODE ONE ONLY]**

- 1 Critically important
- 2 Important, but not critical
- 3 Not very important, or
- 4 Not at all important

VOLUNTEERED

- 8 Don't know/No answer



11. Realizing that an Environmental Handling Fee, or EHF would be charged on the sale of all new electronic products, do you completely support, mostly support, mostly oppose or completely oppose such an electronics recycling program being introduced in your area? **[CODE ONE ONLY]**

- 1 Completely support
- 2 Mostly support
- 3 Mostly oppose, or
- 4 Completely oppose

VOLUNTEERED

- 8 Don't know/No answer

12. Which of the following two options best describes how you would you prefer recycling fees on electronic products to be displayed in the stores? **[READ AND ROTATE, CODE ONE ONLY]**

- 1 I would prefer the Environmental Handling Fee amount to be identified separately from the price of the product
- 2 I would prefer the Environmental Handling Fee amount to be included in the price of the product.

VOLUNTEERED

- 97 Depends on the fee
- 98 Don't know/No answer
- 99 Other **[SPECIFY: _____]**

13. To what extent do you agree or disagree that retailers should display the Environmental Handling Fee for the Electronics Recycling Program separately from the price of the product. Do you... **[READ SCALE, CODE ONE ONLY]**

- 1 Completely agree
- 2 Mostly agree
- 3 Mostly Disagree, or
- 4 Completely Disagree

VOLUNTEERED

- 8 Don't know/No answer

14. To what extent would you support or oppose having the Environmental Handling Fee amount indicated on the receipt when you buy an electronic product? Would you... **[READ SCALE, CODE ONE ONLY]**

- 1 Completely support
- 2 Mostly support
- 3 Mostly oppose
- 4 Completely oppose
- 8 Don't know/No answer



15. **[DO NOT POSE IF 'DK/NA' IN Q.14]** And why do you **[SUPPORT/OPPOSE FROM Q.14]** having the Environmental Handling Fee indicated on the receipt? **[DO NOT READ, CODE ALL THAT APPLY] PROBE:** Anything else?

- 1 Shouldn't be everywhere/can be on the packaging only
- 2 People don't read their bills/waste of paper/ink
- 3 Need to know before buying/should be included in price
- 4 Knowledge of price increase would influence purchases
- 5 Would feel like an additional/hidden tax
- 6 Other **[SPECIFY:_____]**
- 7 Don't know/refused

16. To the best of your knowledge, are there any organizations in your local area that currently accept old or unwanted electronics for recycling? **DO NOT READ, CODE ONE ONLY]**

- 1 Yes
- 2 No

VOLUNTEERED

- 8 Don't know/No answer

17. **[ASK IF YES TO Q.16]** Can you name the organizations in your area that currently accept old or unwanted electronics for recycling? **[RECORD VERBATIM]**



Tabular Results

- ACES -

TABLE AC1:

Which of these three statements best describes your opinion regarding the environment?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
I am trying to be more aware of my environmental impact	64	64	67	63	60	69	54	66	72	57	70	63	59	59	74	66
I am passionate about trying to protect the environment	27	27	25	29	29	26	32	33	21	38	24	25	32	21	23	28
I have not done much to reduce my environmental impact	8	8	7	7	10	5	12	1	6	5	6	11	9	18	3	5
Don't know/No answer	1	0	1	1	1	0	1	0	1	0	1	1	0	2	0	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

TABLE AC2:

Do you completely agree, mostly agree, mostly disagree, or completely disagree that you are personally responsible for your own impact on the environment?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Completely agree	41	41	38	41	41	40	41	55	38	45	40	38	37	43	45	40
Mostly agree	51	51	54	50	51	52	47	40	57	52	53	49	47	52	51	53
Mostly disagree	6	6	3	6	6	5	6	5	3	1	5	8	7	5	3	5
Completely disagree	2	1	3	1	2	1	4	0	1	2	1	3	6	0	0	1
Don't know/No answer	1	0	1	1	0	1	2	0	0	0	1	1	3	0	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% AGREE	92	92	92	91	91	92	88	95	95	97	93	87	83	95	97	94
% DISAGREE	7	7	6	8	8	6	10	5	5	3	6	12	14	5	3	6

- ACES -

TABLE AC3:

Prior to today, were you aware that environmental fees are used to support regulated recycling programs?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	63	64	61	64	67	59	58	77	63	50	71	62	60	59	61	66
No	35	34	37	34	30	39	39	21	34	46	27	36	37	37	39	31
Don't know/No answer	2	2	2	3	3	2	2	2	3	4	1	2	3	4	0	2
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

TABLE AC4a:

How familiar are you with the following recycling programs? Are you very familiar, somewhat familiar, not very familiar, or not at all familiar with:

The Used Oil Management Association

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Very familiar	9	8	15	7	11	8	9	14	7	5	8	13	15	14	9	6
Somewhat familiar	19	20	19	19	25	14	19	24	16	14	25	17	14	18	25	20
Not very familiar	21	24	17	18	20	22	22	21	22	22	22	19	22	21	24	20
Not at all familiar	49	47	45	55	43	55	50	41	52	58	44	49	49	43	42	53
Don't know/No answer	1	1	3	0	2	1	0	0	2	2	1	1	0	5	0	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% FAMILIAR	29	28	35	26	36	22	28	38	23	19	33	30	29	32	34	26
% NOT FAMILIAR	70	71	62	73	63	77	72	62	75	79	66	69	71	64	66	73

- ACES -

TABLE AC4c:

How familiar are you with the following recycling programs? Are you very familiar, somewhat familiar, not very familiar, or not at all familiar with:

The Used Tire Management program

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Very familiar	20	21	21	17	25	14	14	24	22	14	19	23	20	18	28	17
Somewhat familiar	40	40	40	40	38	42	38	52	40	35	45	37	33	43	37	43
Not very familiar	15	12	21	17	13	18	19	13	12	13	14	18	21	9	20	13
Not at all familiar	24	26	19	24	24	24	26	10	25	37	19	20	23	30	15	25
Don't know/No answer	1	1	0	1	0	2	3	0	1	0	2	1	3	0	0	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% FAMILIAR	60	61	60	57	63	56	52	76	62	50	65	60	53	61	64	60
% NOT FAMILIAR	39	38	40	41	37	42	45	24	37	50	34	38	44	39	36	39

TABLE AC4d:

