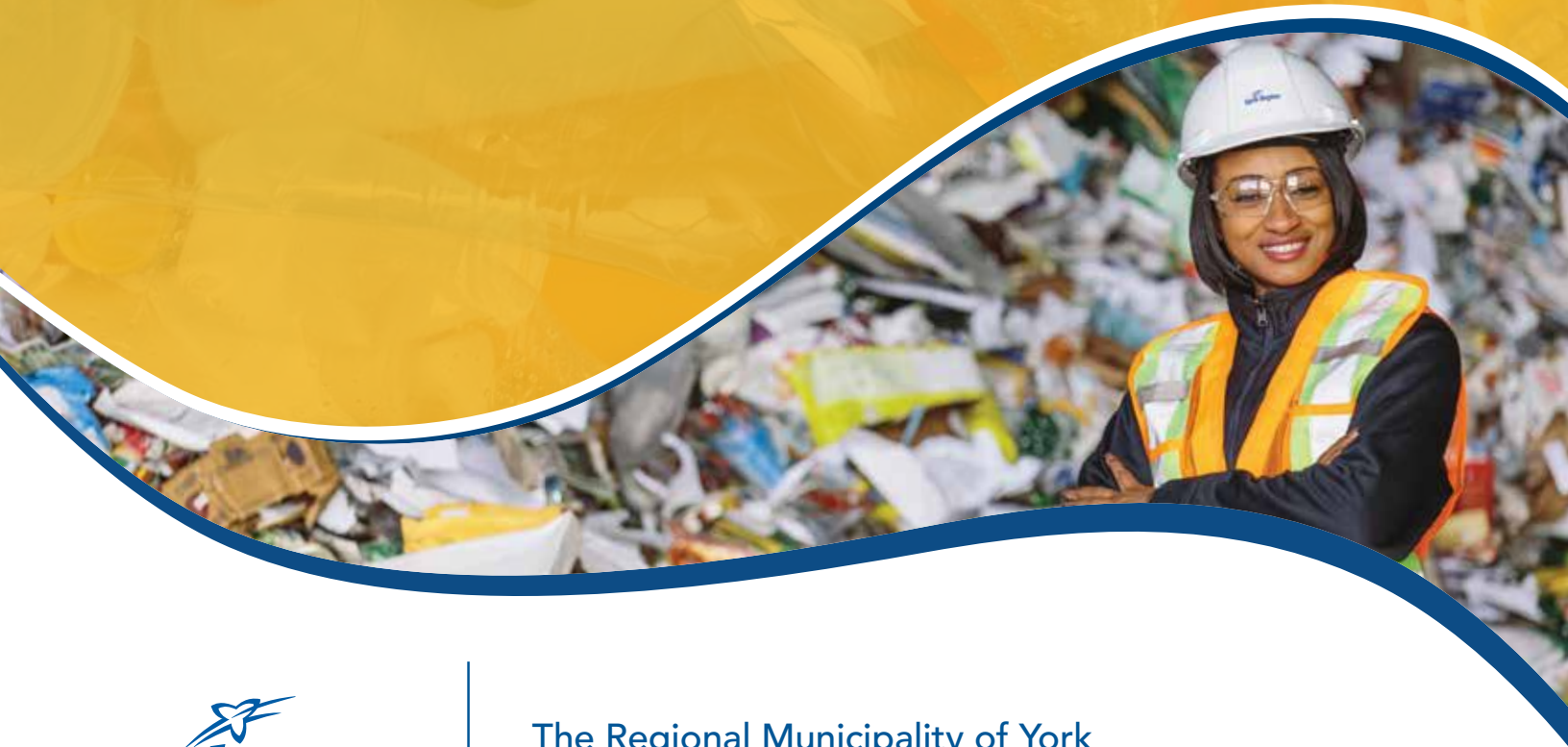


# PARTNERSHIPS DRIVING

reduction  
reuse  
recycling  
recovery



The Regional Municipality of York  
2014 Annual Diversion Report

Accessible formats or communication supports are available upon request.  
Please contact [EnvironmentalServices@york.ca](mailto:EnvironmentalServices@york.ca) or call 905-830-4444 extension 73000.



A photograph of a community garden with several raised wooden beds. In the foreground, there is a bed filled with bright green lettuce. To the right, another bed contains large-leafed plants, possibly squash or pumpkins. In the background, more garden beds are visible, some with small plants and others with taller, yellow-flowered plants. The garden is situated on a grassy area.

# partnership

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York Region and its nine local municipal partners plan and deliver sustainable waste reduction, diversion and disposal programs. York Region's SM4RT Living Integrated Waste Management Master Plan (SM4RT Living Plan) supports collaboration and innovation through local partnerships.

This alliance includes community engagement, which will continue to build important partnerships during implementation of the SM4RT Living Plan.





# reduce

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Waste reduction requires a change in beliefs, values, practices and attitudes to ultimately result in behaviour change. Over the next 25 to 40 years, a continued focus on waste reduction will extend the life of existing infrastructure and result in significant cost avoidance over the long term. This will be achieved through public education and outreach efforts on waste reduction including the food waste reduction strategy. Packaging reduction efforts will continue through municipal advocacy groups such as the Regional Public Works Commissioners of Ontario, the Association of Municipalities of Ontario and the Municipal Waste Association.





# reuse

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A community partnership with Goodwill Industries at York Region's two Community Environmental Centres encourages diversion of reusable household items from disposal. Reusable goods collected at these centres are distributed for resale at Goodwill retail stores. A variety of opportunities exist to increase reuse and repair in the community through partnership-based initiatives with non-profit organizations interested in promoting reuse activities. The SM4RT Living Plan will focus on expanding reuse opportunities for residents across York Region. In 2014, the Town of East Gwillimbury partnered with York Region and a local community group to host a community Repair Café, where household items were repaired by skilled volunteers.





# recycle

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Recyclables collected through local municipal Blue Box Programs are processed at York Region's Waste Management Centre located in the Town of East Gwillimbury. Blue box materials are separated into their individual commodities and sent to end markets, where they are recycled into new products. In 2014, a new mixed paper clean-up system was installed at the Waste Management Centre to prevent flattened containers from entering the paper stream. This upgrade has increased the capture of misdirected containers by up to 90 per cent, thereby optimizing recovery, recycling and revenue. The Waste Management Centre is owned by York Region and operated under contract by Miller Waste Systems.





# recover

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The Durham York Energy Centre is an energy-from-waste facility in the municipality of Clarington, Ontario.

