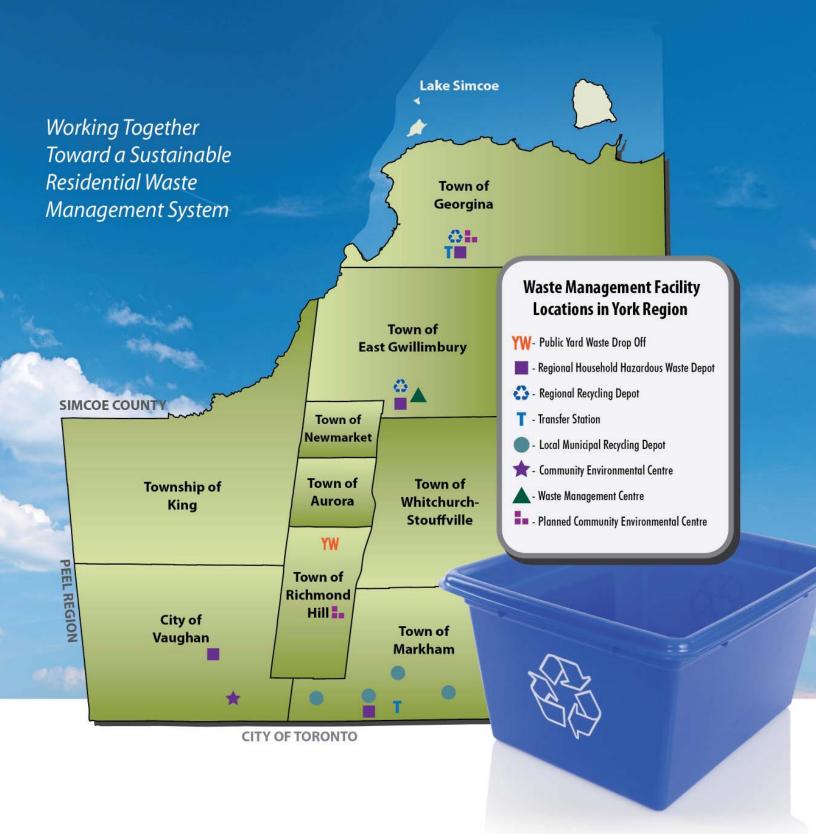


YORK REGION 2010 WASTE DIVERSION REPORT























Overview







The Regional Municipality of York is responsible for the processing and disposal of waste, including Blue Box and Green Bin materials.

The curbside collection program is managed by York Region's nine Local Municipalities, including the Towns of Aurora, East Gwillimbury, Georgina, Newmarket, Markham, Richmond Hill, Whitchurch-Stouffville, Township of King and the City of Vaughan.

In 2010, York Region achieved a 52 per cent Waste Diversion Ontario (WDO) diversion rate (unverified).

YORK REGION WASTE DIVERSION ONTARIO (WDO) DIVERSION RATE 1% 1% 10% 1% 1% 8% 14% 17% 12% 9% 3% (Unverified) Green Bin Yard Waste ■ HHW/Electronics ■ Other* * Other include scrap metal, tires, clean fill, textiles, municipal re-use, backyard composters,

grass cycling and bottle deposits

The Region's solid waste management portfolio includes:

- Waste Management Centre material recovery facility to process blue box recyclable material
- McCleary Court Community Environmental Centre (Elgin Mills opened fall 2011)
- Georgina Waste Transfer Station and Recycling Depot
- Household Hazardous Waste depots in East Gwillimbury, Georgina, Markham and Vaughan
- Dongara Pelletization Plant
- Partnerships with private contractors for the processing and disposal of source separated organics and residual waste
- Durham York Energy Centre (EA approved in 2010 with operation expected fall 2014)

