

---

**From:** Switzer, Barbara <Barbara.Switzer@york.ca> **On Behalf Of** Regional Clerk  
**Sent:** Tuesday, June 29, 2021 10:27 AM  
**Subject:** Regional Council Decision - 2020 Annual Waste Management Report

**CAUTION: This email originated from a source outside the City of Markham. DO NOT CLICK on any links or attachments, or reply unless you recognize the sender and know the content is safe.**

On June 24, 2021 Regional Council made the following decision:

1. The Regional Clerk circulate this report to the Clerks of the local municipalities and the Ministry of the Environment, Conservation and Parks.

The original staff report is attached for your information.

Please contact Laura McDowell, Director, Environmental Promotion and Protection at 1-877-464-9675 ext. 75077 if you have any questions with respect to this matter.

Regards,

**Christopher Raynor** | Regional Clerk, Regional Clerk's Office, Corporate Services

---

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1  
**O:** 1-877-464-9675 ext. 71300 | [christopher.raynor@york.ca](mailto:christopher.raynor@york.ca) | [york.ca](http://york.ca)

Our Mission: **Working together to serve our thriving communities – today and tomorrow**



# **The Regional Municipality of York**

Committee of the Whole  
Environmental Services  
June 10, 2021

Report of the Commissioner of Environmental Services

## **2020 Annual Waste Management Report**

### **1. Recommendation**

The Regional Clerk circulate this report to the Clerks of the local municipalities and the Ministry of the Environment, Conservation and Parks.

### **2. Summary**

This report provides Council with a copy of the 2020 Annual Waste Management Report (Attachment 1) which summarizes the Region's waste reduction and diversion initiatives and provides an update on implementation of the SM4RT Living Integrated Waste Management Master Plan (the SM4RT Living Plan). It supports the Region's enhanced approach to tracking, measuring, and reporting on the performance of its waste management system.

This Annual Report is submitted to the Ministry of the Environment, Conservation and Parks each year to satisfy the Durham York Energy Centre Environmental Assessment condition for diversion reporting.

#### Key Points:

- Regional and local municipal staff collaborated to manage the challenges created by the COVID-19 pandemic, adapting programs and services to ensure safe delivery for staff and residents
- Organics and garbage curbside generation rates increased in 2020 due primarily to pandemic impacts
- The Region and its local municipal partners achieved 93% diversion from landfill in 2020, again exceeding the Regional Official Plan goal of 90% waste diversion from landfill. This includes all tonnes collected through local municipal curbside programs, waste depot diversion programs and tonnes managed through energy-from-waste
- A diversion rate of 66% has been reported by the Region for 2020 and is awaiting verification by the Resource Productivity and Recovery Authority (RPRA). The province does not recognize energy-from-waste as diversion and, as such, the diversion rate reported by RPRA does not include energy-from-waste tonnages



- Although the release of the Blue Box regulation is still pending (as of drafting this report), York Region continues to prepare for transition of the Blue Box Program to full producer responsibility and has advocated to the province to finalize the Blue Box regulation (Attachment 2)
- The SM4RT Living Plan's focus on circular economy will support the Region as it recovers from the pandemic and navigates waste-related legislative changes

### 3. Background

#### **The SM4RT Living Plan focus on circular economy demonstrates leadership in an evolving waste landscape**

The SM4RT Living Plan outlines the long-term direction for waste policy and programming in the Region. The SM4RT Living Plan has a visionary goal of a world where nothing goes to waste and a strong focus on partnerships and innovation to drive change. Approved by Council in [April 2020](#), the SM4RT Living Plan continues to move York Region to a more sustainable circular economy that emphasizes waste reduction, repair, reuse and resource recovery to ensure materials are kept in circulation, maximizing economic value and environmental protection. Council demonstrated early leadership in this important shift which is gaining momentum with senior governments, municipalities across Canada, and the private sector.

Changes influenced by the pandemic restrictions have highlighted the value of resilient and adaptable local supply chains that can be achieved through a more circular economy. Despite the ongoing pandemic challenges, the federal government has moved forward with funding announcements for Canadian industry, academia and other sectors to support innovative circular solutions to address plastics, textiles and food waste reduction. Advancing the circular economy will keep the Region at the forefront of this important movement, helping to improve waste management outcomes, while mitigating greenhouse gas emissions and supporting innovation and resilience in the public and private sectors.

