

Waste Electrical and Electronic Equipment Program Plan Continuous Improvement Activities 2010

1.0 Background

The Board of Directors of Waste Diversion Ontario, at their meeting on January 27, 2010, advised Ontario Electronic Stewardship (OES), the industry funding organization (IFO) for the Waste Electrical and Electronic Equipment (WEEE) Program Plan, that actions were required to ensure that OES would meet the objectives set out in the approved Program Plan.

These actions included presentation of an updated Revised (Phase 1 and 2) WEEE Program Plan budget together with an implementation plan to achieve the Revised WEEE Program Plan Year 1 targets taking the following into consideration:

- Revising fees paid for collection services to be implemented by April 1, 2010;
- Expanding the communications and promotion program to pro-actively reach residential and industrial, commercial and institutional (IC&I) generators, including communications by stewards at point of sale, with delivery to begin immediately using the remaining Phase 1 Year 1 budget;
- Investigation of alternatives to depot-based collection to make reuse and recycling of electronics more convenient; and
- Outreach with collectors/processors who are not affiliated with the OES program to encourage them to join the program.

OES has taken steps to modify the design and delivery of the WEEE Program. The following sections describe these activities.

2.0 Program Design Changes

2.1 Increasing Collection Incentives

Under the Phase 1 WEEE Program Plan, all collectors who comply with the OES collection standard were eligible to receive \$165 per tonne for all types of electronic waste (e-waste) collected. While some e-waste collectors considered this incentive reasonable, others expressed concerns that the incentive was not adequate for the collection service.

OES issued a request for proposal to study the costs of collecting electronic waste at depots, events and curbside as well as costs associated with e-waste packing systems including pallets and roll-off containers (with subsequent repacking). This study was initiated in the fall of 2009 with the final report due in the summer of 2010.

Recognizing that the results of the costing study would not be available for some time, OES modified the collection incentives at the launch of the Revised (Phase 1 and 2) WEEE Program on April 1, 2010 to the values set out in the following table. Any revisions to these collection incentives resulting from the collection cost study will be retroactive to April 1, 2010.

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Type of Collection Activity	Depots (\$/tonne)		Events (\$/tonne)
		Additional for Transportation from Satellite Sites to Central Depot Location (\$/tonne)	
Roll-off bin service	\$150	+\$30	\$185
Palletized	\$200	+\$30	\$185

2.2 Providing Municipalities with More Flexibility for Collection Services

The Phase 1 WEEE Program Plan was launched with a requirement for collectors to prepare electronic waste for shipment by stacking computers, monitors and televisions on pallets and to place printers and other small e-waste in gaylords¹. This form of packing was stipulated to reduce breakage of monitors which contain hazardous materials and to accommodate the stated delivery requirements of electronic waste processors.

As municipalities typically operate waste collection activities using roll-off containers, some municipalities could not accommodate the use of pallets and therefore were unable to offer electronic waste collection services under the OES program.

To identify options for these municipalities, OES implemented a pilot project to test use of roll-off containers followed by repacking of the collected e-waste onto pallets at a secondary facility or by direct delivery to processors willing to test receipt of collected e-waste in roll-off containers.

Based on the pilot project, OES prepared and issued a tender to procure services to provide and transport roll-off containers and to provide repacking services. OES received submissions to provide transportation services from 45 companies and to provide repacking services from 21 companies. Four of the 14 Approved Processors agreed to accept WEEE directly in roll off containers.

OES then invited applications from municipalities who wish to provide electronic waste collection services using roll-off containers. Sixteen municipalities are now utilizing roll-off containers at 33 collection locations, of which 32 are new collection locations.

2.3 Alternatives to Municipal Depot Collection

Collection of recyclables, other than printed papers and packaging at curbside, has historically been provided through municipal drop-off depots. While OES continues to solicit municipalities to establish and operate drop-off depots (See Sections 2.1 and 2.2), OES has also established agreements with for-profit and non-profit organizations to provide additional depot collection. Examples of additional non-municipal depot collection include:

¹ Gaylords are large corrugated fibreboard boxes designed to sit on a pallet.

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- Best Buy/Future Shop offering a full in-store take-back program with 88 collection locations across Ontario
- Staples offering a full in-store take-back program with 97 locations across Ontario
- Salvation Army operating 48 locations across Ontario
- Five reuse organizations operating 11 collection sites across Ontario

The following table sets out municipal and non-municipal depots collecting WEEE in Ontario.