Quick Facts



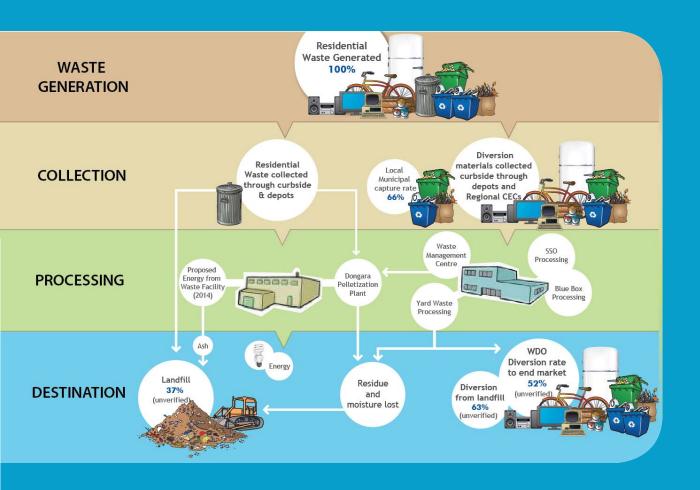
- York Region covers 1,776 square kilometres from Lake Simcoe in the north, to Steeles Avenue in the south; it borders Simcoe County and Peel Region in the west and Durham Region in the east
- York Region is made up of nine Local Municipalities: Towns of Aurora, East Gwillimbury, Georgina, Newmarket, Markham, Richmond Hill, Whitchurch-Stouffville, Township of King and the City of Vaughan
- York Region's population is an estimated 1,073,158.
- York Region has 280,000 single family households and approximately 38,000 apartments
- In 2010, Blue Box material processed was approximately 88,000 tonnes
- Revenue generated from the sales of Blue Box recyclables was approximately \$8 million
- Green Bin material collected was approximately 92,000 tonnes
- Residual garbage collected was approximately 125,000 tonnes
- Total Household Hazardous Waste (HHW) and Waste Electronics and Electrical Equipment (WEEE) collected at Region depots was approximately 3,000 tonnes
- Total Yard Waste collected curbside and at public drop-off areas was approximately 39,000 tonnes
- 'Other diversion', including tires, clean fill, textiles, wood waste, scrap metal and other diversion was approximately 2,800 tonnes

IN THE YEAR 2031, ESTIMATES SUGGEST:

- There will be 1.5 million people living in York Region
- There will be almost 2.5 times as many people over the age of 50 as of today
- There will be 800,000 jobs

Building waste management partnerships in York Region

Waste management in York Region is a cooperative approach to maximize diversion. The nine local municipalities of the Towns of Aurora, East Gwillimbury, Georgina, Newmarket, Markham, Richmond Hill, Whitchurch-Stouffville, Township of King and the City of Vaughan are the first line of waste diversion with residents. The Local Municipalities are responsible for curbside collection of waste and may also have their own diversion programs/depots.



YORK REGION AND LOCAL MUNICIPAL

	CURBSIDE COLLECTION					21	DEPOTS/ FACILITIES		
	Alternating Week Bag Collection Limit (Cost per Tag) ¹	Weekly Blue Box Collection	Weekly Green Bin Collection	Yard Waste Collection	White Goods Collection Cost per Item	Bulky Item Collection Cost per Item	Recycling/ Reuse Depots	Household Hazardous Waste Depots	Community Environmental Centre
AURORA	(No tags)		Û	18/year	No Fee	I I			
EAST GWILLIMBURY	(No tags)		T	18/year	No Fee	No Fee			
GEORGINA	(§1, limit 5 items)		•	17/year	\$1 [a bag tag]	\$1 [a bag tag]			
KING	(§1, limit 5 items)		T	17/year	\$20 (+6ST)	\$10 (+GST)			
MARKHAM	(Tags, limit 3 items)		Û	18/year	\$10	I I	4 Depots (2 GW operated separately)	Limited HHW at Recycling Depots	
NEWMARKET	(5 tags for \$12, 6 item limit)		f	17/year	\$12	\$12			
RICHMOND HILL	(\$2, limit 4 items, includes bulky items)		T	21/year	No Fee	No Fee			
VAUGHAN	(Tags, 10 for \$10.20, 4 'double up' days)		Ū	25/year ²	\$27	I I No Fee			
WHITCHURCH- STOUFFVILLE	(\$2)		Û	17/year	No Fee	No Fee			
YORK REGION							2 Depots East Gwillimbury, Markham	4 Depots East Gwillimbury, Georgina, Markham, Vaughan	Accleary Court Vaughan, Elgin Mills Richmond Hill