### 4. Analysis

#### **The Region and local municipal partners provided flexible, high quality service to residents despite COVID-19 impacts to waste operations**

Throughout the pandemic, the Region and its local municipal partners adapted quickly and remained flexible to maintain curbside and waste depot service levels. Outlined in Attachment 1 (pages 22 – 23), waste depots implemented additional safety protocols to ensure the health and safety of workers and residents. The community environmental centres and our Georgina Transfer Station temporarily prioritized drop-off of garbage and household hazardous waste at the start of the pandemic. Textile diversion was briefly suspended at the request of Diabetes Canada. When the program resumed in July 2020 usage of this service surged. Similarly, there was a significant increase in demand for depot services during the pandemic, with a record number of tonnes collected and visits to depots.

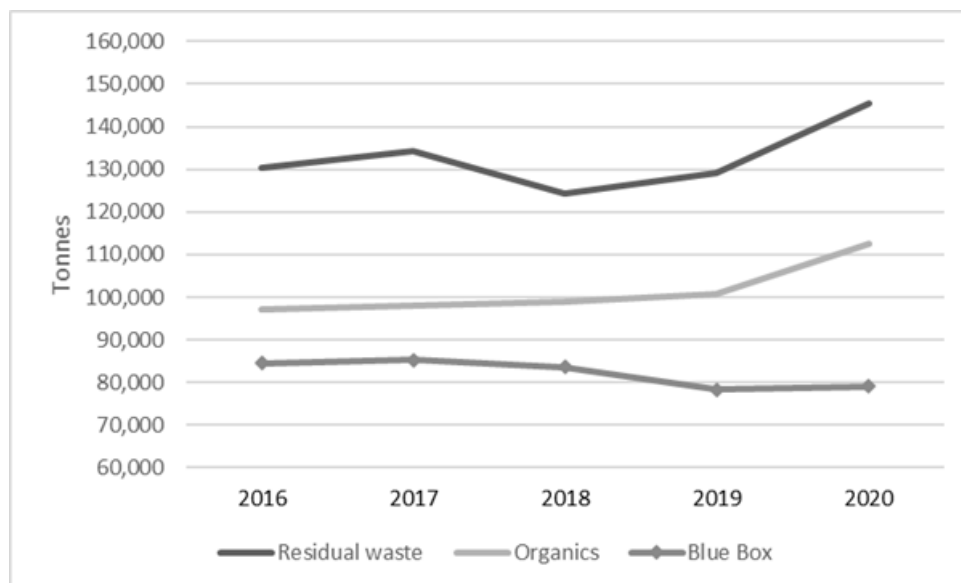


At the local municipal level, staff collaborated with the Region on messaging about proper placement of materials at the curb and provided flexibility on garbage bag limits to support residents working or studying at home. Some municipalities adapted services such as bin and tag sales to contactless formats.

### **COVID-19 had a significant impact on waste generation rates as communities implemented measures to manage the pandemic**

In 2020, the global pandemic impacted social and recreational activities, jobs, supply chains and economies worldwide resulting in significant changes in consumption and waste disposal behaviours at home. Municipal systems captured waste normally managed in workplaces, schools, and other places outside the home and additional waste generated from online shopping, takeout food and single use personal protective equipment. This led to increased tonnages of waste managed in the Region's three largest streams and new blue box contamination challenges. Figure 1 shows the total tonnes collected over the last five years. Year over year changes in tonnage can be attributed to population growth, however, in 2020 additional increases were attributed to COVID-19 impacts.

**Figure 1**  
**Total Tonnes Collected per Year**



Attachment 1 (pages 6 – 9), details the Region's waste generation rates in 2020 and highlights waste behaviours that influenced these rates. The green bin generation rate increased from 84 kilograms per person in 2019 to 92 kilograms per person in 2020 and the garbage generation rate increased from 81 kilograms per person in 2019 to 91 kilograms per person in 2020.



## **Region and community partners engage residents through virtual programming to help support waste reduction and health and wellbeing**

The pandemic inspired growing interest in activities such as cooking, gardening and bicycling, as residents took advantage of more time at home to learn new skills and manage mental health impacts of isolation. The Region partnered with community groups to offer online and socially distanced programs and shared waste messaging that aligns with the SM4RT Living Plan and engages residents exploring new pursuits. The 2020 Annual Waste Management Report (pages 30 – 31) showcases community engagement activities across the Region, including a partnership with Markham Cycles that provided online workshops, a donated bike refurbishing program and outdoor bicycle tune-ups. Regional staff developed a new contactless approach to the annual composter sale which saw increased demand from new and existing gardeners. Partnerships with York Region Food Network and York Farm Fresh allowed the Region to continue sharing tips and tools for reducing food waste while cooking at home and buying local produce.