Co-owned by The Regional Municipalities of Durham and York, the facility will process up to 140,000 tonnes of non-hazardous, municipal solid waste per year, of which York Region will contribute 30,000 tonnes. Heat generated by waste combustion will be used to generate electricity; recyclable metals will also be recovered.

York Region continues to be a leader in sustainable waste management. The Durham York Energy Centre is the first energy-from-waste facility to be constructed in the Province of Ontario in 22 years. It was designed, built and will be operated by Covanta Durham York Renewable Energy Limited Partnership. This facility is being commissioned and is scheduled to be operational by Q2 2015.



# At-a-Glance

York Region and our local municipal partners plan, finance and deliver sustainable waste management programs and infrastructure

York Region covers 1,776 square kilometres of land and is comprised of nine local municipalities: the Towns of Aurora, East Gwillimbury, Georgina, Newmarket, Richmond Hill and Whitchurch-Stouffville, the Township of King, and the Cities of Markham and Vaughan.

Curbside collection of blue box, green bin, yard waste and garbage is managed by York Region’s local municipal partners. These materials are delivered to York Region facilities for processing, energy recovery and/or disposal by external contractors. Regional and municipal depots offer waste diversion opportunities in addition to regular curbside collection.

York Region’s solid waste management infrastructure includes:

- Waste Management Centre – material recovery facility to process blue box recyclables and transfer station for organics and garbage
- McCleary Court Community Environmental Centre
- Elgin Mills Community Environmental Centre
- Georgina Transfer Station – includes recycling and a household hazardous waste depot
- East Gwillimbury Household Hazardous Waste and Recycling Depot
- Household Hazardous Waste Depots in the Town of Georgina and the Cities of Markham and Vaughan
- Durham York Energy Centre scheduled to be operational by Q2 2015

- Partnerships with private contractors for processing organics and yard waste, as well as processing and disposal of residual waste

.....

### ESTIMATES SUGGEST:

- In 2031 there will be 1.5 million people living in York Region
- 180 per cent growth is projected in multi-residential development in York Region over the next 40 years
- York Region will achieve an annual reduction of approximately 8,700 tonnes of waste through reuse of materials by 2031



# Quick Facts

In 2014, York Region and our local municipalities diverted 64 per cent\* of collected materials from disposal

## 64%\*

2014 Waste Diversion Ontario (WDO) diversion from landfill after curbside collection.

\*2014 diversion data presented is unverified by WDO at time of printing.

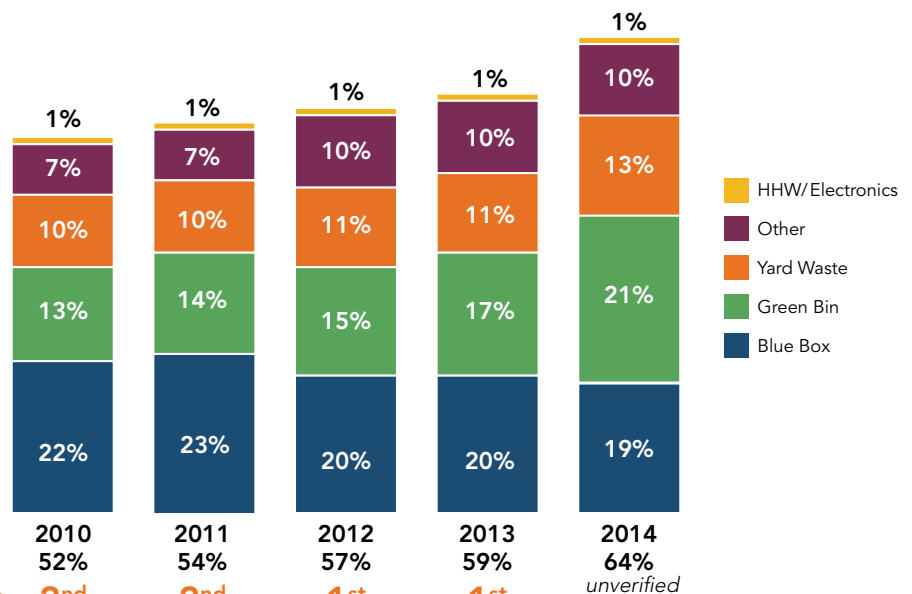
## 85%

2014 diversion from landfill including energy-from-waste management.

York Region's Regional Official Plan target is 90 per cent diversion from landfill (including energy-from-waste tonnage) by 2016 and 100 per cent by 2020.

- **1,144,760 (2014):** York Region's population (estimated)
- **229,168:** York Region single family residences (estimated)
- **44,496:** Apartments (estimated)
- **87,645 tonnes:** Blue box material processed
- **\$6.9 million:** Revenue generated from sale of blue box recyclables
- **94,700 tonnes:** Green bin material collected
- **52,457 tonnes:** Yard material collected curbside and at public drop-off areas
- **4,930 tonnes:** 'Other diversion,' including tires, textiles, wood waste, scrap metal and other diversion
- **2,531 tonnes:** Household hazardous waste (HHW) and waste electronics and electrical equipment collected at depots
- **124,011 tonnes:** Residual garbage collected

Annual Waste Diversion 2010 to 2014



Waste Diversion Ontario  
Ranking for Large Urban  
Municipalities

Waste Diversion Ontario calculates diversion from landfill after processing of materials and does not include York Region approved energy-from-waste initiatives.



# Partnerships for Success

York Region and municipal partners work collaboratively to provide integrated waste management services

In 2014, York Region residents generated 320 kilograms of waste per person.

## COLLECTION

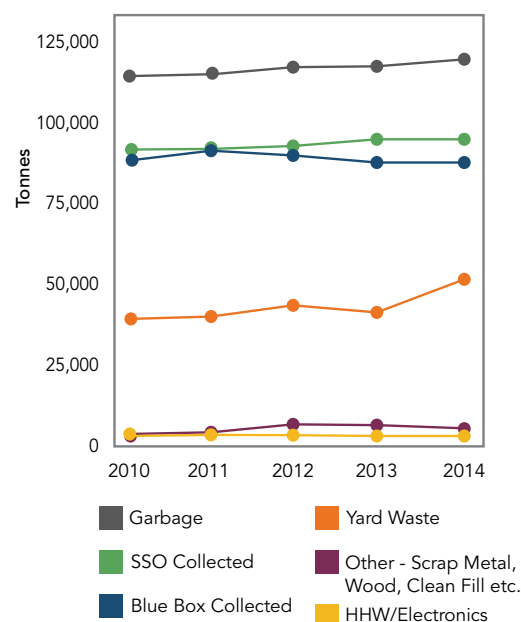
In York Region, recycling and organics are collected every week, while residual waste (garbage) is collected every other week. Three-stream waste collection is overseen by our local municipal partners. Each of the local municipalities implement some form of pay-as-you throw program, bag limit system and/or clear bag program to target waste reduction in single family households as a means to increase diversion. In addition, the City of Markham and Town of Richmond Hill have implemented three-stream waste collection in some multi-residential buildings.