JOINT WASTE MANAGEMENT SUMMARY

OTHER INITIATIVES										
Public Space Recycling Parks & Facilities	Multi-residential Collection	Waste Minimization Policies	Backyard Composter							
Details	Details	Details	Distribution							
Recyclables and residual waste collected within the Business Improvement Area of Yonge Street, at nine Town facilities and at Town sponsored events Organics recycling provided at leash free dog park	20 buildings serviced weekly Recyclables collected from carts	Participation and implementation of Joint Waste Diversion Strategy (JWDS) Bag limits as identified in the waste collection bylaw Integrated Waste Management Master Plan Annual recycling and waste collection calendar	\$10							
Recyclables and residual waste collected at all parks and Town facilities Recyclables, organics and residual waste collected at Town facilities equipped with kitchens		Participation and implementation of JWDS Bag limits, waste and recycling calendar, waste collection bylaw, joint promotion and education efforts with the Region, Strategic Plan (protecting and enhancing the environment) Integrated Waste Management Master Plan Annual recycling and waste collection calendar	\$44.02							
Recyclables and residual waste collected at all parks and Town facilities Recyclables, organics and residual waste collected at the theatre, senior centres and at some Town sponsored events	One building and 705 apartments (located above retail outlets) serviced weekly Recyclables from the building placed in a cart, apartments utilize the curbside Blue Box program Implemented duckweed program placed in a cart, apartments utilize the curbside Blue Box program	Participation and implementation of JWDS Integrated Waste Management Master Plan Annual recycling and waste collection calendar	\$35							
Recyclables and residual waste collected at six parks and six Town facilities Recyclables, organics and residual waste collected at the municipal office		Participation and implementation of JWDS Integrated Waste Management Master Plan Annual recycling and waste collection calendar								
Recyclables and residual waste collected at eight Town facilities Recyclables, organics and residual waste collected at 17 Fown facilities Recyclables and residual waste collected at 19 parks, and organics recycling is provided at leash free dog park 95 public space recycling bins (Eucan Bins) for recyclables and residual waste Zero Waste at two Town facilities Four solar public space recycling bin (Big Blue Belly's) for recyclables	61 buildings serviced weekly Recyclables from 49 buildings Recyclables and organics from 12 buildings Mandatory tri-sorters required in all new buildings Mandatory internal storage of all containers White Goods collection program (\$10 per item)	Participation and implementation of JWDS Zero waste policies Two-year collection calendar distributed to every home Side door collection for persons with disabilities Integrated Waste Management Master Plan Annual recycling and waste collection calendar	Annual Free Composter Giveaway Event							
Recyclables and residual waste collected at one park and two Town facilities Parks pilot with York Region	24 buildings serviced weekly Recyclables collected from carts	Participation and implementation of JWDS Waste collection bylaw and bag tags Integrated Waste Management Master Plan Annual recycling and waste collection calendar	\$20							
Recyclables, organics and residual waste collected at 18 Town facilities and at some Town sponsored events	Recyclables from 80 buildings collected from carts or front end bins Organics collected in carts from 21 of the 80 buildings Additional buildings being phased in during 2011	Participation and implementation of JWDS Waste audits as part of Richmond Hill's International Organization for Standardization (ISO) continuous improvement program Formal policy for development standards starting in 2011 waste management bylaw allows fines for non-compliance Integrated Waste Management Master Plan Annual recycling and waste collection calendar	\$20							
Recyclables and residual waste collected at parks and City facilities Organics collected at two City facilities Paper towel collected for composting in all City washrooms Damaged blue boxes and green bins accepted from residents and returned for recycling Household batteries and printer toner cartridges accepted for recycling at City facilities	S3 buildings serviced weekly Recyclables collected from carts Developmental policy for all new Multi-residential properties (post 2007) to provide multit-sort disposal systems	Participation and implementation of JWDS Green Directions Vaughan, Waste Collection Standards Policy for Developments and Redevelopments, waste collection by-law and promotion and education efforts Integrated Waste Management Master Plan Annual recycling and waste collection calendar Four environmental days	\$20							
Recyclables and residual waste collected at 30 parks and four Town facilities Recyclables, organics and residual waste collected at four Town facilities	Five buildings serviced weekly Recyclables collected from carts	Participation and implementation of JWDS Integrated Waste Management Master Plan Annual recycling and waste collection calendar								
Parks pilot with the Town of Newmarket Waste Reduction and Recycling Strategy developed for Regionally owned and operated facilities, Region-wide rollout schedule pending Recyclables, organics, florescent bulbs, batteries, eyeglasses, toner cartridges, wood shipping skids and residual waste collected at the Administratrative Centre Waste audits conducted to measure program success and regulation compliance		Participation and implementation of JWDS Integrated Waste Management Master Plan Annual recycling and waste collection calendar	\$10							

Local Municipal partners provide a comprehensive waste collection service and additional programs to residents encouraging diversion



Local municipal collection is the front line for waste management in York Region.