## **SM4RT Living Plan priorities guide programs and policy as the Region moves towards recovery from COVID-19**

It is unclear how changes brought about by the pandemic response, such as increased online shopping, working from home, and further reliance on single use packaging may impact waste generation over the longer term. The Region will continue to monitor waste generation trends over the next few years to better understand the medium and long-term impacts. While the Region has been successful at promoting environmentally friendly consumption and waste behaviours in the past, it might be challenging to address some of the new consumption and waste habits residents displayed during the pandemic. On the other hand, residents have also exhibited new skills and interests such as cooking, gardening and repair that may be leveraged to help in waste reduction engagement and education efforts. Private sector commitments such as the new [Loop Program](#) offering reusable packaging options for shopping and take-out food aligns with federal commitments on banning single use items and suggests that the movement towards a circular economy continues.

As the pandemic evolves the Region will continue to work with local municipal and community partners to deliver waste reduction and education programs supporting this transition. The Region's first Circular Economy Initiatives Fund, launched in February 2021, will support non-profit organizations to drive community-led waste reduction and reuse efforts. The Region has also applied to participate in the [Circular Cities and Regions Initiative](#), a network of municipalities engaged in transition to a circular economy. Program participants will be announced in June 2021. If successful, the Region will have the opportunity to work with national and international experts and municipal peers to develop a roadmap to circularity that builds on our SM4RT Living plan to further guide our work over the next several years.



## **Region continues to exceed the Regional Official Plan target with 93% diversion from landfill in 2020**

Although an increase in tonnage for all streams was noted in 2020, York Region and its local municipal partners achieved 93% diversion from landfill, continuing to exceed the Regional Official Plan target of 90% waste diversion from landfill. The Region has exceeded its diversion from landfill target since the target was established in 2016; however, the rate has decreased slightly from our 2019 rate of 94%. The diversion from landfill rate includes all tonnes collected through local municipal curbside programs, waste depot diversion programs and tonnes managed through energy-from-waste. Diversion from landfill is a key performance measure under the sustainable environment priority in the Corporate Strategic Plan. The diversion rate is reported annually to the Ministry of the Environment, Conservation and Parks to satisfy the Durham York Energy Centre Environmental Assessment condition for diversion reporting.

## **York Region continues to lead large urban municipalities in the Resource Productivity and Recovery Authority diversion ranking**

Since 2012, York Region has ranked first in the large urban municipal diversion category, verified through the Resource Productivity and Recovery Authority Annual Datacall. The province does not recognize energy-from-waste as diversion and, as such, the diversion rate reported by the Resource Productivity and Recovery Authority does not include energy-from-waste tonnages. York Region and its local municipal partners continue to be leaders in Ontario in sustainable waste management. In 2019 (the latest year for which we have verified data), York Region continued this leadership with the highest verified diversion rate of 66% in the large urban municipal diversion category. For 2020, York Region has again reported a diversion rate of 66% which has been submitted to the Resource Productivity and Recovery Authority for verification. This suggests the Region's diversion rate remained the same despite challenges and impacts of the pandemic.

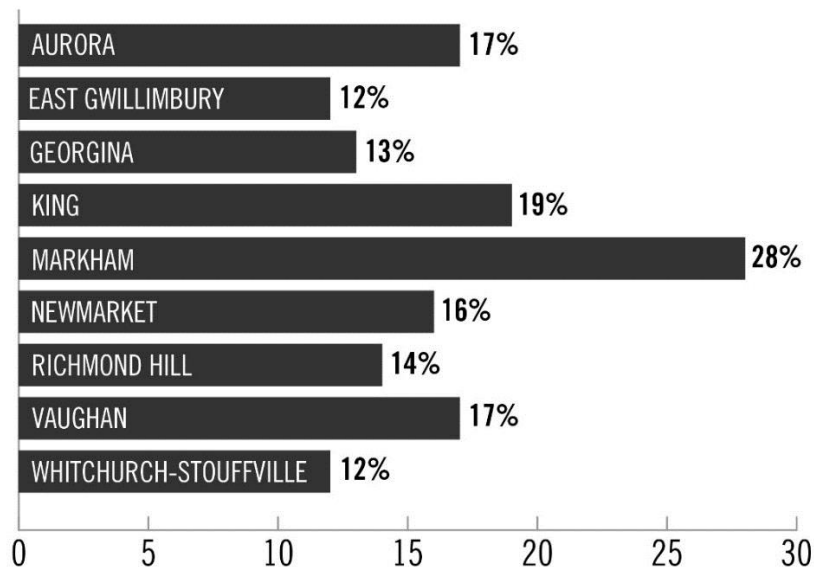
## **The Region and local municipalities will tackle broader blue box contamination to prepare for transition**

Waste audits revealed that blue box contamination persisted in 2020. Local municipal contamination rates range from 12% to 28% as seen in Figure 2. A broad range of contaminants was found in the blue box stream, with no common contamination issues among the municipalities.



