



Report to: General Committee

Date Report Authored: September 21, 2013

SUBJECT: Diversion Strategy – Status Update

PREPARED BY: Claudia Marsales, Senior Manager, Waste & Environmental
Management Department

RECOMMENDATION:

1. That the report entitled “Diversion Strategy – Status Update” be received;
2. That Council continue to implement the recommendations outlined in “ The Best of the Best – A Road Map to 80% Diversion”;
3. That staff conduct an internal review of the Community Recycling Depots and report back to Council in 2014;
4. And that Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

To provide an update on Markham’s diversion strategy and recommend a staff review of the Community Recycling Depots.

BACKGROUND:

Markham’s successful Diversion Strategy achieves 80% diversion in 2013 at no additional cost to residents

The goal of Markham’s ‘Best of the Best’ Diversion strategy was to develop a package of program changes to maintain high participation, resident engagement, and high diversion. A key objective was to reduce the amount of toxic or hazardous materials in the waste residue stream in preparation for the incineration of Markham’s waste at the York Durham incinerator opening in 2014.

Program changes implemented in 2013 included:

- Markham’s Waste Management By-law was amended to require mandatory material separation for both residential and multi-residential sectors
- Clear bags for waste residue replaced 3-bag limit
- Electronics and household batteries no longer collected curbside as waste residue
- No tag days replaced by ‘Spring and Fall Clean-up ‘ days
- Launched Zero Waste for schools program with support from MESF
- Leaf and yard collection extended to December 15
- New Waste app launched

By June 2013, Markham’s municipal diversion rose to 81% with significant increase in electronic and battery collected for recycling. This is a significant achievement considering most Ontario communities currently divert 30% of the waste stream.

**TABLE #1
DIVERSION RESULTS**

MATERIAL	JUNE	JULY	AUGUST
Blue Box	1,894t (28%)	1,955t (26%)	1,987t (27%)
Green Bin	2,377t (35%)	2,697t (36%)	2,711t (37%)
Leaf and Yard	1,084t (16%)	1,026t (14%)	864t (12%)
Other	174t (3%)	334t (4%)	266t (4%)
Residue Waste	1,272t (19%)	1,465t (20%)	1496t (20%)
DIVERSION TOTAL	81%	80%	80%

Other: includes depot materials, tires, E-waste, HHW

Markham is currently the largest Ontario municipality to require clear bags for waste residue. Dufferin County, including Orangeville, launched clear bags in June 2013.

The use of clear bags for garbage collection has been shown to increase waste diversion through social pressure, and the ease with which waste management by-laws can be enforced by collection crews.

The use of clear bags for garbage has many advantages and supports waste diversion in several ways:

- ✓ Residents are motivated to recycle due to social pressure. They want to avoid public scrutiny such as neighbours taking notice they are not participating
- ✓ Clear bags serve as a prompt. If people forget to separate recyclables from the garbage, they are constantly reminded by the 'clear bag' because they can view its contents.
- ✓ Clear bags reduce worker injuries and damage to roads driveways by identifying non compliant material such as paint cans, sharp objects, and hazardous containers.

The successful clear bag launch could not have been possible without the hard work and support of Council, the Waste Diversion Sub-Committee, York Region staff, MEAC and Miller Waste Systems.

Increased Electronics and battery recycling

In just two years, awareness of Ontario's electronic material recycling stewardship program has grown. Since 2009, Ontario municipalities have diverted more than 100,000 metric tonnes of

electronic material from landfill. In addition to the high market value for electronic material, electronic recycling (E-recycling) has encouraged economic and job growth in the province. To facilitate increased E-recycling, Markham is partnering with willing charitable organizations to establish drop-off opportunities across Markham. From July to September, ten 2-day events were held and staffed by the Lions Club.

With the support of Markham's Fire Services, week-end drop off locations at Fire Stations 92, 97 and 99 have been held. A popular drop off location is the Markham Community Recycling Depot. E-recycling will also be offered and promoted at the Markham Home Show. In addition, 27 Markham facilities, 22 private business and Markham schools collect household batteries.