How familiar are you with the following recycling programs? Are you very familiar, somewhat familiar, not very familiar, or not at all familiar with:

Beverage Container Return Program

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Very familiar	65	67	62	63	59	71	59	71	68	60	69	65	58	69	65	67
Somewhat familiar	29	29	34	26	34	24	31	29	28	39	26	25	28	30	30	29
Not very familiar	2	2	2	4	4	1	4	0	2	0	3	4	6	1	2	2
Not at all familiar	3	2	1	5	3	3	6	0	2	1	1	5	7	0	4	2
Don't know/No answer	1	0	1	2	0	1	1	0	0	0	1	0	2	0	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% FAMILIAR	94	96	97	89	94	95	90	100	96	99	95	90	86	99	94	96
% NOT FAMILIAR	5	4	2	9	6	4	9	0	4	1	4	9	12	1	6	3

- ACES -

TABLE AC4f:

How familiar are you with the following recycling programs? Are you very familiar, somewhat familiar, not very familiar, or not at all familiar with:

Multi Materials Stewardship Board (MMSB)

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Very familiar	20	25	12	19	23	18	7	24	31	15	25	19	15	17	17	25
Somewhat familiar	34	37	37	27	36	32	29	46	37	30	39	30	26	17	33	42
Not very familiar	17	16	16	19	14	19	24	14	12	17	15	19	21	18	15	15
Not at all familiar	28	22	32	34	25	30	38	16	20	37	19	32	36	44	34	18
Don't know/No answer	1	0	3	1	1	2	1	0	1	2	1	1	2	4	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% FAMILIAR	54	61	49	46	59	49	36	70	68	44	64	48	41	34	51	67
% NOT FAMILIAR	45	38	48	53	40	49	63	30	31	54	35	51	57	62	49	33

TABLE AC5a:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. To begin:

Computer Monitors

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	21	22	17	21	22	20	11	26	25	21	27	13	6	21	32	24
No	79	77	82	79	78	79	88	73	75	79	73	86	94	76	68	76
Don't know/No answer	0	1	1	0	0	1	0	1	0	0	0	1	0	3	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

- ACES -

TABLE AC5b:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. Next:

Desktop or notebook computers

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	18	22	13	14	19	17	11	22	21	21	22	11	2	17	20	24
No	82	77	86	86	81	82	89	77	79	79	78	88	98	80	80	76
Don't know/No answer	0	1	1	0	0	1	0	1	0	0	0	1	0	3	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

TABLE AC5c:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. Next:

Printers

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	23	26	18	22	26	20	15	26	29	30	26	15	4	24	29	29
No	77	74	82	78	73	80	85	74	71	70	74	85	96	74	71	71
Don't know/No answer	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

- ACES -

TABLE AC5d:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. Next:

Televisions

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- <\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	26	23	36	25	33	20	21	28	31	26	28	25	23	30	31	26
No	73	77	64	74	67	79	79	72	69	74	72	74	77	69	69	74
Don't know/No answer	0	0	0	1	0	0	0	0	0	0	0	1	0	2	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

TABLE AC5e:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. Next:

DVD players

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- <\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	22	21	33	17	26	18	18	27	23	24	26	16	20	17	27	23
No	78	78	67	83	74	81	82	71	77	76	74	83	80	82	73	77
Don't know/No answer	0	1	0	0	0	1	0	1	0	0	0	1	0	2	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

- ACES -

TABLE AC5f:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. Next:

VHS recorders/players

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	28	28	31	26	33	23	18	34	35	30	32	21	15	26	31	33
No	71	72	68	72	66	75	81	66	64	70	68	76	84	72	67	66
Don't know/No answer	1	1	1	1	0	1	1	0	1	0	0	3	1	2	2	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

TABLE AC5g:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. Next:

MP3 or digital music players

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	20	23	15	19	21	19	11	18	28	34	20	10	8	29	27	21
No	80	77	85	81	78	81	89	82	72	66	79	90	92	71	73	79
Don't know/No answer	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

- ACES -

TABLE AC5h:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. Next:

Land line telephones

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	23	19	26	28	30	17	19	25	27	22	26	21	19	22	22	26
No	76	80	73	71	69	82	80	75	73	78	73	77	78	77	78	74
Don't know/No answer	1	1	1	1	1	1	1	0	1	0	1	2	2	2	0	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

TABLE AC5i:

I am going to read a list of different types of electronic devices. Please indicate if you have any of the following electronics in your household that do not currently work, or are no longer being used. Next:

Any other types of electronics that do not work or are not being used?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	21	22	15	22	26	16	18	21	24	33	21	12	10	12	28	25
No	78	76	85	78	74	82	80	79	76	67	79	85	88	88	70	74
Don't know/No answer	1	2	0	1	0	2	2	0	1	0	1	2	1	0	2	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

- ACES -

TABLE AC5i:

OTHER MENTIONS

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Cell phone	43	48	22	43	32	58	43	58	27	45	47	31	40	0	73	40
Stereo components/Tape deck/CD player	17	22	9	13	21	11	29	6	15	21	9	26	40	14	11	16
Camera/Camcorder	17	14	24	18	12	24	10	13	28	30	13	0	0	25	0	24
Radio	9	2	23	14	12	4	13	14	5	4	7	21	0	27	0	11
Gaming systems	8	3	14	15	8	9	13	0	11	17	5	0	0	34	0	9
Satellite receiver	3	2	0	6	2	5	6	0	2	0	7	0	0	0	0	5
Photo copier/scanner/fax	2	2	8	0	2	2	0	5	3	0	2	6	0	0	0	3
Portable walkman/CD player	2	4	0	0	0	5	0	9	0	0	5	0	0	0	0	3
Other	18	25	0	14	17	19	7	12	20	8	26	17	20	0	16	20
WEIGHTED SAMPLE SIZE (#)	82	44	12	27	49	33	25	17	34	31	34	17	9	7	16	51
UNWEIGHTED SAMPLE SIZE (#)	74	42	9	23	43	31	21	16	29	19	36	19	9	5	13	47

TABLE AC5:

Indicated "YES" to having at least one of the following electronics in your household that do not currently work, or are no longer being used.