**Figure 2**

**Blue Box Contamination Rates – 2020 Audit**



The Region and local municipalities along with the collection contractors recognize that education combined with curbside enforcement are best practices that must be employed to help lower blue box contamination. Region and local municipal staff continue to work together to drive improvements in the Blue Box Program by educating residents on what materials are acceptable and leveraging curbside enforcement practices. However, further progress is needed in areas where high contamination rates persist. As the pandemic recovery phase commences York Region and the local municipalities will work on expanding education efforts and focus enforcement on targeted areas to address broader contamination issues. Regional and local municipal staff have engaged in discussions to develop an approach to better understand the impacts of the pandemic on blue box participation and contamination.

**Provincial government advances transition of several key programs however regulations show erosion of producer responsibility requirements**

As the recycling landscape in Ontario continues to evolve, York Region has remained engaged in consultations related to implementation of full producer responsibility. Table 1 highlights the regulatory changes and consultations in 2020 and early 2021 and the Region's feedback/position. While the Region is pleased to see significant progress on plans to transition to full producer responsibility, there is concern about the strength and effectiveness of the regulation. In some cases, materials covered by draft regulations were not included in the final versions, leading to a possible reduction in diversion and convenience for residents. Lack of clear targets in the regulations could also impact environmental outcomes.



**Table 1**  
**Regulatory advocacy work in 2020**

---

### **Batteries**

- Transitioned to individual producer responsibility on July 1, 2020
- 

### **Blue Box**

- [June 2020](#): all nine local municipal councils and Regional Council passed resolutions indicating transition in 2025 as the preferred date; this date was included in the draft regulation
  - October 2020: Ministry released proposed Regulation
  - December [2020](#): Staff submitted comments on the draft regulation that included local municipal concerns
  - Ministry expected to finalize Blue Box regulation in 2021 (still pending)
  - April 2021: Region issues letter to Minister of Environment, Conservation and Parks, copying the Premier's office, to advocate for the release and finalization of the Blue Box regulation
- 

### **Electronic Waste**

- December 31, 2020: Waste Electrical and Electronic Equipment Program ended
  - January 1, 2021: program transitioned to individual producer responsibility
  - Concerns around new Electrical and Electronic Equipment Regulation as fewer material types designated under final regulation than in earlier draft version; no established penalties for non-compliance
- 

### **Food and Organic Waste Policy Statement**

- September 2020: Ministry posted proposed amendments to policy statement to encourage inclusion of compostable packaging in green bin programs
  - [November 2020](#): Region and local municipalities provided feedback, including recommendation to establish producer responsibility for compostable packaging
- 

### **Municipal Hazardous or Special Waste**

- September 30, 2021: transition to individual producer responsibility
  - February 2021: proposed regulations released
  - York Region and local municipalities responded with feedback expressing extreme disappointment that the draft did not include key material types and lacked targets
  - Feedback also identified lack of alignment between ministry's permissions office and producer responsibility regulations; the "use it up" approach for fertilizer under the proposed regulation increases non-point source runoff at a time when the province is actively trying to reduce non-point sources of phosphorus to the Great Lakes and Lake Simcoe. This is in stark contrast to increasingly restrictive phosphorus requirements for wastewater facilities already subject to extremely stringent phosphorus effluent limits.
-



Regional and local municipal staff will continue to advocate for improvements to ensure residents have convenient access to diversion programs as well as trust that waste is being managed consistently and responsibly under new programs.

The Blue Box regulation has yet to be finalized despite earlier commitments from the province to release the final regulation by early 2021. The Association of Municipalities of Ontario, City of Toronto, Peel Region and York Region (Attachment 2) have issued letters to the province advocating for release of the final regulation and other municipalities across Ontario are following this lead.