Bulky waste and white goods (large appliance) collection is also provided by local municipalities to single family households. In most cases, white goods collection is provided to residents by scheduling a pick-up either through the municipality or directly with the waste management collection company.

In addition to curbside collection services, some local municipalities offer community waste reduction initiatives such as:

- Environment days and waste reduction week events
- Public recycling/reuse depots
- Special electronic waste collection days, mulch giveaways and community reuse events
- Three-stream waste collection in public spaces, municipal offices and schools
- Pilot programs for re-use, organics and electronics collection in multi-residential buildings

Residential Tonnes Collected, 2010 to 2014



| Material Type              | 2010    | 2011    | 2012    | 2013    | 2014    |
|----------------------------|---------|---------|---------|---------|---------|
| Garbage Collected          | 115,420 | 116,235 | 119,648 | 120,260 | 124,011 |
| SSO Collected              | 91,680  | 91,685  | 92,260  | 94,591  | 94,700  |
| Blue Box Collected         | 88,395  | 90,948  | 89,488  | 87,879  | 87,645  |
| Yard Waste                 | 39,230  | 40,155  | 43,688  | 40,486  | 52,457  |
| Other - Scrap Metal, Tires | 2,864   | 4,053   | 6,657   | 6,297   | 4,930   |
| HHW and Electronics        | 3,125   | 3,077   | 3,007   | 2,629   | 2,531   |

\*values in tonnes



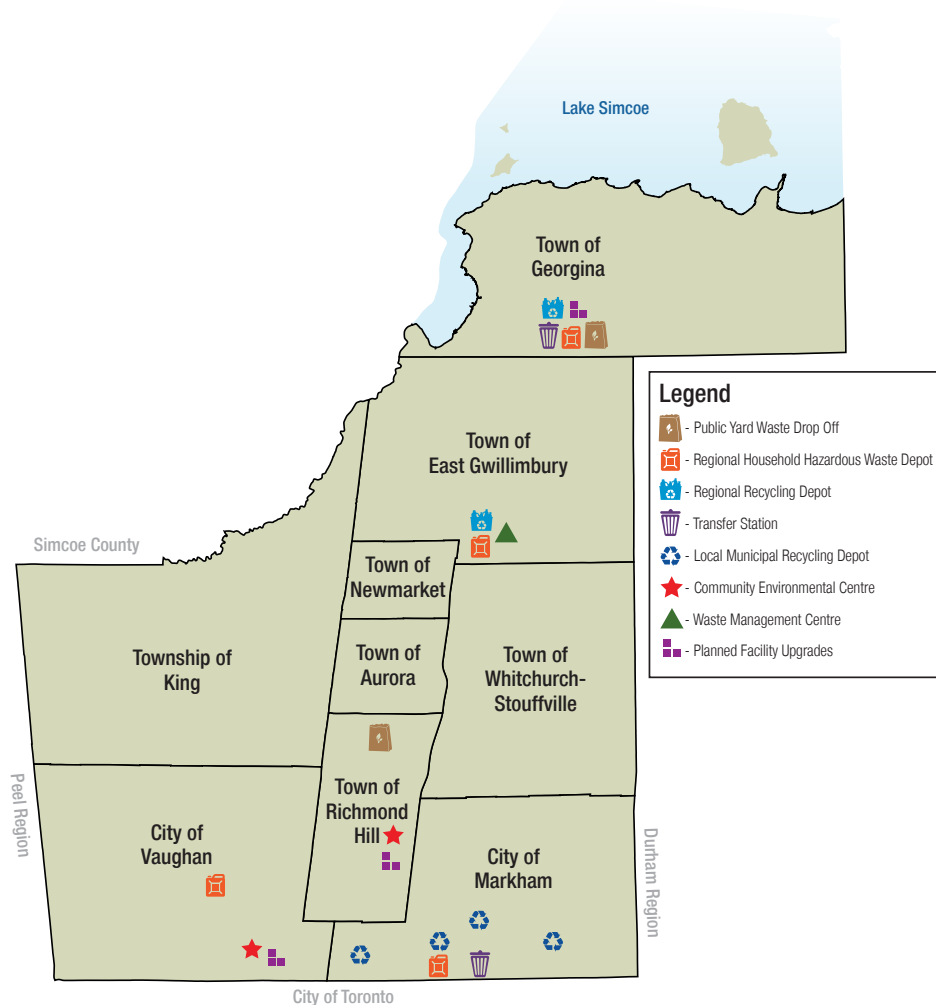
## PROCESSING

Following collection, the processing of recyclables, organics, yard waste and residual waste is handled by York Region. This is accomplished through a combination of Regional blue box processing, external contracts for treatment of organics and yard waste, and energy-from-waste recovery and landfill disposal for residual waste.

## DISPOSAL

Within the Region's 4R hierarchy (reduce, reuse, recycle, recover), the preferred disposal destination is energy-from-waste to receive the benefit of capturing energy from residual waste. Landfill disposal remains the last option for managing Regional materials, once all other diversion options have been exhausted. Landfill is also needed for bulky materials that are not suitable for energy-from-waste processing.

