

# Queen's University

## Waste & Recycling Report

Date: 2011-12

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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, it has improved its diversion rate, and implemented several new initiatives, including an office organics program and improved labelling on recycling containers. It has also expanded the materials it recycles to include single-use coffee cups and Polystyrene.

### Waste Diversion Programs

#### **Mixed Recycling**

The university's waste management program continues to participate in the two core recycling streams: cans, glass and plastic and mixed fibre (paper & cardboard). This year, Queen's added single-use coffee cups and Polystyrene to the cans, glass and plastic stream. It is expected that a significant portion of the 1.1 million coffee cups and 13 metric tonnes of polystyrene materials disposed of annually on campus will now be recycled. Queen's has also adopted new recycling signage.. These mixed recycling streams account for approximately 890 MT of the university's waste diversion.

#### **Outreach & Awareness Initiatives**

Educating people about what is recyclable and how to dispose of recyclable materials properly is one of the biggest challenges large organizations like Queen's face when it comes to recycling. The Sustainability Office has launched a new informational campaign that includes stickers and posters to let people know what goes where, and to increase awareness about recycling on campus. The university once again participated in the international college and university campaign, Recyclemania

#### **Ewaste**

Queen's has had an electronic recycling program in place since 2005. Staff and faculty can submit an on-line request to Waste Services 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 2011-12, the university recycled 22.5 MT of electronics.

#### **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 2011-12, 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 2011-12, approximately 76 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 and retail outlets. This is accomplished through the use of organics collection totes at all locations. The organics material is picked up and then transported by BFI to the local Norterra facility for composting. The University

uses Somat E-Corect systems in the two major dining rooms. The Somat machines are a high-speed food-waste-recycling machine that rapidly dehydrates food waste and compostable disposables. This year, the university diverted 100 MT of organic waste through the organics program.

The organics program has been expanded to capture food waste generated by staff in their lounges. The office organics program is voluntary, and users participate in the material removal. The Sustainability Office provides logistical support including bins, information sheets highlighting what can and can't go into the organics stream, and support via email and phone to ensure participants are successful. Future tracking will assess the success of this program.

Organics collection has also been added to the front-of-the-house or post-consumer organic waste in two of the retail food outlets on campus: Mac-Corry (Sodexo) and Victoria Hall (Lazy Scholar). Current visual audits indicate high levels of contamination and that further education is required to ensure the success and expansion of this program.

### **Grease**

Food Services continues to collect grease from its kitchen operations. This year, they sent 19 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. This program typically diverts approximately 10 MT of reusable furniture items from landfill each year.

### **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 6.3 MT of hazardous waste from landfill.

## **Plans for Program Expansion**

### **Waste Lookup Tool**

The Sustainability Office is looking for ways to improve outreach and simplify the way users find information. We are assessing the City of Kingston Waste Lookup Tool as a model. Recognizing that people are increasingly turning to online media for information because it is fast and convenient, the Sustainability Office plans to work with our office IT personnel to develop an online Waste Lookup Tool that reflects campus procedures for our waste and recycling programs.

### **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.

### **Plastic Water Bottle Ban**

As of September 1 2012, bottled water will no longer be available in Queen's University vending machines, retail outlets or at catered events. The ban aims to reduce the 98,000 plastic bottles that go through the university's waste and recycling system each year.

## Summary

In 2011-12, the university slightly improved its waste diversion rate to approximately 45%. This improvement can be attributed to the tracking of the hazardous waste programs and to increases in scrap metal collection, leaf and yard waste, and grease collection. Of particular note, is the number of initiatives that the Sustainability is looking forward to implementing in the coming year.

### **2011-2012**

<b>Material</b>	<b>Tonnage</b>	<b>% Total Waste</b>
Waste	1,262.57	48%
Grounds Waste	107.87	4%
Durables	92.96	4%
Cans, Glass & Plastic	338.49	13%
Mixed Fibre	551.88	21%
Organic Toters	97.16	4%
Leonard Organics	2.26	0%
Leaf & Yard	76.73	3%
Electronics	22.50	1%
Scrap Metal	49.66	2%
Furniture Reuse	13.61	1%
Books (including hardcover)	5.16	0%
Grease	19.42	1%
Total Waste Generated	2,640.27	
Total Diversion	1,176.87	45%