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	70	70	74	68	76	64	60	69	80	82	73	58	52	75	81	73
No	30	30	26	32	24	36	40	31	20	18	27	42	48	25	19	27
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

- ACES -

TABLE AC6a:

In the next 12 months, how likely, if at all, would you be to do the following? Would you definitely, probably, probably not, or definitely not:

Drop off unwanted or old electronics at an ACES drop-off centre for recycling

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- <\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Definitely	66	65	61	71	68	64	69	69	63	65	67	65	66	65	59	68
Probably	25	26	28	22	25	25	23	22	27	28	26	22	22	26	31	25
Probably not	6	7	8	3	6	6	4	5	9	5	5	7	6	3	10	5
Definitely not	2	1	3	4	0	4	3	4	1	1	2	4	4	6	0	1
Depends where the depot is located	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Don't know/No answer	1	1	0	0	0	1	1	0	1	0	0	1	1	0	0	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% DEFINITELY/PROBABLY	91	91	89	93	93	89	93	91	90	94	92	88	88	91	90	93

TABLE AC6b:

In the next 12 months, how likely, if at all, would you be to do the following? Would you definitely, probably, probably not, or definitely not:

Donate unwanted or old electronics to charity or similar organization for reuse

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- <\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Definitely	55	56	56	55	52	58	48	61	57	64	55	50	44	59	52	60
Probably	32	33	31	32	37	28	37	28	32	31	30	36	37	26	40	30
Probably not	8	9	9	7	8	9	8	11	8	3	11	9	11	10	7	7
Definitely not	3	1	3	6	3	3	5	0	4	1	3	3	6	3	0	3
Don't know/No answer	1	1	1	1	0	2	2	0	0	0	1	2	2	2	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% DEFINITELY/PROBABLY	88	89	87	86	89	86	85	89	89	96	85	86	81	85	93	90

- ACES -

TABLE AC6c:

In the next 12 months, how likely, if at all, would you be to do the following? Would you definitely, probably, probably not, or definitely not:

Give unwanted or old electronics to friends or family members for reuse

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Definitely	49	50	52	44	45	52	47	52	52	65	47	39	48	51	44	50
Probably	30	27	32	34	35	26	28	31	32	27	35	27	24	26	39	31
Probably not	13	13	9	14	14	12	13	13	10	5	13	18	11	8	12	14
Definitely not	9	10	6	9	7	10	11	3	6	3	6	16	16	15	5	5
Depends where the depot is located	0	0	1	0	0	0	1	0	0	0	0	1	1	0	0	0
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% DEFINITELY/PROBABLY	79	77	84	77	79	78	75	84	84	91	82	65	72	77	83	81

TABLE AC6d:

In the next 12 months, how likely, if at all, would you be to do the following? Would you definitely, probably, probably not, or definitely not:

Sell unwanted or old electronics

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Definitely	16	14	15	19	16	16	19	13	14	26	16	8	15	9	17	18
Probably	24	19	32	28	29	20	23	25	25	27	26	20	27	12	30	26
Probably not	30	36	25	22	26	33	23	38	33	32	32	25	16	41	30	32
Definitely not	30	31	28	31	30	31	36	23	28	15	26	46	42	38	22	25
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% DEFINITELY/PROBABLY	40	33	47	47	45	36	42	39	39	53	42	28	42	21	48	43

- ACES -

TABLE AC7:

Understanding that an Environmental Handling Fee, or EHF would be charged on the sale of all new electronic products, do you have a completely favourable, mostly favourable, mostly unfavourable, or completely unfavourable opinion of recycling programs for electronic products?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Completely favourable	23	26	16	22	21	25	26	26	21	37	15	22	18	19	28	25
Mostly favourable	49	45	59	48	43	54	45	55	49	40	55	46	50	58	43	46
Mostly unfavourable	13	13	9	13	14	11	11	8	16	6	15	15	11	11	15	13
Completely unfavourable	10	9	10	10	15	5	13	6	8	6	9	12	16	8	11	7
Don't know/No answer	6	7	5	6	8	5	5	6	6	10	6	4	4	4	3	9
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% FAVOURABLE	71	71	75	70	64	79	71	81	70	77	70	68	69	78	71	71
% UNFAVOURABLE	22	23	20	23	29	16	23	14	24	12	24	27	27	18	26	20

TABLE AC8:

In your opinion, do you completely agree, mostly agree, mostly disagree, or completely disagree that the ACES Program would help contribute to recycling and waste diversion in your province?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Completely agree	34	39	28	31	31	38	37	39	31	44	29	35	35	36	42	32
Mostly agree	49	44	55	51	50	47	45	53	49	46	51	48	45	53	39	52
Mostly disagree	7	7	9	6	7	7	7	4	10	6	9	6	5	5	12	7
Completely disagree	5	4	3	7	8	1	4	3	6	2	6	4	5	3	6	4
Don't know/No answer	5	5	4	5	3	7	8	1	3	2	5	7	10	3	2	4
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% AGREE	83	84	83	82	81	85	82	92	80	89	80	83	80	89	81	84
% DISAGREE	12	11	13	13	16	9	10	7	16	9	15	10	10	8	17	12

- ACES -

TABLE AC9:

Realizing that an Environmental Handling Fee (EHF) would be charged on the sale of all new electronic products, how important is it for you that the electronics recycling program ensures responsible recycling? Would you say it is:

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Critically important	45	47	43	43	42	47	44	52	43	52	46	39	43	43	53	44
Important, but not critical	45	44	44	45	41	48	43	46	46	44	42	48	42	44	37	48
Not very important	5	5	6	4	8	2	4	0	6	4	6	4	5	10	5	3
Not at all important	4	2	6	5	7	0	5	2	4	0	4	6	5	2	3	3
Don't know/No answer	2	2	1	3	1	3	4	0	1	0	3	3	5	0	2	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% IMPORTANT	90	91	88	88	84	95	87	98	89	96	88	87	85	88	90	93
% NOT IMPORTANT	8	7	11	9	15	2	9	2	10	4	9	11	10	12	8	6

TABLE AC10:

How important is it for you that participants in the electronics recycling program are audited by an independent third-party to ensure compliance with responsible recycling standards that have been established in Canada? Would you say this is:

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Critically important	52	56	47	48	52	51	44	65	54	43	55	54	43	47	50	57
Important, but not critical	37	34	39	41	34	40	44	27	38	50	37	30	42	38	43	34
Not very important	6	7	7	4	6	5	6	6	4	5	6	7	9	9	3	4
Not at all important	3	2	5	2	5	1	4	2	2	0	2	6	4	3	3	2
Don't know/No answer	2	1	1	5	2	2	2	0	2	2	1	3	2	3	0	2
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% IMPORTANT	89	91	87	89	87	92	88	92	91	92	92	84	85	85	94	92
% NOT IMPORTANT	9	9	12	6	11	7	10	8	7	5	8	13	13	12	6	7

- ACES -

TABLE AC11:

Realizing that an Environmental Handling Fee, or EHF would be charged on the sale of all new electronic products, do you completely support, mostly support, mostly oppose or completely oppose such an electronics recycling program being introduced in your area?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Completely support	33	35	34	29	29	37	33	40	30	43	28	32	28	26	31	37
Mostly support	48	47	51	50	48	48	49	51	49	48	51	45	47	63	43	47
Mostly oppose	8	8	6	9	9	7	8	2	11	5	10	8	9	7	11	7
Completely oppose	8	8	6	9	13	4	7	6	8	4	8	11	10	4	12	7
Don't know/No answer	3	3	3	3	2	4	4	0	3	0	3	5	6	0	3	2
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% SUPPORT	81	81	84	79	77	85	81	91	78	91	79	77	75	89	74	84
% OPPOSE	16	16	12	18	21	11	15	9	19	9	18	18	19	11	23	14

TABLE AC12:

Which of the following two options best describes how you would you prefer recycling fees on electronic products to be displayed in the stores?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
I would prefer the Environmental Handling Fee amount to be identified separately from the price of the product	53	58	50	47	56	50	46	57	58	42	61	51	43	42	54	59
I would prefer the Environmental Handling Fee amount to be included in the price of the product	43	39	47	46	37	48	48	43	36	54	36	42	52	53	40	37
Shouldn't be a handling fee/Don't want to pay fee	2	0	1	5	3	1	2	0	3	2	1	2	2	2	4	1
Other	1	2	0	0	2	0	1	0	1	2	1	0	0	0	0	2
Don't know/No answer	2	2	1	2	2	2	3	0	1	0	1	5	3	3	2	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

- ACES -

TABLE AC13:

To what extent do you agree or disagree that retailers should display the Environmental Handling Fee for the Electronics Recycling Program separately from the price of the product? Do you:

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Completely agree	45	46	47	43	50	41	44	43	49	40	47	47	35	40	44	51
Mostly agree	30	28	26	35	26	33	31	33	26	28	32	28	41	27	22	29
Mostly disagree	13	12	13	14	12	13	10	15	14	18	11	11	9	19	15	12
Completely disagree	9	11	9	7	10	9	10	9	9	12	9	8	10	10	17	6
Don't know/No answer	3	2	5	1	2	4	5	0	2	2	1	5	5	5	2	2
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% AGREE	75	75	72	77	76	74	75	76	74	68	79	75	76	67	66	79
% DISAGREE	22	23	22	21	22	22	20	24	23	30	20	19	19	29	32	19

TABLE AC14:

To what extent would you support or oppose having the Environmental Handling Fee amount indicated on the receipt when you buy an electronic product? Would you:

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Completely support	52	56	44	51	51	53	44	56	59	54	55	47	37	59	56	55
Mostly support	35	32	41	37	34	37	42	37	29	33	35	37	47	30	27	34
Mostly oppose	6	5	8	7	8	5	6	3	7	8	6	6	7	7	8	5
Completely oppose	5	6	3	5	5	5	8	4	4	5	4	7	7	3	7	5
Don't know/No answer	1	1	2	0	2	0	1	0	2	0	1	3	2	0	2	1
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193
% SUPPORT	87	88	86	88	85	89	85	93	88	88	90	84	84	89	83	90
% OPPOSE	12	11	12	12	13	10	14	7	11	12	10	13	14	11	15	10

- ACES -

TABLE AC15: TOTAL MENTIONS

[DO NOT POSE IF DON'T KNOW/NO ANSWER IN Q.AC14] And why do you support or oppose having the Environmental Handling Fee indicated on the receipt?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Need to know before buying/should be included in price	35	32	39	35	35	34	31	47	36	31	37	34	32	44	36	32
To see actual cost of environmental handling fee/To know where the money is going	31	34	26	27	33	28	26	35	35	36	31	26	22	26	35	34
Knowledge of price increase would influence purchases	11	14	10	9	10	13	10	14	9	14	10	11	13	7	10	13
Would feel like an additional/hidden tax	5	4	4	5	6	4	4	5	4	0	7	5	7	2	2	5
Make people more environmentally aware/Encourage people to recycle	3	3	4	4	3	4	4	1	5	4	4	3	1	0	0	6
People don't read their bills/waste of paper/ink	2	3	4	1	4	1	2	1	3	5	2	1	3	3	2	2
People will complain about fee	2	2	1	2	1	3	1	0	3	3	1	2	2	4	0	2
Shouldn't have to pay an environmental handling fee	2	2	0	2	3	1	2	0	3	2	1	2	1	0	6	1
Shouldn't be everywhere/can be on the packaging only	0	1	0	0	0	1	0	0	1	0	1	1	0	0	3	0
Other	12	13	10	12	13	12	17	11	10	14	11	12	12	11	15	12
Don't know/Refused	7	5	11	7	7	7	9	7	3	4	4	13	13	7	1	6
WEIGHTED SAMPLE SIZE (#)	395	194	76	126	188	207	136	79	141	97	165	134	82	56	56	198
UNWEIGHTED SAMPLE SIZE (#)	395	198	71	126	187	208	142	78	131	59	177	159	93	55	53	191

- ACES -

TABLE AC15: TOTAL MENTIONS

[DO NOT POSE IF DON'T KNOW/NO ANSWER IN Q.AC14] And why do you support having the Environmental Handling Fee indicated on the receipt?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- \$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Need to know before buying/should be included in price	37	35	40	37	37	36	35	46	37	32	39	37	35	49	39	33
To see actual cost of environmental handling fee/To know where the money is going	34	38	30	31	38	31	30	37	38	41	33	30	25	27	41	38
Knowledge of price increase would influence purchases	13	15	11	10	11	14	12	15	10	16	11	13	15	7	11	14
Would feel like an additional/hidden tax	5	5	3	5	5	4	4	5	3	0	7	5	6	2	3	5
Make people more environmentally aware/Encourage people to recycle	4	3	4	5	3	4	4	1	5	4	4	3	1	0	0	7
People don't read their bills/waste of paper/ink	1	1	2	1	1	1	1	1	2	0	2	1	1	0	2	1
People will complain about fee	1	2	0	1	1	2	0	0	2	2	1	1	2	4	0	1
Shouldn't be everywhere/can be on the packaging only	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0
Other	11	12	8	11	12	10	14	10	9	16	9	11	10	9	13	12
Don't know/Refused	6	3	12	5	6	5	6	6	3	3	3	10	11	7	0	5
WEIGHTED SAMPLE SIZE (#)	349	172	67	111	163	186	117	73	125	85	149	116	71	50	47	179
UNWEIGHTED SAMPLE SIZE (#)	350	176	63	111	165	185	123	73	117	52	161	137	81	49	44	174