## York Region Waste Management Facility Locations





# Joint Waste Management Summary

## 2014 Curbside Collection

## 2014 Diversion Initiatives

| Municipality     | Alternating Week Bag Collection Limit (Cost per Tag) <sup>1</sup>                                           | Weekly Blue Box and Green Bin Collection                                            | Yard Waste Collection (Frequency)                                                                | White Goods Collection Cost Per Item                                                                   | Bulky Item Collection Cost Per Item                                                                  | Multi-residential Collection                                                                                                                                                                                                                                                                                                                           | Other Initiatives                                                                                                                                                                                                                                                     |
|------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aurora           | <br>(No tags)             |   | <br>(18/year)  | <br>(No fee)         | <br>(No fee)       | <ul style="list-style-type: none"> <li>21 buildings receive weekly municipal garbage and recycling collection</li> <li>Recycling is collected from carts</li> <li>Formal waste management development standards in place</li> </ul>                                                                                                                    | <ul style="list-style-type: none"> <li>Aurora to ban the disposal of batteries in the garbage effective January 1, 2015</li> </ul>                                                                                                                                    |
| East Gwillimbury | <br>(No tags)            |  | <br>(18/year) | <br>(No fee)        | <br>(No fee)      |                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>Nine municipal facilities receive garbage, recycling and organics collection</li> <li>Appliance recycling collection by appointment</li> <li>In 2014, East Gwillimbury hosted an e-waste recycling collection event</li> </ul> |
| Georgina         | <br>(\$1, limit 5 items) |  | <br>(17/year) | <br>(\$1 bag tag)   | <br>(\$1 bag tag) | <ul style="list-style-type: none"> <li>23 buildings receive weekly municipal garbage collection</li> <li>One of 23 buildings receive biweekly municipal recycling collection</li> <li>Five of 23 buildings receive bi-weekly municipal collection of recycling and organics</li> <li>Formal waste management development standards in place</li> </ul> | <ul style="list-style-type: none"> <li>In 2014, Georgina hosted four e-waste recycling events and six Curbside Giveaway Days</li> <li>Town facilities receive municipal recycling collection from carts</li> </ul>                                                    |
| King             | <br>(\$1, limit 5 items) |  | <br>(17/year) | <br>(\$20.50 + hst) | <br>(\$10 + hst)  |                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>King plans to host seven Curbside Giveaway Days in 2015</li> </ul>                                                                                                                                                             |
| Markham          | <br>(No tags)            |  | <br>(18/year) | <br>(\$11)          | <br>(No fee)      | <ul style="list-style-type: none"> <li>101 buildings receive weekly municipal garbage and recycling collection</li> <li>65 of 91 buildings receive weekly municipal organics collection</li> <li>Mandatory tri-sorters required in all new buildings</li> <li>Mandatory internal storage of all containers</li> </ul>                                  | <ul style="list-style-type: none"> <li>Preparing a Feasibility Study for an Automated Vacuum Collection (AVAC) System</li> </ul>                                                                                                                                      |



## 2014 Curbside Collection

## 2014 Diversion Initiatives

| Municipality           | Alternating Week Bag Collection Limit (Cost per Tag) <sup>1</sup>                                                                | Weekly Blue Box and Green Bin Collection                                            | Yard Waste Collection (Frequency)                                                                             | White Goods Collection Cost Per Item                                                            | Bulky Item Collection Cost Per Item                                                             | Multi-residential Collection                                                                                                                                                                                                                                                                                                            | Other Initiatives                                                                                                                                                                         |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Newmarket              | <br>(5 tags for \$12, 6 item limit)            |   | <br>(17/year)               | <br>(\$12)    | <br>(\$12)    | <ul style="list-style-type: none"> <li>24 buildings receive weekly municipal garbage and recycling collection</li> <li>Recyclables collected from carts</li> </ul>                                                                                                                                                                      | <ul style="list-style-type: none"> <li>In 2014, Newmarket hosted four Curbside Giveaway Days</li> </ul>                                                                                   |
| Richmond Hill          | <br>(\$2, 3 item limit, includes bulky items) |  | <br>(21/year)              | <br>(No fee) | <br>(No fee) | <ul style="list-style-type: none"> <li>84 buildings receive weekly municipal garbage and recycling collection</li> <li>40 of 84 buildings receive weekly municipal organics collection</li> <li>28 of 84 buildings have an electronics recycling program in place</li> <li>Appliance recycling available</li> </ul>                     | <ul style="list-style-type: none"> <li>Plans to implement three-stream recycling and organics program in municipal buildings including libraries, arenas and community centres</li> </ul> |
| Vaughan                | <br>(10 tags for \$11, 4 double up days)      |  | <br>(25/year) <sup>2</sup> | <br>(\$27)   | <br>(No fee) | <ul style="list-style-type: none"> <li>53 buildings receive weekly municipal garbage and recycling collection</li> <li>Recyclables collected from carts and garbage from bulk bins</li> <li>Since 2007 all new buildings receive private collection services</li> <li>Formal waste management development standards in place</li> </ul> | <ul style="list-style-type: none"> <li>Joint education campaign with York Region to promote electronics and textile recycling in multi-residential buildings</li> </ul>                   |
| Whitchurch-Stouffville | <br>(\$2)                                     |  | <br>(17/year)              | <br>(No fee) | <br>(No fee) | <ul style="list-style-type: none"> <li>Eight buildings receive weekly municipal garbage collection</li> <li>Six of eight buildings receive weekly municipal collection of recyclables from carts</li> <li>Bulky items and appliances collected by appointment</li> </ul>                                                                |                                                                                                                                                                                           |

(<sup>1</sup> Most tags are sold in sheets of five or 10, <sup>2</sup> Grass clippings are accepted).



# Community Environmental Centres

Convenient drop-off depots offer access to reuse, recycling and disposal

York Region's two Community Environmental Centres (CECs), McCleary Court in the City of Vaughan and Elgin Mills in the Town of Richmond Hill, provide York Region residents and small businesses with two convenient locations to drop off a variety of materials, including those that are not picked up during regular curbside collection.

Materials accepted include reusable goods such as clothing, housewares, books, textiles, electronics, home furnishings, appliances and collectibles for resale by local charities. York Region has partnered with Goodwill Industries to operate and staff the on-site reuse buildings.

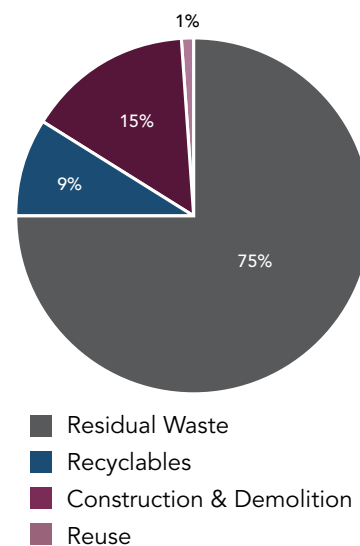
Bulky recyclables, construction and demolition materials are also accepted at the CECs, while all other items that cannot be diverted are safely disposed as residual waste.