## 5. Financial

### Uncertainty around Blue Box Regulation may impact future budgets

Further delays in the release of the final regulation are increasing municipal costs that would otherwise be avoided through transition to full producer responsibility. Transition as currently proposed in the draft regulation would initiate in 2023, with York Region scheduled for 2025. Delayed transition timing and/or inadequate scope of the final regulation will impact the timing and extent of future costs savings and may result in increased costs. Staff continue to collaborate with local municipal partners to adapt to the changes during this evolving process.

### COVID-19 impacts reflected in 2020 actuals and 2021 budget

Increased blue box, garbage, and green bin tonnages observed in 2020 due to the pandemic resulted in an increase of \$2.1 million to the Region's waste management net operating costs. Table 2 summarizes the operating impact of the pandemic on the affected waste streams.

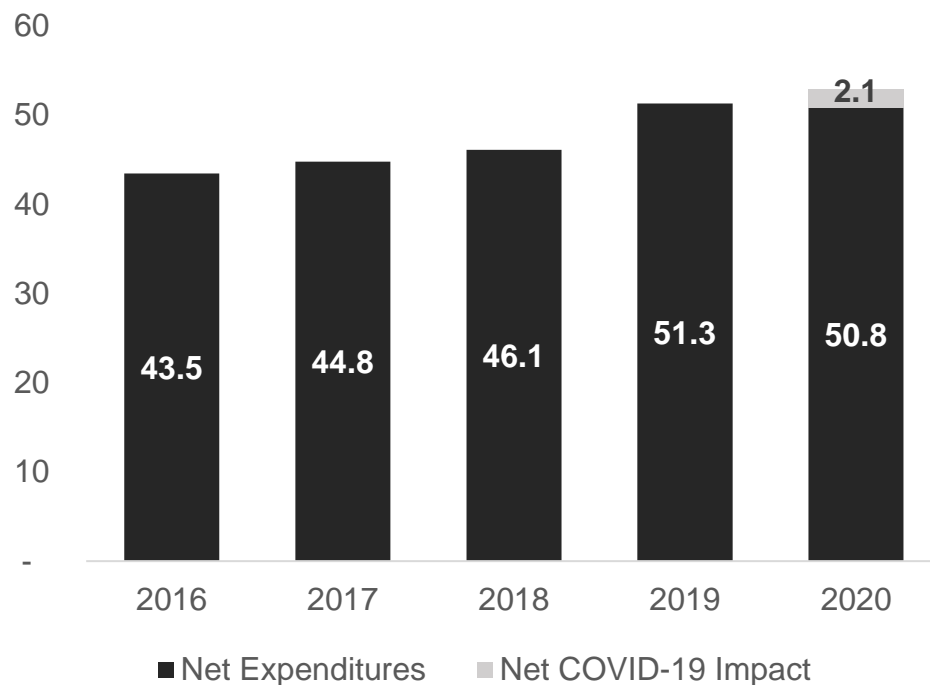
**Table 2**  
**2020 Net Operating Impact of COVID-19 by Waste Stream**

Waste Stream	Additional Tonnage Due to COVID-19	Net Operating Impact (000s)
Garbage	7,900	\$630
Blue Box	3,000	\$240
Organics	8,000	\$1,230
<b>Total</b>	<b>18,900</b>	<b>\$2,100</b>



Over the past five years, the waste management operating spending has grown at a predictable and consistent rate typically due to cost inflation and population growth. As shown in Figure 3, 2020 operating expenditures were forecasted to be slightly lower than 2019 expenditures. However, the impact of the pandemic increased the waste expenditures by \$2.1M, an additional 4% over expected spending.

**Figure 3**  
**Waste Management Net Operating Expenditures 2016-2020**  
**(\$ Millions)**



Tonnages and contamination are difficult to forecast given the uncertainty about residents continuing to work or study from home and how behaviours will be modified based on the evolving pandemic. Based on current trends the pandemic is expected to increase 2021 waste management expenditures by an additional \$1.8 million.

## 6. Local Impact

### Local municipal efforts critical to eliminate personal protective equipment (PPE) in the blue box

Waste directly related to the COVID-19 pandemic, specifically masks and gloves, began appearing in the blue box at the start of the pandemic in 2020, raising health and safety concerns for collection and processing staff. The Region conducted waste audits that found a higher quantity of personal protective equipment in blue box tonnages from the southern municipalities. Markham recorded the highest PPE related contamination rate, with 236 gloves/masks per tonne of blue box material audited.