- ACES -

TABLE AC15: TOTAL MENTIONS

[DO NOT POSE IF DON'T KNOW/NO ANSWER IN Q.AC14] And why do you oppose having the Environmental Handling Fee indicated on the receipt?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Need to know before buying/should be included in price	19	12	29	22	23	14	5	59	23	19	22	15	15	0	19	27
Shouldn't have to pay an environmental handling fee	14	18	0	17	20	8	14	0	26	15	15	13	7	0	37	14
People don't read their bills/waste of paper/ink	11	16	18	0	21	0	10	0	12	44	0	0	16	28	0	9
People will complain about fee	8	3	10	13	4	13	7	0	10	11	5	8	0	10	0	16
Would feel like an additional/hidden tax	5	0	13	6	8	0	5	0	8	0	7	5	10	0	0	5
To see actual cost of environmental handling fee/To know where the money is going	3	7	0	0	3	4	0	0	5	0	10	0	0	14	0	4
Shouldn't be everywhere/can be on the packaging only	2	4	0	0	0	5	0	0	0	0	0	5	0	0	11	0
Knowledge of price increase would influence purchases	2	4	0	0	4	0	0	0	6	0	6	0	0	0	0	5
Other	21	20	23	21	15	28	33	17	17	0	34	23	24	34	24	14
Don't know/Refused	19	22	7	22	10	29	27	24	4	11	11	30	29	14	8	15
WEIGHTED SAMPLE SIZE (#)	46	22	9	15	25	21	19	6	15	12	16	18	12	6	9	19
UNWEIGHTED SAMPLE SIZE (#)	45	22	8	15	22	23	19	5	14	7	16	22	12	6	9	17

TABLE AC16:

To the best of your knowledge, are there any organizations in your local area that currently accept old or unwanted electronics for recycling?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Yes	19	24	8	18	24	15	10	15	29	24	22	12	6	24	18	24
No	67	57	85	73	65	70	74	66	63	51	71	75	83	63	66	62
Don't know/No answer	13	19	6	9	11	15	15	19	9	24	7	13	11	13	16	14
WEIGHTED SAMPLE SIZE (#)	400	196	78	126	192	208	137	79	143	97	166	138	84	56	57	200
UNWEIGHTED SAMPLE SIZE (#)	400	201	73	126	191	209	144	78	134	59	178	163	95	55	54	193

- ACES -

TABLE AC17: TOTAL MENTIONS

[ASK IF YES TO Q.16] Can you name the organizations in your area that currently accept old or unwanted electronics for recycling?

	NEWFOUNDLAND AND LABRADOR %	REGION			GENDER		INCOME			AGE			EDUCATION			
		St. John's/ Avalon	East	West	M	F	L.T. \$50K	\$50- -\$75K	\$75K+	18- 34	35- 54	55+	L.T. H.S.	Grad H.S.	Some P.S.	Grad P.S.
Community/Charitable organizations	18	14	25	23	28	3	18	0	23	15	23	10	49	7	32	14
Schools	14	15	16	12	15	13	10	30	12	6	19	14	0	13	23	14
Computer/Electronic stores	13	18	0	6	9	18	10	14	13	25	9	4	0	13	0	17
Cell phone/Telecommunication companies	10	11	42	0	9	12	7	0	13	8	5	26	12	0	6	14
Municipal/Town recycling program	7	5	0	13	9	4	6	7	7	5	7	9	15	0	0	9
Second hand stores	4	5	0	3	3	6	5	0	6	7	2	4	0	19	0	1
Other	21	16	16	33	18	26	23	42	16	29	17	18	0	46	21	16
Don't know	25	27	16	22	20	32	31	22	21	18	30	23	24	16	32	26
WEIGHTED SAMPLE SIZE (#)	77	48	7	23	45	31	14	12	41	24	37	17	5	13	10	48
UNWEIGHTED SAMPLE SIZE (#)	77	49	6	22	48	29	14	12	39	15	42	20	5	12	12	48

‘Appendix G’

EPRA NS & PEI Stewards (as of Jan. 31, 2013)	
100743 PEI Inc.	Ken-Porter Conseillers Ltee
1135378 Ontario Ltd.	Kenwood Electronics Canada Inc.
1212326 Ontario Inc.	KESS Computer Limited
1485608 Ontario Inc.	Kevin P. Smith Holdings Ltd.
2268853 Nova Scotia Limited	King Laser Products Incorporated
2511862 Nova Scotia Ltd	King's-Edgehill School
3020300 Nova Scotia Ltd	KJQ Computer Services
3136231 Nova Scotia Ltd.	Kodak Canada Inc
3022327 Nova Scotia Limited	Kodak Graphic Communications Canada Company
3195912 Nova Scotia Limited	Konica Minolta Business Solutions (Canada) Ltd.
3255549 Nova Scotia Ltd.	Kroll Computer Systems Inc.
3216558 NOVA SCOTIA LIMITED	L&M Mercier Enterprises Inc
341234 BC Ltd	L. M. Computers Ltd.
3627730 Canada Inc.	LA CO-OPERATIVE DE CHETICAMP LIMITEE
3D datacomm Inc.	KESS Computer Limited
3-Way Systems Canada Inc	La Cie Peripherals Inc.
9097-1086 Quebec Inc.	Lantz Electronics Limited
941362 Ontario Inc.	LCR Computer Consulting
A&J Networking Solutions	Leitch Automotive Limited
A & M Wardell Sales Ltd	Lenovo (Canada) Inc.
A. J. ACHESON SALES LIMITED	Leon's Furniture Limited
A.H. Cunningham Sales Ltd.	Les Systemes Informatique O. G. C. Inc.
Aardvark Computer Solutions	Lester A Daurie
Aaron's Inc.	Lewco Funiture Inc
ABM Systems Limited	Lexmark International, Inc.
ABRAM FURNITURE INC	LG Electronics Canada Inc.
Acer America Corporation	Liteline Corporation
Acrodex Inc.	Little Mac Shoppe Inc.
Active Technology Datasystems Limited	LNC Computer Services and Consulting
ADP Canada Co.	Loblaw Companies Ltd
AFK Computer Services	Logos Are Lame Clothing Company
Agilent Technologies Inc	London Drugs Limited
Ahearn & Soper Inc	Long and McQuaid Limited
AIMIA Proprietary Loyalty Canada Inc.	LP Electronics
All About Printers	Lymb Solutions
Alpine Electronics of Canada Inc.	LynXphere Dealer Channel Inc.
AM PM Service Ltd.	Lyreco Office Products Inc.
AMAloha	M&VT Computer Services
AML Communications Inc.	Mac East Limited
Amway Canada Corporation	Macholl IT-Services