In 2014 a total of 20,351 tonnes of material were collected at the CECs:

- Goodwill and Habitat for Humanity collected 267 tonnes of reuse materials (one per cent)
- Blue box, shredded paper, electronics, tires, scrap metal, polystyrene and cooking oil accounted for 1,808 tonnes (nine per cent)
- Construction and demolition materials, including wood, drywall, concrete and rubble represented 3,073 tonnes (15 per cent)
- Residual waste was 15,203 tonnes (75 per cent)

In 2015, York Region will upgrade the CECs to include introducing weigh scales and weight-based fees and adding household hazardous waste drop-off facilities. The weight-based fees will help offset the actual cost of material management and drive cost recovery for higher cost recyclables like construction and demolition materials. Adding household hazardous waste drop-off facilities at the CECs will truly make these facilities a one-stop location for York Region residents.

Percent Composition of Materials at Elgin Mills and McCleary Court Community Environmental Centres, 2014



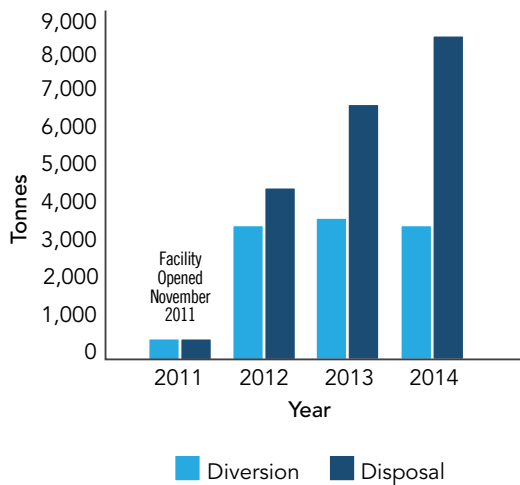
## Did you know?



The CECs represent five and a half per cent of the overall waste tonnage managed by the Region.



**Elgin Mills Community Environmental Centre  
Diversion and Disposal Tonnes, 2011 to 2014**

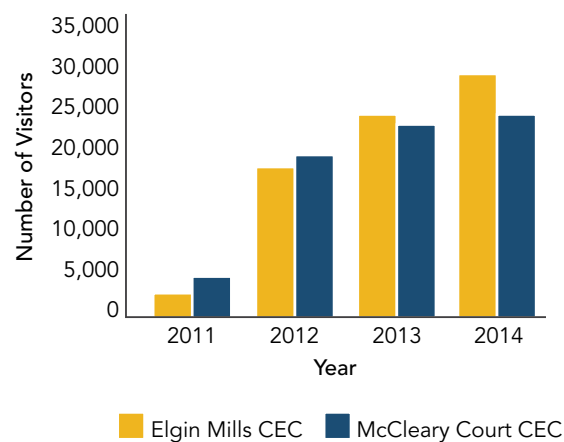


**McCleary Court Community Environmental Centre  
Diversion and Disposal Tonnes, 2010 to 2014**



The amount of waste disposed at the CECs has increased over time, which can be attributed to the increase in CEC usage. In 2014, the number of visitors at Elgin Mills CEC increased by 20 per cent over 2013.

**Visits to Elgin Mills and McCleary Court  
Community Environmental Centres, 2011 to 2014**





# Blue Box

Turning blue box materials into recyclable commodities is an important component of York Region's diversion strategy

Following processing, blue box materials are separated into individual commodities and shipped to markets domestically and internationally for conversion into new products. Participation in the blue box program results in creation of new products using recyclable materials, saving both energy and resources by avoiding extraction and depletion of natural resources. York Region residents should be commended for their participation in the Blue Box Program, which is among the highest in the Greater Toronto Area.

Ontario's Blue Box Program is delivered by municipalities. Funding is shared among producers who manufacture and sell the products that end up in the blue box. Producers contribute approximately 50 per cent of Blue Box Program costs to ensure their products and packaging are properly managed and recycled by the Region and our municipal partners. The remaining blue box costs are borne by municipalities.

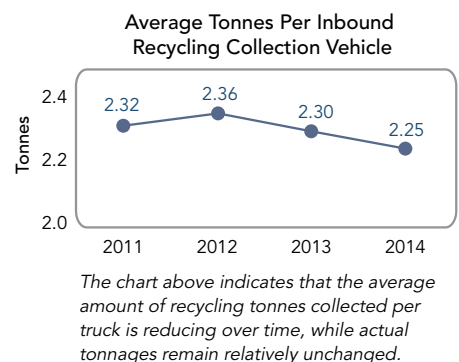
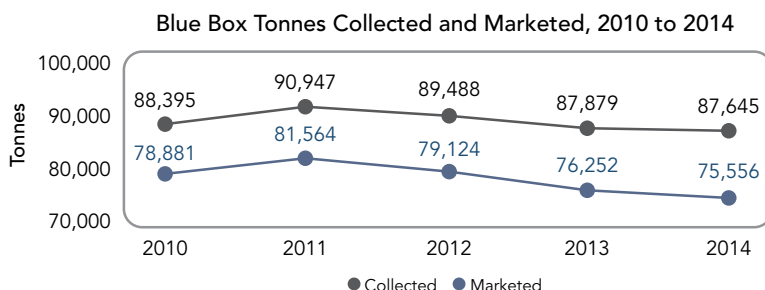
In May 2014, Ontario municipalities and producers, represented by Stewardship Ontario, went into arbitration to determine the steward obligation for 2014 after a negotiated agreement could not be achieved. On November 25, 2014, the arbitrator confirmed the 2014 steward obligation should be based on the municipally reported Datacall, which was verified by Waste Diversion Ontario (WDO) and demonstrated reasonable costs. Municipalities were awarded \$115.2 million, the full amount sought in the arbitration with producers.

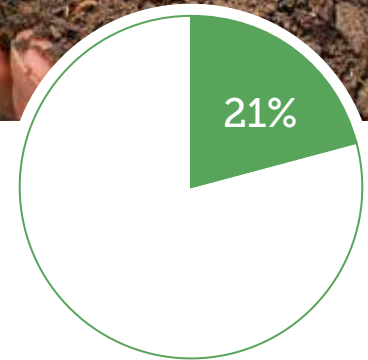
In 2014, the blue box made up 19 per cent of the total materials collected and processed in York Region. Despite population growth, total tonnes collected and marketed remain relatively unchanged, while the volume of materials has increased. This is mainly due to changing composition of blue box materials. There is an increase in lightweight and high volume materials such as plastic and polycoat like juice

boxes and a decrease in the heavier, dense materials like glass and printed paper.

Upgrades at York Region's Waste Management Centre have improved the contamination separation process, creating end-market recyclables that are high in quality and value. York Region's Waste Management Centre provides sufficient blue box processing capacity to address continued population growth, improved promotional efforts, new materials in the waste stream and expansion of recycling services to multi-residential dwellings.