Accessibility	End of Phase 1 Year 1	Added April to June 2010	Running Total	Revised (Phase 1 and 2) Program Year 1 Accessibility Targets	Actual as % of Target
Municipal depots	79	27	106	413	
Other depots	235	172	407		+24%
<i>Total Depots</i>	314	199	513		

To expand program accessibility beyond these depots, OES also established agreements with for-profit and non-profit organizations to operate events. Examples of additional non-municipal depot collection include:

- A Sears catalogue store pilot collection event in 10 northern communities along two northern Ontario highway corridors: Highway 17 between Sudbury and Sault Ste. Marie: Thessalon, Espanola, Blind River, Bruce Mines, Elliot Lake; and Highway 11 north of Sudbury: Hearst, Cochrane, New Liskeard, Kapuskasing and Kirkland Lake
- Four weekend collection events at 76 Sears locations

	Provided During Phase 1 Year 1	Operated or Scheduled under Revised (Phase 1 and 2) Year 1	Revised (Phase 1 and 2) Program Year 1 Accessibility Targets	Actual as % of Target
Municipal special events	116	78	253	+47%
Non-municipal special events	110	276		
OES Round-up events	24	19		
<i>Total Events</i>	250	373		

In addition to depots and events, the following additional collection services have been offered:

- Sears Canada offers an electronic waste collection service, on a pilot basis, to customers who are having appliances, mattresses or furniture delivered to their homes

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- Sony Canada will pick up televisions from customers who are having a new television delivered and installed
- City of Toronto offers curbside collection of small, hand-held waste electronics using a special plastic bag provided for this purpose on a pilot basis

2.4 Introducing Processor Incentives

Under the Phase 1 WEEE Program Plan, OES operates a consolidation system where electronic waste is picked up from Approved Collectors and transported to consolidation sites by companies under contract to OES. Under this system, all e-waste managed under the program is collected by OES Approved Collectors or at OES Round-up events.

To expand the methods by which electronic waste can be collected, OES has implemented a series of incentives for collection, transportation and processing of e-waste that are available to Approved Processors as of October 4, 2010.

Approved Processors can arrange to provide collection, transportation and processing services for residential as well as IC&I generators² of electronic waste. Approved Collectors can choose to opt out of the OES collection and transportation system and to contract directly with an Approved Processor³.

Approved Processors are eligible for the incentives set out in the table below⁴, based on the Approved Processor's recycling efficiency rate for the material and subject to completion of the tracking system documentation so that OES can meet its obligation to track program materials from collection to final disposition.

Material Category ¹⁾	Level 1		Level 2		Collection/Transport Incentive ³⁾	
	Recycling Efficiency Rate ²⁾	\$/Tonne	Recycling Efficiency Rate ²⁾	\$/Tonne	Southern Ontario	Northern Ontario ⁴⁾
Display Devices	50% to 75%	\$650	>75%	\$850	\$150	\$200
Desktop & Portable Computers	60% to 85%	\$450	>85%	\$650	\$150	\$200
Other Program WEEE	60% to 85%	\$550	>85%	\$750	\$150	\$200

² The Direct Ship program, under which IC&I generators could receive an incentive of \$430 per tonne to participate in the WEEE Program, will end when the incentive system commences.

³ Should an Approved Collector choose to be serviced directly by an Approved Processor, the agreement between OES and the Approved Collector will be terminated.

⁴ WEEE stewards manage end-of-lease and warranty items through reuse and recycling. These activities are financed directly by the stewards and are not eligible for the reuse and processing incentives.

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Material Category ¹⁾	Level 1		Level 2		Collection/Transport Incentive ³⁾	
	Recycling Efficiency Rate ²⁾	\$/Tonne	Recycling Efficiency Rate ²⁾	\$/Tonne	Southern Ontario	Northern Ontario ⁴⁾
Floor Standing Copiers & Printers	60% to 85%	\$550	>85%	\$750	\$150	\$200

Notes:

¹⁾ The four material categories utilized for the Processor Incentives are the same categories used for material sorting by Approved Collectors.

²⁾ The recycling efficiency rate reflects the percentage of the WEEE processed that is recycled rather than disposed (direct for energy recovery, incineration or landfill). Higher recycling efficiency rates represent better recycling practices and contribute to higher program diversion rates. A recycling efficiency rate calculation methodology is being developed and recycling efficiency rates of Approved Processors will be assessed using the methodology by independent consultants. The recycling efficiency rates on which Processor Incentives are based may be adjusted following completion of this assessment if required to more accurately reflect actual recycling efficiency rates achieved by Approved Processors.

³⁾ Packaging materials (pallets, gaylords, and stretch wrap) will not be provided by OES to Approved Processors under the Processor Incentive system.