Andrew Gouin	Make It Go
Andrew's Mobile DJ Service Ltd.	Mandala Systems Limited
Annapolis Appliance Sales & Service Ltd.	Marian Richard Enterprises Inc.
APro Computer Services Ltd.	Maritect Investigations and Security Limited
Apple Canada	Martin Leclercq holding INC.
Aptika	Maritz Canada Inc.
Aralex Acoustics Ltd.	MarMich Computers Ltd
ASI Computer Technologies (Canada) Corp.	Marshalls Gifts & Souvenirs
Asia Link Computer Inc.	MDG Computers Canada Inc.
Associated Maritime Pharmacies Limited	Maximizing Today's Telecommunications Inc
Atlantic Car Stereo Ltd.	megadeals r us inc.
Atlantic Datasystems Inc.	Metafore Technologies Inc.
Atlantic Digital Reproductions Incorporated	Metro Micro Products
Atlantic Geomatics Research Inc.	Micro Computer Atlantic Limited
Atlantic Mobility Products LLP	Micro Electronics
Audio Visual System Integration	Microcad Computer Corporation
AVAD Canada Ltd	Microsoft Corporation
Avaya Inc.	micro world computer services
Avnet International (Canada) LTD.	Micwil Group of Companies
Avon Micro Systems	Mid-Range Computer Group Inc.
A-Z Printers Plus Inc.	Mike Greek - Computer Sales & Service
B & D Technology Inc.	Mistique Computing
B & H Hinze Enterprises Ltd.	Mitek Canada Distribution, A Partnership
B & M Computer Services	Mitel Networks Corporation
Backman Vid-Comm Ltd.	Mitsubishi Electric Sales Canada Inc.
Basics Office Products Ltd.	Montague Office Supplies
Basin Stationary & Office Supplies Ltd.	Motion Computing
Beckman Coulter Canada LP	Motorola Mobility Inc.
Bell Aliant Regional Communications Limited Partnership	Mr. Surplus
Bell Canada - Bell Mobility	MTI - MOBILTECH INTERNATIONAL INC.
Bell Canada - Bell TV	MyAXS Inc.
BenQ Canada Corp.	Nanuq Resources Inc.
Best Buy Canada Ltd.	Navigator Technologies
Big John's Computers	NCR Canada Ltd.
Big Lots Canada Inc.	NEC Display Solutions of America, Inc.
Bitmore Computers	Nedtek Computer Solutions Inc.
Black Fly Bytes	Nerds On Site Inc
Blair's Computer Service	NetConnect
BlueCurl	Net-X Computer Technologies Incorporated
Bluerange Technology Inc	Netlink Computer Inc
BNKL Computer Services	Neural Net Technologies
Bose Limited	New Horizon Computers & Consultants
Bradley's Entertainment Centre LTD	New Line Incentives Inc
Bridgetown Pharmacy Ltd	New Wave Enterprise Ltd
Brilliance Computer Technologies Inc.	Newegg Canada Inc.

Brother International Corp. (Canada) Ltd.	Nikon Canada Inc.
brucesonline.com	Northern Micro Inc.
BRUNSCO INC.	Nova Networks Inc.
BT Computer Services Inc.	Ntyce Motorsports Ltd.
Buffett's Office Supplies Limited	NWD Systems Montreal Inc. / Les Systemes NWD (Montreal) inc.
Bulletproof Solutions Inc.	NXSource Technology Inc.
Burkes TV & Appliance Ltd.	Oak Incentives Group Inc.
BurnMac Computers & Consulting	Office Interiors
Burtek Systems Corporation	Office-Xperts Inc.
C.Robertson Business Equipment Ltd.	OKI DATA AMERICAS, INC
Cabot Tech Computers Inc.	Old Mill Computer Services
Caissieco Enterprises Ltd.	On Grade Inc.
Callbeck's Furniture (Leon's) Ltd.	ON-LINE Computer Services Inc
Calvin's T.V. Sales & Service Ltd.	On-Site Computer Services of Halifax
CAMACC Systems Inc.	OnX Canada Inc.
Camnex Marketing Inc.	OnX Enterprise Solutions Ltd.
Canadian Tire Corporation, Limited	Oracle Canada ULC
Canadian Retail Solutions Inc.	Oracle Resource Group
Canflor Holdings Limited	Orange Llama Computers
Canon Canada Inc	Owlscrest Computing
CAPFLEX Networking	P I Incentives Ltd.
Captain Andrew J. Rae & Sons Limited	Panasonic Canada Inc.
Carsand-Mosher Photographic Ltd.	Parallel Systems Computer Services
Cascadia Motivation Inc.	Parker's Satellite & Tech Shop Inc
Cashier Pro Retail Systems Inc.	Patterson Dental Canada Inc.
Cassa Business Equipment (1987) Ltd.	Payne Distributors Inc.
CBCI Telecom Canada Inc.	PBS Financial Systems Inc.
CDW Canada Inc.	PC Corp Inc.
CENDIRECT.COM.INC	PC Mall Canada Inc.
Central Distributors Ltd.	PC Medic Inc.
Central Microsystems 4000 Inc.	Peak Audio Ltd.
Century Computer Sales & Service Limited	Pelican Engineering, Inc.
Christie Digital Systems Canada, Inc.	Peter Kopf's Auto Sound
C.I. Redden Ltd.	PFW Systems Corporation
Circus World Displays Ltd.	Phaselock Systems International Inc.
Cisco Systems Inc.	Philips Electronics Ltd.
CJP Computers	Philips Electronics Ltd. - Speech
Clarion Canada Inc.	Pioneer Electronics of Canada, Inc.
Coasters Computers	Pitney Bowes Inc.
Cochrane Computer Services	Plantronics B.V.
Cogeco Data Services	POS Depot Inc.
Collteck Computers	Positec Solutions Inc.
Combat Computers	Powernode Computer Inc.
CommuniTeK Inc	Powerone Technologies Inc.
Compu-Clone Computer Solutions Inc.	Precious Pig Systems and Consulting Incorporated