Staff will continue to expand drop-off opportunities. Future events are planned for schools, churches, and multi-residential buildings.

Zero Waste for schools Program continues to grow

Schools play an important part in the community to encourage sustainable recycling behaviour and practices. In 2012, 8 Markham primary schools had Zero Waste programs. In 2013, Markham developed the Zero Waste Awards recognition program, and certificates were awarded to the 8 schools by Waste Management staff and local Councillors. So far in 2013, 13 primary and 1 secondary school are in the process of going Zero Waste. Schools that require funding to proceed can apply for financial support through MESF. A budget of \$25,000 to support the program was approved by the Environmental Issues Committee on December 4, 2012 and Markham Council on December 18, 2012.

Additional diversion opportunities include textiles, carpet and home renovation materials
The focus in 2014 will be to expand textile and carpet recycling opportunities with emphasis on education and drop-off opportunities. Staff will be seeking to locate a Habitat for Humanity style store in Markham for renovation materials. Many Ontario communities have attracted used renovation businesses that specialize in accepting and selling used renovation materials.

Curbside collection of textiles in the blue box is not a recommended diversion strategy due to high contamination issues. In 2014, staff will be working with the Region to assess potential for seasonal targeted home collection opportunities.

Depot Improvement Study recommended

Markham's 4 Community Recycling Depots continue to grow in popularity with 116,037 visits by residents in 2012. In addition to steel, tires, and cardboard, over 20,000 kg of styrofoam was received and packaged for transport to the densification unit. Over 10,000 recycling containers were sold or exchanged. Staff will complete the internal review in 2013 and report to Council in early 2014 with recommendations to improve depot operational efficiencies and effectiveness.

Regional study of Compostable bags for organics completed

In 2009, Regional Council required the mandatory use of compostable bags in the Green Bin effective May 1, 2011. Regional Council anticipated processing improvements and decreased processing residue.

Markham Council did not support the program change and expressed concern about the switch to compostable bags for the following reasons: lack of public acceptance, potential declining participation rates, and performance in multi-residential buildings/special events, higher bag costs and challenges associated with enforcement.

In 2013, York Region completed a study of compostable bags at the organic processing facilities which indicated that they did not result in quantifiable benefits or process improvements. On March 24, 2013, Regional Council accepted the regional staff recommendation that the program be relaxed.

In Markham, the use of compostable bags in the Green Bin is not required, and residents can use the bag of their choice in the Green Bin.

Waste Management service delivery in York is a successful integrated partnership model

In York Region, waste management is a two tier responsibility and waste management services are delivered in partnership with the Region. This partnership approach has been extremely successful in launching single stream recycling and Green Bin organics. As a result of our innovative two tier partnership, York Region and Markham have been recognized with numerous diversion awards and according to Waste Diversion Ontario, have one of the highest diversion of all GTA municipalities. Including both local and regional costs, waste management services cost \$227/hh per year.

Staff supports the continuation of the unique Integrated Partnership Model in York Region which fosters collaboration, innovation and leveraging of expertise amongst the 10 municipal partners.

FINANCIAL CONSIDERATIONS AND TEMPLATE: N/A

ALIGNMENT WITH STRATEGIC PRIORITIES:

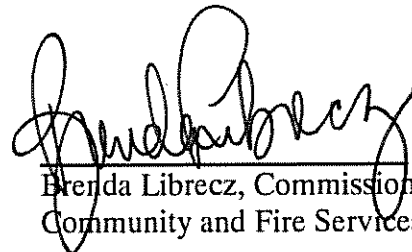
Aligns with Environmental Strategic priorities and the Green Print.

BUSINESS UNITS CONSULTED AND AFFECTED: N/A

RECOMMENDED BY:



Peter Loukes, Director
Environmental Services



Brenda Librecz, Commissioner
Community and Fire Services