York Region takes a multi-faceted approach to waste diversion through our award-winning promotion and education campaigns that address subjects such as decreasing contamination in the blue box. Blue box audits indicate the top three contaminants are newspapers in plastic bags, non-recyclable plastics and materials packed inside one another such as unseparated boxes.





# Organic Waste

Organics processing is a key component of waste diversion

Processing of organic waste into compost currently represents one-third of the Region's overall diversion achievement. In 2014, York Region residents generated approximately 94,700 tonnes of source separated organics. The amount of organics collected province-wide is in line with the availability of reliable compost processing capacity. Operational issues and odour problems often challenge the organics processing industry.

In 2014, York Region shipped 57,981 tonnes of source separated organic waste to Orgaworld in London, Ontario

and 35,071 tonnes to Lafleche in Moose Creek, Ontario for processing. The remaining tonnes represent leachate (liquid produced from organics decomposition) and evaporation during the composting process. In 2014, 817 tonnes of leachate were managed through approved treatment facilities in Ontario and 831 tonnes were lost to evaporation.

In 2014, all collected organic material was processed into compost through securing reliable Ontario-based compost processing capacity.

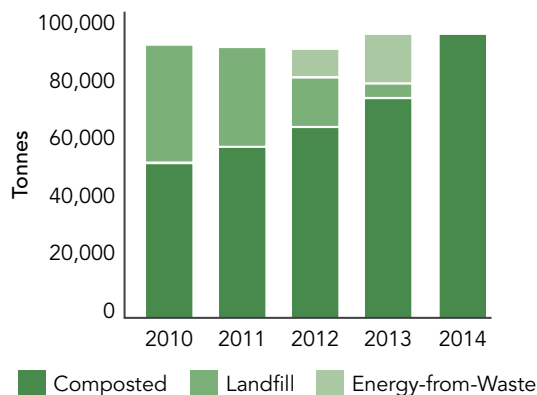


## Did you know?

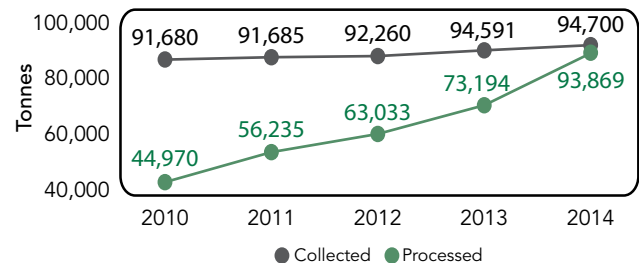


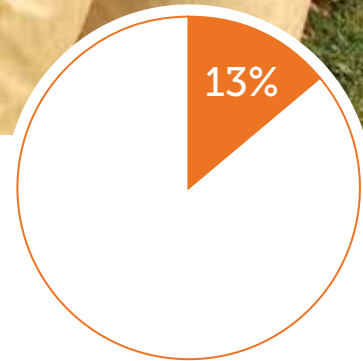
According to Statistics Canada, households throw away up to \$1,500 in food each year.

Source Separated Organics Management by destination (outbound) 2010 to 2014



Source Separated Organics Tonnes Collected and Processed, 2010 to 2014





# Leaf and Yard Waste

Composted leaf and yard waste improves and enriches soil conditions

York Region's local municipal partners offer residents a seasonal curbside leaf and yard waste collection program bi-weekly from spring to fall. Additionally, residents may drop off leaf and yard waste at two facilities in York Region – the Georgina Transfer Station and the Miller Waste Bloomington Road Facility (contracted with the Region and owned/operated by Miller Waste). All yard waste collected in the Region is processed by Miller Waste at their Bloomington Facility in the Town of Richmond Hill.

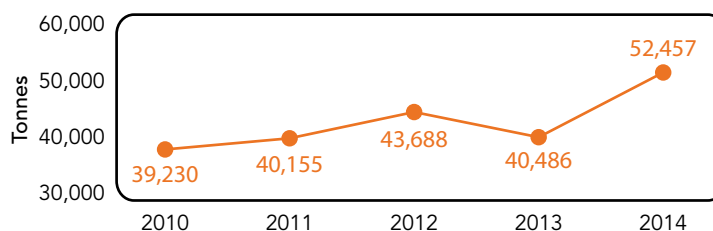
In 2014, York Region residents generated approximately 52,457 tonnes of yard waste, representing 13 per cent of the total curbside waste stream. This represents a significant increase in yard waste collected over 2013 (11 per cent). This is a result of the severe ice storm in December 2013. Ice storm clean-

up efforts began in January 2014 and concluded in June 2014. The Province of Ontario committed to assisting municipalities affected by the ice storm by working with the federal government to fund 100 per cent of eligible recovery costs through a one-time Ice Storm Assistance Program. It is estimated York Region processed approximately 11,000 tonnes of ice storm tree debris. This does not include yard waste collected and processed by Regional and local municipal forestry staff and contracted arborists. York Region and local municipal storm-related costs were submitted at the end of 2014 to the Provincial Ice Storm Assistance Program.

## EMERALD ASH BORER

The Emerald Ash Borer (EAB) was discovered in York Region in 2008. This invasive insect poses no risk to human health but kills all types of ash trees and is a significant threat to our forests and street trees. York Region Forestry has confirmed infestations in all local municipalities within the Region and is working with local municipalities, conservation authorities, the Canadian Food Inspection Agency and the Ontario Ministry of Natural Resources and Forestry to co-ordinate efforts to monitor and manage EAB's impacts in the Region. It is anticipated yard waste tonnages will increase over the coming years as ash trees die off.

Curbside Yard Waste Tonnes Collected, 2010 to 2014





# Waste Electronics

Protecting the environment through collection and proper disposal of electronic waste

York Region provides residents with a network of drop-off facilities for waste electronics, including Georgina Transfer Station, East Gwillimbury HHW and Recycling Depot, Markham HHW Depot, Vaughan HHW depot, as well as McCleary Court and Elgin Mills CECs. In 2009, the Waste Electrical and Electronic Equipment (WEEE) program was developed by Waste Diversion Ontario in co-operation with Ontario Electronic Stewardship. Waste electrical and electronic equipment material has been designated under the *Waste Diversion Act, 2002*, and collection, processing and disposal of this material is funded by brand owners and first importers of these products.