Each of the nine Local Municipalities is responsible for providing three stream curbside collection services—garbage, recycling and source separated organics. A four-day collection schedule has been implemented across the Region with only one exception in Georgina, where a Monday collection is provided to the cottage households along the lakeshore.

Each of the Local Municipalities have chosen to implement some form of pay-as-you-throw program and/or bag limit system, targeting single family households as a means to increase diversion.

Bulky waste and white good (large appliance) collection is also provided by the Local Municipalities to single-family households. In most cases, white goods collection is provided to residents by scheduling a pick up directly with the waste management company.

Local Municipalities provide additional opportunities for residential waste diversion.

In addition to curbside collection services, Local Municipalities also offer opportunities for their residents to drop off waste materials within their communities through Environment Days, Waste Reduction Week events, public recycling depots, special electronic waste collection days, mulch giveaways, community reuse events, three stream waste collection in public spaces and municipal offices, as well as pilot programs for organics and electronics collection in multi residential buildings.

Looking at SM4RT Living – the Waste Management Master Plan

In 2010, the Integrated Waste Management Master Plan for York Region was initiated. The Plan will be looking at where we are in terms of programs and waste management infrastructure, determining where we want to be and how we are going to get there. Future infrastructure needs will be evaluated against projected program capture over the next 25 to 40 years, with special focus on determining impacts of waste reduction and reuse on future infrastructure needs.

The Plan has been named SM4RT Living and will focus on methods for residents and businesses to make better consumption choices. The Master Plan will allow the Region to secure its position as a waste management leader by focusing on driving waste prevention and reuse, while maximizing recycling, composting and energy recovery.



York Region's Sustainable Waste Management Hierarchy

Delivery of solid waste management services in the Region requires a network of conveniently located waste receiving and processing facilities. These facilities manage yard waste, household hazardous waste (HHW), blue box recyclable materials, source separated organics (SSO), reusable goods and residual waste collected by municipalities and dropped off by the general public. With the Provincial commitment to halt exports of Canadian waste to Michigan and the Region's commitment to a diversion target of 70 per cent, new facilities are required to manage the Region's residual waste and expand diversion programs. The Region has taken a balanced approach to insourcing and outsourcing waste management operations to maximize quality service delivery and control costs.

To achieve long-term sustainability, York Region's integrated waste management program encourages:

REDUCE

(waste prevention)

RE-USE

(maximize utility from materials and products)

RECYCLE

(reduce consumption of resources)

RECOVER

(energy and recyclable materials)

MINIMUM LANDFILL DISPOSAL

- 1. Reduction of packaging and improved handling options to prevent waste generation.
- 2. Re-use of products and materials to maximize their useful life.
- 3. Recycling of materials to reduce consumption of new raw materials.
- 4. Recovery of energy and recyclable materials, after all other diversion efforts have been exhausted, to minimize reliance on landfills.

Through leadership and advocacy efforts with local municipalities, government agencies and stakeholders, York Region is working to shape Provincial waste management policies and to advocate for full extended producer responsibility for products and packaging. York Region also conducts frequent events with re-use partners and has integrated a re-use module into our new Community Environmental Centres by partnering with Goodwill Industries and Habitat for Humanity York Region.





Providing Blue Box material processing capacity in a changing environment of increased Extended Producer Responsibility



Turning Blue Box materials into recyclable commodities is an important component of York Region's diversion strategy. The materials collected in the Blue Box program are processed in the Material Recovery Facility (MRF) located in York Region's Garfield Wright Waste Management Centre (WMC).

An expansion of the Material Recovery Facility was completed in 2011, with a contribution in funding from the Government of Canada's Infrastructure Stimulus Funding program. The additional technology and sorting capability increased the annual facility processing from 95,000 tonnes to 140,000 tonnes. The additional capacity has been allocated for the projected population increase in York Region.