CompuCom Canada Corp.	Precision Computer Services
Compugen Inc.	Precision Sound Corporation
Computer Dynamics Inc.	Pro-Data Inc.
Computer Dynamics	Protek Corporation
Computer Informatics Solutions	Proudfots Incorporated
Computer Systems Centre Corp.	Pulsar Computer Systems
Computerized Business Solutions	Quality Cameras & Computers Ltd.
Compuvision Systems Inc.	Quartet Service Inc.
Comtronic Computer Inc.	R S KOMPUTER KARE LTD.
Conex Business Systems Inc	R.P.Anaka Investments Ltd.
Connolly Security Systems Ltd.	R.C. Lawrie Enterprises
Connors Office Products Ltd	RDE Computer Sales
Coopers Custom Computers	R.H. Davis & Company Limited
Corporate Express Canada, Inc.	Randmar Inc.
Corporate Impact INC.	Redpoll Computer Consulting
COSTCO Wholesale Canada LTD	Rent a Centre Canada Ltd.
Coulstrings Rentals & Repairs	Ribbons Recycled Inc.
Creative Auto Images	Richard Bennett Associates, Inc.
Crutchfield Corporation	Ricoh Canada Inc.
CSG Security Systems	Rinax Systems Ltd
CT Corporate Services Inc	RMF MicroComputer Services
Cumberland Satellite	Robert Bosch Inc.
D & D Consulting	Robin Cook Enterprises Limited
D & H Canada	Rogers Furniture Co.Ltd.
D & M CANADA Inc.	Robert Wagner : Computer Sales & Service
D&P Desktop Solutions	Rogers Communications Inc.
D&W Détaillants	RTO Asset Management
D and L Guitard Sales INC	Rugged Technologies Inc.
D.P. Thistle Consulting Ltd.	Ru-Link Computer Corp
Daiwa Distribution (Ontario) Inc.	S.P. Richards Co. Canada Inc.
Dalhousie University	Sak Data Products Ltd.
Data Integrity Inc.	Samsung Electronics Canada Inc.
Datarite Limited	SANity Computer Consulting
DataSpeak Incorporated	SARCOM, INC.
DATAWAVE Computer and CATV Limited	SaulTech Computers
Dataworld (Canada) Inc.	ScanProf
DBW Computer Solutions	Schaffner Computers Sales and Service
DC Drive Electronics	Schwartz & Company (2000) Ltd.
DELL CANADA INC	Schwartz & Company (2006) Limited
Demings Consulting - Accounting, Computerization, Training	Scott Adams
Derek Hutchinson Sales Limited	SARCOM, INC.
D.P. Thistle Consulting Ltd.	SaulTech Computers
Desktop Computer Systems (Truro) Ltd.	ScanProf
Digby Audio World LTD	Schaffner Computers Sales and Service

Digital nGenuity Consulting Ltd.	Schwartz & Company (2000) Ltd.
Digital River globalTech, Inc.	Schwartz & Company (2006) Limited
Dihedral Video Services Ltd.	Scott Adams
Direct Canada Computer Inc.	Sears Canada Inc.
DIS (Dealer Information Systems) Limited	Seashore Electronics Ltd.
DLS PC Services	Seaside Communications Inc.
Dobson's Stationers (1974) Ltd.	Serious Sounds
Dorazio Retail Group	SF Marketing Inc.
Dorcas's PC Services	Sharp Electronics of Canada Ltd
Dramis Network Cabling (NS) Ltd	Shaw Communications Inc.
Dramis Network Cabling (2009) Ltd	SHI Canada ULC
Dulong's PC Repair	Shopalicity Inc.
DTM Systems Corp.	Shelburne Furniture & Appliances Ltd.
Dymaxion Research Limited	Shoppers Drug Mart Inc
Eaglez Consulting Services	Shopstar Network Inc.
EagleSpirit Marketing Inc.	Shoreline Business Machines Limited
Eastern Office Supplies Limited	Silicon Mechanics Inc.
Eco Laser Inc.	Sites & Bytes Computers
eLab Inc.	Site-to-Site Computers
ELCO Systems (Halifax)	Sky-Tec Electronics Ltd.
Electronics Boutique Canada Inc.	SLC Computer Consulting
Ellis and Birt Limited	Slick Solutions for Computers
Emergis Inc	Soehner Sales Limited
Emerich Winkler	Softchoice Corporation
Enablecore Technologies Inc.	Sony Computer Entertainment Canada
Enman Auto Supply Ltd.	Sony of Canada Ltd
Epicor Software Corporation	S.O.S. Computer Solutions
Epicor Solutions Canada LTD.	Sound by Baak Audio/Video Solutions
EOpen Solutions Inc.	Soroc Technology Inc.
EPROM INC	South Shore Computer Sales & Service
Epson Canada Limited	Splice Training
Everything CPU Repair	St. Peter's Grenville Computer
Evolution Hosting Solutions Inc.	St. Peter's Hardware Limited
F & K Computer Sales & Service	STAPLES THE BUSINESS DEPOT
Failsafe Computer Services	Stephen K. Mann Limited
Fairchild Development Ltd.	Steve's Computer Services
Fairlane Performance Management Inc.	StudentComputers.ca
FileHBS Systems, Inc.	Supercom Canada Ltd
Fisher Electric	Superior Computers Inc.
FH Campbell Computer Sales	Surrogate Technology Management Inc.
Fourniture de Bureau Denis Inc.	Swoopo Entertainment Shopping, Inc.
FrontierPC.com Computer Inc.	Symbex Business Supplies & Design
FUJIFILM Canada Inc.	Synnex Canada Limited
Fujitsu Canada Inc	Syspro Proven Systems
Full Spectrum Computers	T.H.E. Pridham's Studio Ltd.