While electronic materials can contain harmful substances such as mercury, lead and cadmium, which require special handling, there are also valuable and limited resources in electronics, such as steel, copper, aluminum and other precious metals. Recycling these materials helps reduce the need for new raw materials. These components are valuable in the marketplace, resulting in service providers paying the Region for electronics collected at municipal depots.

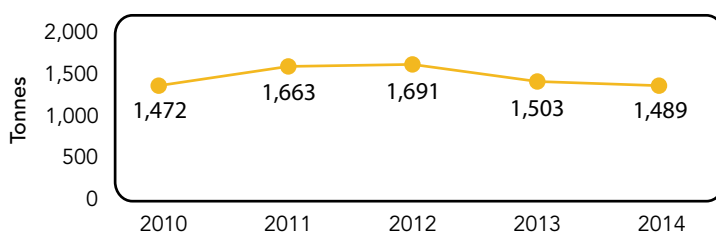
In 2014, 1,489 tonnes of WEEE materials were collected at York Region depots. The decrease in WEEE collected at depots is a result of newer, lightweight

electronics in the marketplace coupled with the increase in WEEE community collection events and convenient retail take-back locations available to York Region residents.

In 2015, the Ontario Electronic Stewardship (OES) Program Plan will be reviewed and updated. York Region, through municipal associations including the Association of Municipalities of Ontario, the Regional Public Works Commissioners of Ontario and the Municipal Waste Association, will be providing comments on the revised plan. Of particular interest is the incentive fees OES provides for collection of their electronic waste.

0.6%

Waste Electrical and Electronic Equipment  
Tonnes Collected, 2010 to 2014



## Did you know?



The gold, silver and bronze medals awarded at the Vancouver 2010 Winter Games were made in part with metals recovered from waste electronics such as computers, TVs and computer keyboards. (*Recycling Council of British Columbia*)



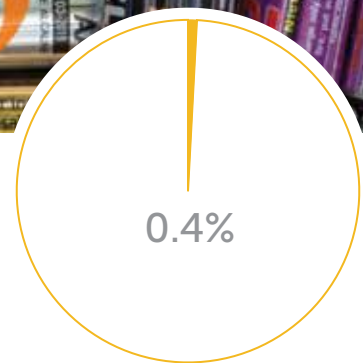
# Household Hazardous Waste (HHW)

Safely managing and diverting municipal hazardous waste to protect the environment

York Region provides a network of facilities where residents can drop off municipal hazardous or special waste. Drop-off locations include the Georgina Transfer Station, East Gwillimbury HHW and Recycling Depot, Markham HHW Depot and the Vaughan HHW Depot. The Region is currently working on incorporating the Vaughan HHW Depot into the McCleary Court CEC operation, a new HHW Depot into the Elgin Mills CEC operation and relocating the Markham HHW depot. Through specialized contract services at these locations, these materials are recycled or treated and disposed of in an environmentally responsible manner.

In 2014, the amount of HHW materials (1,042 tonnes) collected at Regional depots declined from previous years as retail take-back programs increased capture. Both municipal depots and retail take-back programs ensure materials are safely managed to end-of-life and divert harmful substances from landfill, waterways and forests. In addition, many of these items contain materials that can be recovered, refined and reused in manufacturing new products, reducing the need for virgin resources.

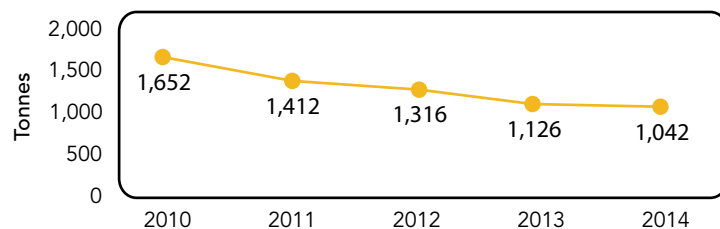
The Recycling Council of Ontario's Phase Two funding program to ensure the safe management of six types of household hazardous wastes was cancelled by the Ministry of the Environment and Climate Change on October 1, 2014. To mitigate the cancellation of the Phase Two program, plans to negotiate cost recovery agreements with producers on a voluntary basis are being considered until new waste management legislation is in place to ensure municipalities are fully compensated. Although the HHW stream is small (0.4 per cent of the total waste stream) when compared to other waste streams such as the blue box (19 per cent of the total waste stream), the cost to process HHW is high at \$424 per tonne (net of funding revenue) compared to \$64 per tonne for blue box (net of market revenue).

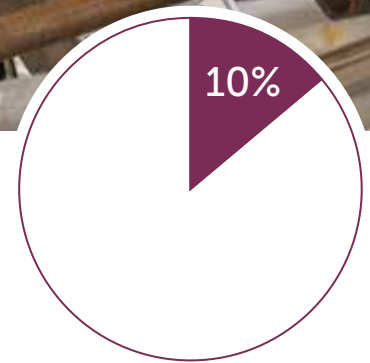


## Did you know?

York Region's 2014 waste audits indicate residents are putting hazardous waste where it belongs. There was only 0.33 per cent of HHW found in the waste stream.

Household Hazardous Waste  
Tonnes Collected, 2010 to 2014





# Tires, Metal, Cooking Oil and Signs

Continued diversion success with depot based recycling programs

## Tire Recycling

York Region collects used tires at the Elgin Mills and McCleary Court Community Environmental Centres (CECs), as well as the Georgina Transfer Station and Recycling Depot. Residents can drop off up to four tires per visit, including car and passenger tires, heavy truck tires or farm tractor tires. These tires are recycled into new products such as rubber bricks, playground surfacing and rubber mulch. This program is funded by tire stewards through the Used Tire Program and supported by Tire Stewardship Fees levied on each tire supplied in Ontario. These fees are collected by the Ontario Tire Stewardship. In 2014, the Region collected 157 tonnes of tires through the CECs and Georgina Transfer Station and Recycling Depot.

## Metal Recycling

York Region residents can bring their scrap metal including metal appliances for recycling to the East Gwillimbury HHW and Recycling Depot, the Georgina Transfer Station and Recycling Depot or the Elgin Mills or McCleary Court CECs. Acceptable scrap metal items include appliances, metal sinks, bicycles and metal furniture. Refrigerated appliances containing freon must have a CFC removal sticker affixed to be eligible for recycling. CFC removal stickers can be purchased at York Region's CECs for \$20 per unit. In 2014, York Region collected 1,155 tonnes of scrap metal for recycling.