Residents and small businesses may drop off recycling free of charge at the McCleary Court Community Environmental Centre, Elgin Mills Community Environmental Centre, East Gwillimbury Household Hazardous Waste and Recycling Depot and the Georgina Waste Transfer Station.

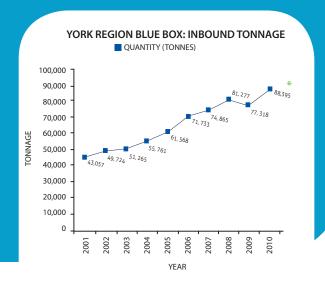
In 2010, the Blue Box made up 22 per cent of the materials captured and processed. Future additional Blue Box processing capacity will be required to address the influences of continued population growth, improved promotional efforts, new materials in the waste stream and expansion of recycling services to multi-residential dwellings, parks and recreation facilities.

ACCEPTABLE

Newspaper, printed paper, corrugated cardboard, rigid plastics (food and household cleaning product containers), aluminum foil and cans, steel and tin cans, glass bottles and jars, polycoat containers and gable top containers

NOT ACCEPTABLE

Polystyrene foam, plastic bags/wrap, non food and beverage formed/bubbled plastic packaging, household hazardous waste (HHW), tissue paper, paper towels, cookie bags, potato chip bags, pans, kitchen utensils, shredded paper



Composting of source separated organics is an important and challenging component of York Regions's diversion strategy

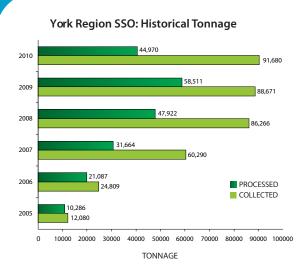


Processing of organic waste into compost, a beneficial agricultural growing media supplement, currently represents almost half of the Region's overall diversion achievement. In 2010, the Region processed approximately 44,000 tonnes of organic material. The demand of source separated organics processing province-wide has outpaced the establishment of reliable compost processing capacity. Operational challenges and odour problems have also plagued the source separated organics processing industry.

Currently, York Region contracts composting of its source separated organic materials to two privately-owned facilities, Orgaworld in London, Ontario and WeCare Organics in Massachusetts. These facilities provide York Region with sufficient processing capacity to meet its needs for the next several years. In recent years, Orgaworld has experienced reductions in processing capacity and ultimately, facility shutdowns, due to odour impacts on the local communities. This significantly impacted York Region's ability to divert organic material in 2010, when a three-month facility shutdown was ordered by the Ministry of the Environment. During that shutdown and processing shortage, York Region was forced to landfill a significant tonnage of source separated organics. The landfilling of organics was responsible for a decrease in the WDO Diversion Rate from 2009 to 2010.

Orgaworld conducted a study during the 2010 shutdown and has experienced an improvement in providing consistent processing operations in 2011. Contingency landfill capacity continues to be maintained should disposal of SSO material be required.

York Region has entered a partnership with Dufferin County to proactively secure reliable and sustainable processing capacity for Source Separated Organics in the future. An industry-leading facility will be designed and constructed to accept and process material from both York Region and Dufferin County. The facility will be designed to initially process 50,000 tonnes of SSO per year (45,000 tonnes for York Region and 5,000 tonnes for Dufferin County) and allow for a future expansion for a total processing capacity of 100,000 tonnes.



Strategy for management of residual waste is key to long-term sustainability

After all efforts at waste diversion have been expended, York Region is seeking to manage its remaining residual waste primarily through energy recovery, with landfill disposal remaining as the final and least preferred option.

To this end, York Region has established a residual waste processing contract with Dongara Pellet Plant LP to convert residual solid waste into a fuel pellet product suitable for use in approved industrial combustion processes to displace consumption of fossil fuels.

York Region is also partnering with Durham Region to develop an Energy-from-Waste facility in Clarington, Ontario (Durham Region). The Durham York Energy Centre represents a sustainable approach to management of York Region's residual waste, enhancing security, diversification and stability in the long-term.

For the foreseeable future, some landfill disposal of residual waste will continue to be required. York Region has a long-term contract with the City of Toronto to dispose of residual waste at the Green Lane Landfill near London, Ontario.