G&G Computers Inc	Taknology (Canada) INC.
Games People Play!	Talon Computer Repair
Garden Isle Computing 2005 Inc.	Target Canada Co.
Gator Byte Computers & Entertainment	TBC Computer Sales & Services "Two Bad Cats" Ltd.
GBR Computers	TCS Computer
GBS Communications	TDM Computer Repairs
GEMS Computer Services	TEAC AMERICA INC.
General Electric Canada	Tech Data Canada Corporation
GEP Sales Inc.	Techome Computer and Technical Services
Glendyn Consulting Inc.	Techmania Inc.
Globalware Solutions Inc	Technology Solutions International Ltd.
Gord MacDonald Sales Inc.	TechTom Multitasking
gow's frig-air	Telecom Computer Inc.
Grand & Toy Limited / Grand & Toy Limitee	TELUS Communications Company
Gunnebo Canada Inc.	The Bargain! Shop Holdings Inc.
H. MacPhersons Deli Ltd.	The Brick Warehouse LP
Hachette Distribution Services	The Cotton Penguin Inc.
GEP Sales Inc.	The Fax & Printer Guy Inc.
Glendyn Consulting Inc.	The Hardman Group Limited
gow's frig-air	The New Sound LTD
Grand & Toy Limited / Grand & Toy Limitee	The Priestman Electronics Corporation
Gunnebo Canada Inc.	The Source (Bell) Electronics Inc.
H. MacPhersons Deli Ltd.	Thewebbeach.com Inc.
Hachette Distribution Services	Thing Technologies Ltd
Globalware Solutions Inc	Tigerdirect.ca Inc.
Gord MacDonald Sales Inc.	TJX Canada
gow's frig-air	TLD Computers Inc.
Haier America Trading, L.L.C.	Tom Chediack Furniture & Appliances Ltd.
Hall Telecommunications Supply Ltd.	Tom Mara Enterprises Limited
Happy Computers	ToadCo. Computers
Harbour View Technical	Top Down Electronics
Hard Drive Café	Toshiba Global Commerce Solutions (TGCS)
Hartco Distribution Limited Partnership	TOSHIBA OF CANADA LIMITED
HCQ Technologies	Toshiba Tec Canada
Henry's (A Division of Cranbrook Glen Ent.)	TouchStart Limited
Her Majesty the Queen in Right of Canada as Represented by the Chief of Defense Staff in His Non Public Property Capacity (CANEX Expressmart Shearwater)	Town's End Strings and Things Ltd
Her Majesty the Queen in Right of Canada as Represented by the Chief of Defense Staff in His Non Public Property Capacity (CANEX Retail Store Windsor Park)	Toysrus (Canada) LTD
Her Majesty the Queen in Right of Canada as Represented by the Chief of Defense Staff in His Non Public Property Capacity (CANEX Expressmart Halifax)	Transpolar Technology Corporation
Her Majesty the Queen in Right of Canada as Represented by the Chief of Defense Staff in His Non	Travana Networks Inc.

Public Property Capacity (CANEX Supermart Greenwood)	
Helix Global Solutions	Tri-Ed Ltd.
Hewlett Packard (Canada) Co.	Triple CLP Inc.
Hilltop Furniture and Appliances	Tri-Star Industries Limited
Home Depot of Canada Inc.	Truro Hardware Limited
Home Hardware Stores Limited	Truro Techs 2 Go
Hospitality Network	TruServ Canada Inc.
Hotelevision Canada Limited	TTX Canada Inc.
Howard Enterprises Inc.	TUC Managed IT Solutions Ltd.
Hudson's Bay Company	uberHome Technology Integration, Ltd.
Hypertec Systems	Ubertech Computer Services
HYPERTECHNOLOGIE CIARA INC	Uniden America Corporation
I.M.P. Group Limited	Unity Telecom Corporation
I.T. Xchange Inc.	Valcomp Technology Inc
IDEXX Laboratories Canada	Vertical Peripheriques Inc.
IBM Canada Ltd.	Vet Novations
Impath Networks Canada Corporation	Video Focus Ltd.
Imprimir Document Technologies	Video Pros AVU
Indigo Books & Music Inc.	Video World Inc.
Ingram Micro Inc.	View Sonic Corporation
Innovative Systems and Phone Solutions	Vi-Net Computer Solutions
Insight Canada Inc.	Vision Business Products
Insight Direct USA Inc.	VistaCare Communications Services of Canada Inc.
Insite Computer Group Inc.	VTech Technologies Canada Ltd
intellico IDS Inc	Vuugo
Intelligent Choice Computers, Ltd.	W.A.K. Electronics
Internetworking Atlantic Inc	W. Stewart Smith
InterSpace Resource Group	Wal-Mart Canada Corp.
Island Key Computer Ltd.	WBM Office Systems Inc
Island Laser Inc.	WEBDOCS ICM Inc.
Isle Madame Computers	Wessex Technologies
J & M Adventures Ltd.	William Whiting Sales Ltd.
JC Information Technology	Wilson Security Limited
J. J. Cunningham Sales Ltd.	Wilson's Shopping Centre Limited
J & J HI TEC ENTERPRISES	Wimmer Computer & Design Services
JR Electronics Computers & Services	Wizard International, Inc
JTP Computers	Work@Home Computer Services
J.W.Burley Holdings Limited	WT Computer Products Inc.
Jacob Dambergs	Xerographic Solutions Inc.
JAM Industries Inc.	Xerox Canada Limited- Head Office
JAMES R.RAHEY Stores Limited	Xtra Document Solutions Limited
John Primrose Computer Consulting Services Ltd.	Yamaha Canada Music Ltd.
Journey PC Inc.	Young's Grocery Ltd.
JVC Canada Inc	YTN Consulting Services
K & A MacEachern Holdings Ltd.	Zones Canada Inc.

K.D. Alley Inc.	
KD Micro Computers Inc.	

Stewards that have already submitted intention to register with EPRA in NL as of Jan 31, 2013;
Epson Canada LTD
Home Hardware Stores Limited
Lenovo (Canada) Inc.
Lexmark Canada Inc.
LG Electronics Canada, Inc.
Panasonic Canada Inc.
The Source (Bell) Electronics Inc.