

# Queen's University

## Waste & Recycling Report

### Date: 2012-2013

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#### Introduction

The principles of waste reduction and diversion continue to drive the university's waste and recycling programming. Queen's is committed to reducing, reusing, and recycling waste material generated by its operations. This year, Queen's has once again improved its diversion rate, and implemented several new initiatives, including the development of a Waste Lookup Tool and the implementation of the plastic water bottle ban. Also of significance is the university's renegotiation of its solid waste disposal contract.

#### Waste Diversion Programs

##### Mixed Recycling

The University's multi-pronged recycling programming continues to include two core recycling streams: cans, glass and plastic and mixed fibre (paper & cardboard). There was a reduction in the cans, glass and plastics stream, which could be attributed to the implementation of the plastic water bottle ban. Combined, these recycling streams account for approximately 850 MT of the university's waste diversion.

##### Education and Outreach

The Sustainability Office has improved outreach and simplified the way users find information. Using the City of Kingston Waste Lookup Tool as a model, the Sustainability Office worked with office IT personnel to develop an online Waste Lookup Tool that reflects campus procedures for our waste and recycling programs. The application allows users can type a waste item into an information box and the Recycling Tips look-up tool tells them how the item should be discarded (<http://www.queensu.ca/sustainability/initiatives/Waste/recyclingtipslookup.html>).

For the third consecutive year, the university participated in the international college and university competition, Recyclemania. Queen's University finished in 73rd place in the Grand Champion Division with a diversion rate of 38.45%. Queen's recovered a total of 166 MT of organic and recyclable materials which is the equivalent of 818 Metric Tons of CO<sub>2</sub>, or 160 cars off the road, or the energy consumption of 71 households. The Sustainability Office continues to look for ways to engage students in this awareness program.

##### E-waste

Queen's has had an electronic recycling program in place since 2005. Staff and faculty can submit an on-line request to Waste Service to pick up their unwanted electronic items. Items are collected on a weekly basis and sent for recycling to the contracted electronics recycler, Sims Recycling Solutions. In 2009-10, an online pick-up request form was implemented on the Physical Plant Services website. This process has standardized the process and ensured ease and consistency of disposing of this material. In addition, the Sustainability Office, the Campus Computer Store (CCS), and ITSservices and teamed up to host the Recycle IT Games. Participants were invited to bring e-waste from both work and home, resulting in almost 3.5 metric tonnes being collected at the event in just one day - more than 10% of the roughly 30 metric tonnes of e-waste that Physical Plant Services recycles annually. Recycled items included 2,179 kilograms of

computer towers and 590 kilograms of monitors. In 2012-13, the university recycled 41.5 MT of electronics. This increase could be attributed to improvements in the disposal reporting mechanisms for ewaste.

### **Scrap Metal**

A scrap metal bin has been placed on campus to collect any metal materials that are identified for disposal by campus departments. In 2012-13, the university's scrap metal program recycled over 50 MT of metal materials.

### **Leaf & Yard Waste**

The Grounds department continues to dispose of campus leaf and yard waste at the local Kingston Area Recycling Centre (KARC). In 2012-13, approximately 73 MT of leaf and yard waste was diverted from landfill through this program.

### **Organics**

The University's organic waste collection program focuses on collecting food waste from the kitchens of the campus dining rooms, retail outlets and office lunch room spaces. Based on responses from 17/28 offices, the office organics program is contributing approximately 650 kg of organic material from the waste stream every month and 7800 kg annually. This year, the university diverted 88 MT of organic waste through the organics program.

### **Grease**

Food Services continues to collect grease from its kitchen operations. This year, they sent 15 MT of grease to Rothsay for recycling.

### **Books (Better World Books)**

Better World Books is a self-sustaining, for-profit social enterprise that collects and sells books online to fund literacy initiatives locally, nationally and around the world. Over the past year, the campus has recycled 5 MT of books from landfill.

### **Furniture Reuse (Freecycle@Work)**

The furniture reuse program serves as a waste diversion tool to reduce the number of reusable items going to landfill. The university continues to use Freecycle to not only reduce the number of items sent to landfill but also cut down on costs associated with relocating, off-site storage and, repurchasing. The university typically diverts approximately 10 MT of furniture from landfill each year, saving the university an estimated \$100,000 through reuse.

### **Hazardous Waste**

The University also collects a variety of hazardous waste materials for recycling, including fluorescent tubes, batteries and paint. These programs combined are responsible for diverting 6.00 MT of hazardous waste from landfill.

## **Plans for Program Expansion**

### **Solid Waste Disposal Contract**

The current solid waste disposal contract will be expiring in July 2013. Therefore, a request for tender will be posted to invite waste and recycling companies to provide services for the campus. It is hoped that this will provide the university with opportunities to revisit current waste reduction and diversion strategies and explore areas for improvement.

### **Exterior Recycling Containers**

Physical Plant Services continues to investigate container options to provide exterior recycling of cans, glass plastic and paper materials for campus users. Currently there are two exterior recycling receptacles on campus at the Queen's Centre and Tindall Field. Waste audits need to be conducted to determine the efficacy of these units.

## Stadium Recycling

The Sustainability Office will be connecting with Athletics to provide recycling opportunities at stadium events. This initiative will address the long-standing concern that recyclables from this campus location have not been separated from the waste stream. It is hoped that stadium event goers will be pleased with this addition and will participate in reducing the environmental footprint of athletic events.

## Summary

In 2012-13, the university improved its waste diversion rate to approximately 48%. This improvement can be attributed to an increase in E-waste recycling. This increase could be related to the improved process to request E-waste pickups. The Sustainability Office continues to create awareness of waste reduction and recycling, while making waste reduction and recycling more accessible to the campus community. This year's activities and innovations, such as the Waste Look-up Tool, the IT Recycle Games, and the plastic water bottle ban are three examples of our continuing efforts.

### 2012-2013

Material	Tonnage	% Total Waste
Waste	1,097.11	45%
Grounds Waste	80.13	3%
Durables	101.69	4%
Cans, Glass & Plastic	323.26	13%
Mixed Fibre	540.92	22%
Organic Toters	88.52	4%
Leaf & Yard	73.23	3%
Electronics	41.53	2%
Scrap Metal	50.55	2%
Furniture Reuse	10.00	0%
Books (including hardcover)	4.99	0%
Grease	15.46	1%
Paint, Batteries, Flourescents		
Total Waste Generated	2,417.39	
Total Diversion	1,148.46	48%