York Region Residual Waste: Historical Tonnage 2010 124.934 2009 121,700 2008 2006 197.964 2005 2002 100.000 200.000 250,000 50.000 150.000 TONNAGE

Additional landfill capacity was secured in 2010 with Walker Brothers and Waste Management of Canada Corporation. The latter was necessary to manage Source Separated Organic material that could not be processed at Orgaworld due to plant closures and will continue to form a basis for contingency in the near-term.

The Region's network of Community Environmental Centres will increase accessibility to waste management services



York Region's Community Environmental Centres, McCleary Court (Vaughan) and Elgin Mills (Richmond Hill) provide members of the public with conveniently located points of access to solid waste management services not available curbside. Community Environmental Centres provide residents with a well-situated location to drop off items such as building materials, electronics, large metal appliances and shredded paper. Community Environmental Centres assist residents with managing waste materials that exceed their curbside pick-up limits and feature an education area for residents to learn more about environmental issues in York Region.

Through the Integrated Waste Management Master Plan, future expansion of the Community Environmental Centre network will be evaluated using sustainability parameters, including environmental, social and financial impacts.

The CEC initiative has been targeted to divert approximately 5,000 tonnes of divertible materials annually from landfill. The CECs will be accessible, within a 20 killometre radius of most York Region residents. These 'one stop' sites provide residents with a convenient location where they can drop off a variety of materials including reusable goods such as clothing, housewares, books, textiles, electronics, home furnishings, appliances, collectibles and building materials for resale by local charities. York Region has partnered with Goodwill Industries and Habitat for Humanity York Region to operate and staff the on-site reuse building, continuing its good working relationships with these charitable organizations. The reusable goods collected at the Community Environmental Centres, through Goodwill Industries and Habitat for Humanity York Region, will be distributed for re-sale at the charities' retail locations within York Region.

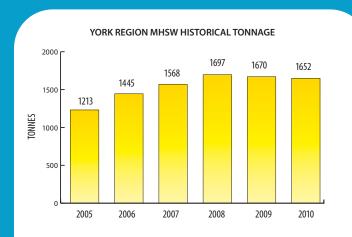
Municipal hazardous special waste (MHSW) and waste electronics and electrical equipment (WEEE) programs remove potentially harmful materials from the waste stream

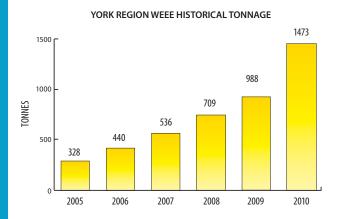
As the Region proceeds forward to implement its vision of a more sustainable waste management system, it becomes increasingly important to remove hazardous substances from the residual waste stream and ensure that those substances are dealt with in an environmentally-sound manner. To achieve this, the Region provides its residents with a network of facilities where residents can drop off MHSW and WEEE. Through specialized contract services at these locations, these materials are then recycled to the extent possible or treated and disposed in an environmentally-secure fashion. MHSW and WEEE material has been designated under the Waste Diversion Act and collection, processing and disposal of this material is partially funded by brand owners and first importers of these products.

Current MHSW and WEEE drop-off locations include the Georgina Transfer Station, the East Gwillimbury HHW and Recycling Depot, Markham HHW Depot and the Vaughan HHW depot.

In addition, WEEE materials are accepted at the McCleary Court Community Environmental Centre. The Elgin Mills Community Environmental Centre in Richmond Hill (fall 2011) will collect WEEE materials, with MHSW collection planned following the first year of operation.







Leaf and Yard Waste



The Local Municipalities are responsible for the collection of leaf and yard waste material curbside. An average of 18 collections per year occur across York Region, with some variation by municipality. In 2010, Yard Waste was 10 per cent of the waste stream.



Program requirements include the use of kraft paper bags and prohibits grass clippings. Residents may drop off additional material at two facilities in the Region – the Georgina Transfer Station and Bloomington Road (contracted with the Region and owned/operated by Miller Waste).

A specific site has been designated for Vaughan residents in the area bounded by Rutherford Road, Steeles Avenue, Highway 27 and Dufferin Street due to Asian Long-horned Beetle regulations.

In 2010, approximately 7,300 tonnes of yard waste material was managed at the site in accordance with Canadian Food and Inspection Agency standards.