⁴⁾ The WDO Board, recognizing the higher costs to service northern Ontario, added a \$200 per tonne collection/transport incentive for northern Ontario to encourage processors to service these more remote areas. The demarcation of Northern Ontario for purposes of the collection/transport Incentive is to be based on the separation of northern and southern Ontario established by the Ministry of the Environment.

At the WDO Board's direction, OES is implementing an independent study of Approved Processor recycling costs to assess whether the Processor Incentives are appropriate. Based on the results of this study, the Processor Incentives may be adjusted retroactive to the commencement date of the incentive system.

At the WDO Board's direction, OES has established a forum to provide regular dialogue with Approved Processors during implementation of the processor incentive system.

2.5 Introducing Reuse Incentives

Under the Phase 1 WEEE Program Plan, OES implemented a Reuse and Refurbishment Standard against which reuse and refurbishment organizations were audited. Approved Reuse and Refurbishment Organizations received no-cost removal of refurbishment scrap material and were required to report the number of units reused and the jurisdiction in which the reused units were distributed. However, reporting by Approved Reuse and Refurbishment Organizations has been inconsistent and data on reuse activities were incomplete for Year 1.

OES has implemented a reuse reporting incentive of \$0.25 per whole working unit to offset the administration costs associated with reporting and to provide an incentive for Approved Reuse and Refurbishment Organizations to provide data on their reuse activities to OES.

While considering the OES proposals for the \$0.25 reuse reporting incentive and the processor incentives described in Section 2.4, the WDO Board considered how to meet its obligation to

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seek to ensure that the marketplace is affected in a fair manner. Recognizing that reuse and refurbishment organizations may compete with processors for access to electronic waste feedstock, the WDO Board decided to add a reuse incentive of \$1.75 per whole working unit, such as computers, monitors, printers, copiers, scanners, televisions and fax machines, available to Approved Reuse and Refurbishment Organizations.

To be eligible for the \$0.25 per whole working unit reporting incentive and the \$1.75 per whole working unit reuse incentive available on October 4, 2010, reuse and refurbishment organizations must:

- Be audited by an independent third party⁵ against the OES Reuse and Refurbishment Standard including requirements for data security and data wiping;
- Meet the reporting obligations set out in the Reuse and Refurbishment Agreement including providing the source and destination of the reused items so that OES can meet its obligation to track program materials from collection to final disposition; and
- Secure their feedstock other than through service contracts with stewards under the WEEE Program Plan⁶.

At the WDO Board's direction, OES is implementing an independent study of Approved Reuse and Refurbishment Organization reuse costs to assess whether the Reuse Incentives are appropriate. Based on the results of this study, the Reuse Incentives may be adjusted retroactive to the commencement date of the incentive system.

At the WDO Board's direction, OES has established a forum to provide regular dialogue with Approved Reuse and Refurbishment Organizations during implementation of the reuse incentive system.

2.6 Modifying Processing Procurement Process

Under the Phase 1 WEEE Program Plan, OES has been operating a consolidation system where electronic waste is picked up from approved collectors and transported to consolidation sites by companies under contract to OES. At the consolidation sites, incoming e-waste is checked to confirm it is comprised only of Phase 1 material and pallets and gaylords are weighed. As some processors only accept certain types of electronic waste, the mixed loads of collected e-waste are segregated by type (e.g. monitors, computers, etc.) to compile full loads of the type of electronic waste required by the Approved Processor scheduled to receive the material.

A methodology was required to determine which WEEE processor would receive WEEE from the consolidation sites. Prior to the launch of the Phase 1 WEEE Program Plan, OES issued a

⁵ A list of accredited auditors from which a Reuse and Refurbishment Organization can select an auditor is available on the OES website. OES will reimburse the audit cost if the auditor confirms that the Reuse and Refurbishment Organization complies with the Reuse and Refurbishment Standard.

⁶ WEEE stewards manage end-of-lease and warranty items through reuse and recycling. These activities are financed directly by the stewards and are not eligible for the reuse and processing incentives.

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request for proposals (RFP) to processors able to comply with the Electronic Recycling Standard (ERS)⁷. Proposals were evaluated using a scoring system described in the RFP with all bidders receiving a portion of the total WEEE based on their relative score.

To date, fourteen processors have been audited against the ERS and have been approved by OES. As the number of processors increases, it has become impractical to divide the collected WEEE among all Approved Processors. OES consulted with processors in order to develop modifications to the RFP process.