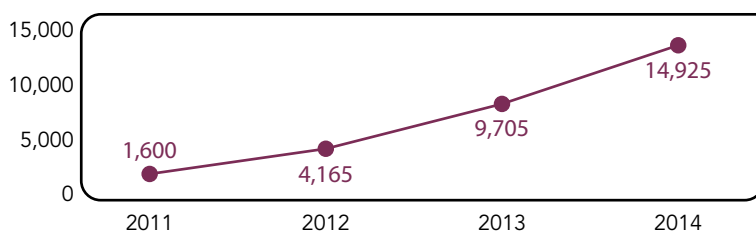
## Used Cooking Oil Drop off and Recycling

Collection of used cooking oil for recycling was initiated in 2011 at the McCleary Court Community Environmental Centre and has been extended to a permanent program due to high resident satisfaction. The Region expanded this program into all HHW depots and the Elgin Mills CEC in 2013. York Region has partnered with Sanimax, a company that collects used cooking oil and processes it into high quality materials such as soap and biodiesel fuel. In 2014, York Region collected 14,925 litres of used oil for recycling and received five cents per litre in revenue.

## Election Sign Recycling

During the 2014 provincial and municipal elections, an election sign recycling program was offered in York Region for coroplast election signs. Drop-off locations included the Elgin Mills and McCleary Court CECs and the Georgina Transfer Station and Recycling Depot. In 2014, York Region collected 11.28 tonnes of coroplast election signs for recycling.

Used Cooking Oil Litres Collected at York Region Drop-Off Depots, 2011 to 2014





# Residual Waste

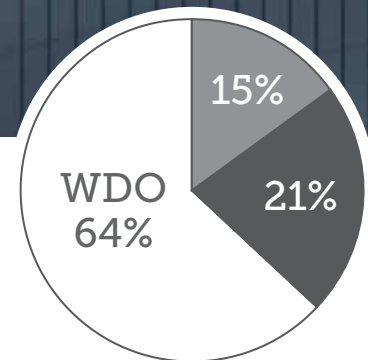
Sustainable residual management through energy recovery

York Region manages its residual waste primarily through energy recovery, with landfill disposal remaining as the final and least-preferred option. Residual waste refers to waste not captured by any of the Region's recycling programs.

In 2014, York Region shipped 81,834 tonnes of residual waste for energy recovery, with 55,799 tonnes processed at Covanta Niagara Limited Partnership in New York State and 26,035 tonnes processed at Emerald Energy in Mississauga, Ontario. The remainder was destined for the Durham York Energy Centre in Clarington; however, due to delays in construction, no residual waste was processed at this facility in 2014. Once operational in 2015, York Region will ship 30,000 tonnes of residual waste for energy recovery. Between the Durham York Energy Centre, Covanta and Emerald Energy, approximately 80 per cent of the Region's residual waste is planned for energy recovery management.

The Region has landfill contracts with Niagara Waste Landfill in Thorold, Ontario and with the City of Toronto at their Green Lane Landfill in St. Thomas, Ontario. These contracts are for the Region's bulky materials, for which diversion programs are not yet established and/or materials are not appropriate for energy recovery. Due to the delay in construction of the Durham York Energy Centre, the Region was required to landfill 53,003 tonnes of residual waste in 2014. Due to operational losses, leachate, evaporation and transfer of materials, 613 tonnes of additional residual waste was landfilled.

The residual waste management portfolio represents a sustainable approach to management of York Region's residual waste, deriving a beneficial use from our residual waste, enhancing security, diversification and stability in the long term.



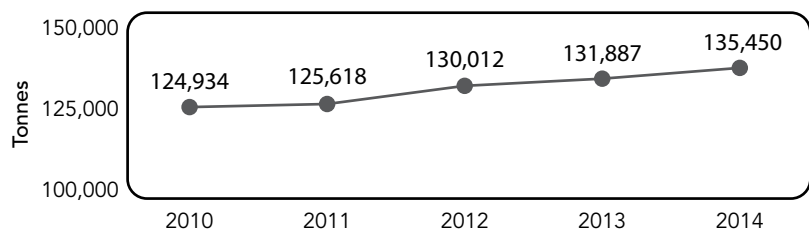
■ Landfill  
■ EFW



## Did you know?

The Durham York Energy Centre is the first energy-from-waste facility to be constructed in more than 20 years.

Residual Waste Generation including Blue Box Residue Tonnes, 2010 to 2014





# Waste Promotion and Education

Award-winning promotion and outreach programs drive waste diversion

Objectives of York Region's environmental promotion and education programs are:

- Promoting participation in waste diversion programs
- Encouraging correct participation in waste diversion programs
- Ensuring compliance with municipal and Regional waste management policies

The Region actively promotes waste diversion through extensive public communication and education programs. Local municipalities also provide broad education and information through their own initiatives, including local waste collection calendars produced and distributed annually to all York Region residents.

## YORK REGION PARTICIPATED IN THE FOLLOWING COMMUNITY OUTREACH INITIATIVES IN 2014:

- Attended 34 special events to distribute waste information
- Conducted 21 presentations and Waste Management Centre tours to students and community organizations, to a total of approximately 1,900 attendees
- Co-ordinated 25 Greener Home and Garden Seminars with more than 1,000 registrants; topics presented supported 4R messages, including seminars reinforcing SM4RT Living Plan, waste reduction and reuse initiatives

## Did you know?



In 2014, York Region received a Gold Communications Award from the Recycling Council of Ontario for the "Breakup Series" Blue Box contamination advertisements.

- Continued promotion of both the McCleary Court and Elgin Mills Community Environmental Centres through the "Take Back your Space" HHW waste campaign featuring print and online advertising, social media and magazine ads
- Continued multi-year blue box contamination campaign in an effort to educate residents on the items that do not belong in the blue box, as well as other blue box best practices
- Improved the online lookup tool called the "Bindicator" to direct residents to nearby public and York Region operated reuse, recycling and disposal locations
- Distributed short animated videos on composting and recycling programs and processes for educational purposes, to all public schools in York Region
- Co-ordinated Waste Reduction Week Open House for staff and local residents that included display booths, lunch and learn sessions and a repair café
- Co-ordinated the initial Southern Ontario Food Waste Collaborative meeting that engaged various levels of government, NGOs, large food retailers and municipalities to initiate a discussion on food waste reduction and common messaging and direction





**THE REGIONAL MUNICIPALITY OF YORK**  
**Environmental Services Department**  
17250 Yonge Street  
Newmarket, Ontario, Canada  
L3Y 6Z1

Access York 1-866-665-6752  
[www.york.ca](http://www.york.ca)



Accessible formats or communication supports are available upon request