Leaf and Yard Waste: Historical Tonnage 2010 2009 2008 2007 28,739 2006 2005 24,493 22,772 2004 2003 2002 14 084 2001 40,000 10,000

TONNAGE



Other Diversion



Used Cooking Oil Drop-off and Recycling

A cooking oil recycling pilot program was initiated in 2010 at the McCleary Court Community Environmental Centre. Residents are able to bring containers of used cooking oil to the site for reclamation instead of disposing as waste. York Region has partnered with Sanimax, a company that collects leftover products like used cooking oil and cleans and transforms them at processing plants into high quality materials. From the recycled products, Sanimax creates pet food, soaps, biodiesel and leather shoes.

Sanimax provides the equipment for the collection of the cooking oil and picks up the material as required.

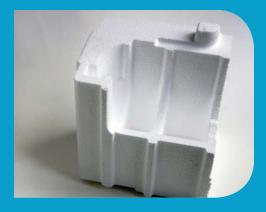


- Canola oil
- Coconut oil
- Corn oil
- Grapeseed oil
- Olive oil
- Palm oil
- Peanut oil
- Soybean oil
- Safflower oil
- Sesame oilSunflower oil
- Vegetable oil

NOT ACCEPTED:

- Animal / meat fat
- Butter
- Gravies
- Lard
- Margarine
- Salad dressings
- Sauces
- Shortening

Polystrene Recycling



Polystyrene collection pilot programs have been recently initiated at York Region's McCleary Court Community Environmental Centre and select Town of Markham depots to allow for York Region residents to drop off polystyrene for recycling. The Town of Markham has recently received funding through the Continuous Improvement Fund for a cold densification unit to allow for densification of material and more economical transportation to recycling facilities. End uses of densified polystyrene include picture frames, furniture, fences, carpets and more.

Election Sign Recycling

For a limited period of time following all government elections, an election sign recycling program is initiated in York Region. Coroplast election signs are accepted for drop-off at the McCleary Court Community Environmental Centre and the Georgina Transfer Station.



Coroplast signs must have fasteners, wood or metal stakes and wires removed for recycling. In 2010, York Region shipped approximately nine tonnes of coroplast election signs for recycling.

Waste Promotion and Education

In 2010, York Region continued to promote its waste management programs through promotion and outreach activities. York Region has identified the objectives of the Promotion and Education programs as to:

- Promote participation in waste diversion programs
- Encourage correct participation in waste diversion programs
- Ensure compliance with Municipal and Regional waste management policies

The Region strives for regular communication among the nine municipalities, recognizing the importance of consistent messaging to minimize confusion among the residents and leverage economies of scale wherever possible.

The Region actively promotes its waste diversion programs through an extensive communication and education program. The Local Municipalities also provide extensive education and information through their local waste collection calendars that are produced and circulated on an annual or biannual frequency and are distributed to all new residents to York Region.

The Region is recognized as a culturally diverse region, therefore it is necessary to provide education materials in a variety of languages.

OVER 34 DIFFERENT EVENTS TOOK PLACE IN 2010 INCLUDING:



- Special electronic drop-off events were held and promoted throughout the year
- Continued promotion of the McCleary Court Community Environmental Centre through print advertising, radio promotion, events and mobile signs throughout the year
- Created a six-minute educational video to be used as a supplement for school education programming
- Promoted newly expanded hours at the HHW depots through print advertising, brochures and public outreach methods
- Continued to promote the Household Hazardous Waste program through commercials airing on Rogers TV listing channel and brochure distribution
- York Works, distributed to all households in the Region, featured information on the Green Bin program, Community Environmental Centres, Household Hazardous Waste and electronics, reuse and an Energy from Waste update

ELECTRONIC LOOK UP TOOLS DEVELOPED TO ASSIST RESIDENTS WITH MANAGING WASTE MATERIALS

In an effort to assist residents with managing their waste materials, the City of Vaughan developed an electronic look up tool that was made available on their website (www.city.vaughan.on.ca). York Region has also developed *Bin-dicator*, a tool that was launched in 2011 (www.york.ca). These tools allow residents to type in specific materials and results are provided that inform residents on how best to manage the material and the most appropriate location for this waste to be managed.

Awards





THE REGIONAL MUNICIPALITY OF YORK Environmental Services

17250 Yonge Street Newmarket,Ontario L3Y 6Z1

1-877-464-YORK (9675) Extension 3000

www.york.ca