The following revisions will come into effect for processor contracts starting December 1, 2010 (or immediately following an extension of current contracts if required to complete the RFP process):

1. Proposals are evaluated⁸ using two evaluation criteria:
 - a. Recycling efficiency rate⁹ with a value of 50 points
 - b. Price with a value of 30 points
2. Successful bidders are selected using a minimum scoring threshold of 70 points
 - a. If fewer than three processors achieve 70 or more points, OES reserves the right to accept the processor at the next closest score
3. WEEE will be pro-rated among the successful bidders based on points received
4. Successful bidders will receive a one year contract
5. Should the successful bidder(s) have insufficient capacity at any time during the one year contract, OES reserves the right to contract with the bidder with the next closest score for services on a standing offer basis

3.0 Communications Activities

To expand its communications activities, the promotion and education budget in the first year of the Revised (Phase 1 and 2) WEEE Program Plan was substantially increased to support expanded communications to reach residential and industrial, commercial and institutional (IC&I) generators.

In addition to a communication campaign implemented early in 2010 and around the April 1, 2010 launch of the Revised WEEE Program, OES implemented a third wave of 2010 advertising in mid-May with a focus on home and cottage spring cleaning. This province-wide media buy included.

- 220 billboards on major routes to cottage country in each region

⁷ OES retains a third party auditor to audit processors against the Electronic Recycling Standard. Processors receive WEEE only after all major compliance issues identified by the auditor have been resolved and the auditor's report has been accepted by the OES Board.

⁸ WDO representatives will act as observers to the proposal evaluation process to ensure transparency.

⁹ A recycling efficiency rate calculation methodology will be developed by OES with assistance from independent consultants and recycling efficiency rates of Approved Processors will be assessed using the methodology by independent consultants.

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- 1,222 posters on Beer Store carts in 440 locations across Ontario
- Full-page magazine ads in the July issues of Chill (Beer Store publication), Cottage Life, Chatelaine, Today's Parent, Flare, Style at Home, Canadian House & Home
- Online BigBox and streaming video ads geo-targeted to audiences on Facebook, Yahoo.com, Sympatico.ca, along with other lifestyle and sports websites
- Digital in-store ads at all Ontario Best Buy and Future Shop locations
- 2 newspaper insertions in 80+ community newspapers to promote local events and approved OES-sites
- 10 second radio message in 16 markets
- Full-page ad including editorial copy in the National Post 'Green Innovations & Solutions' section published June 7

3.1 Co-funding Collection Depot and Event Marketing

Starting in summer 2010, OES is offering Approved Collectors 50% funding of approved expenses to promote e-waste collection activities to an annual maximum of \$800 per collector. Through this co-funding program, OES is partnering with local collectors to increase visibility of e-waste collection efforts.

3.2 Communicating with Residents

OES prepared a consumer brochure, available in both English and French, which explains the WEEE program including how to find the nearest drop-off location, how the program is funded and operated, and the list of accepted products. The brochure is available for free downloading from the OES website and more than 400,000 brochures have been distributed to:

- Retailers who were notified by the Retail Council of Canada that free copies of the brochure were available to support the WEEE Program launch
- Stewards and OES service providers, typically Approved Collectors, who use the on-line order form at www.ontarioelectronicstewardship.ca
- Ontario Power Authority for distribution to retailers participating in their Power Pledge program

OES is preparing a TV commercial to promote safe WEEE recycling through OES approved collectors. Results of the 2010 campaign will be used to evaluate the deployment of more investments in television advertising in 2011 to continue to promote WEEE collection.

On-going residential advertising campaigns scheduled for the remainder of 2010 and early 2011 include:

- A youth campaign in September and October featuring transit advertising, retail and campus digital ads, on-campus posters, and on-line advertising
- Holiday campaigns over November and December featuring province-wide in-cinema advertising
- Post-holiday advertising in January through Super Bowl weekend in February, typically a prime purchasing season for electronics

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3.3 Communicating with IC&I Generators

OES carried out research among Ontario businesses, not-for-profit organizations and institutions to evaluate the most effective messaging platform to motivate businesses to recycle WEEE. A follow-up survey with an expanded respondent base is planned to evaluate WEEE recycling behaviours, needs and opportunities in the IC&I sector.

OES is implementing a targeted communications campaign for IC&I generators in the fall of 2010 using leading print and online publications as well as broadcast media focusing on business, small business, technology, environment and corporate social responsibility. These activities include:

- Direct mail campaign to IT and sustainability decision-makers in office buildings and targeted small, medium businesses
- Print advertising in targeted publications
- Digital advertising in Elevator News Network in selected office buildings
- Collateral materials for commercial property owners and managers to share with tenants
- Posters across GO Transit and in selected Ontario airport terminals