Recognizing this trend, the Region worked closely with the southern municipalities to identify and address PPE waste in the blue box. Through a targeted education and enforcement campaign starting in October 2020, the southern three municipalities monitored blue boxes at the curb and worked with their collection contractors to sticker and leave behind blue boxes containing PPE. In 2020 early results showed a downward trend in observed PPE from September to December. During this period the northern six municipalities continued to educate and enforce at the curb and recorded a lower quantity of PPE in the blue box. This education and enforcement helps protect staff and operations at the Materials Recovery Facility. The Region will continue with education, enforcement work, and monitoring impacts of PPE in the blue box stream.

## **7. Conclusion**

### **The Region and its local municipal partners remain resilient despite impacts of the pandemic and are well positioned to support recovery**

With unexpected changes and impacts to waste management resulting from the pandemic, 2020 was a challenging year. It was also a year that revealed the resilience of Regional and local municipal diversion programs and their potential for improvement. Service levels were maintained with very few modifications and staff continued delivery of high-quality programs through new and innovative methods.

The Region's emphasis on a circular economy supports a strong recovery from the impacts of the pandemic. The Region's Circular Economy Initiatives Fund, launched in 2021, provides funding and support to the non-profit sector to deliver projects that reduce waste and promote a circular economy. Work has begun on developing a circular economy working group to facilitate knowledge sharing and collaboration so the Region's facilities and operations align with our commitment to circularity and waste reduction and efforts to support the industrial, commercial and institutional sector in adopting circular practices can be guided by data and stakeholder insights. The Region and local municipalities also remain actively engaged in advocacy around the transition to full producer responsibility, a key component of the circular economy.



---

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection at 1-877-464-9675 ext. 75077. Accessible formats or communication supports are available upon request.

Recommended by:

Per:   
**Erin Mahoney, M. Eng.**  
Commissioner of Environmental Services

Approved for Submission:

  
**Bruce Macgregor**  
Chief Administrative Officer

May 21, 2021  
Attachments (2)  
#12802140





# 2020 ANNUAL **WASTE** MANAGEMENT REPORT



PARTNERSHIPS DRIVING  
Reduction | Reuse | Recycling | Recovery







# SM4RT LIVING

## Recovery and Resilience through the Circular Economy

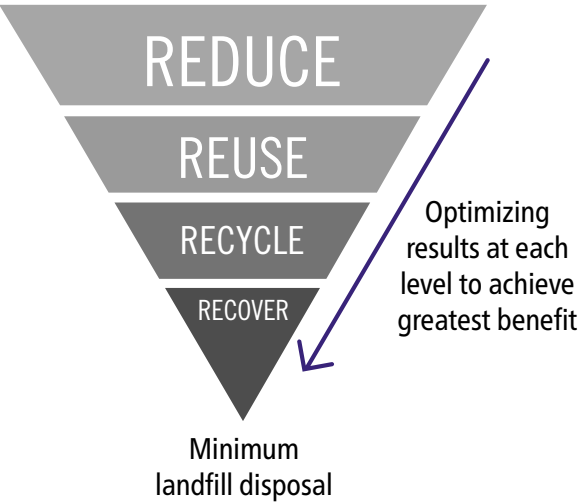
York Region's Integrated Waste Management Master Plan (SM4RT Living Plan) declares a visionary goal of a world where nothing goes to waste. The SM4RT Living Plan identifies the Region's strategy to move away from the traditional linear economy where resources are lost after use to a more sustainable circular economy approach, where resources are continuously recaptured and reused. The Region's focus on a circular economy can support a strong recovery from impacts of COVID-19 by supporting local innovations in resource recovery, product design and zero waste services through implementation of policy and programs identified in the SM4RT Living Plan. Work completed under the SM4RT Living Plan in 2020 included advocacy for circular economy in waste management regulations, continued focus on food waste reduction and diversion and planning for the 2021 launch of the Circular Economy Initiatives Fund. This work supports more innovation in the non-profit sector and will extend the Region's reach. Strong collaborations and partnerships with community groups, businesses and other levels of

government ensures resiliency and sustained long-term efforts to reduce waste and promote a circular economy. In 2021, the plan identifies more opportunities to focus on internal practices and community programs to reduce single-use items, engage community stakeholders and research opportunities to drive circularity alongside municipal peers in City of Toronto, City of Guelph and other communities nationwide. These efforts will provide more opportunities to drive York Region's commitment to the 4Rs:

1. Reduce the amount of waste generated in York Region
2. Reuse items instead of discarding them
3. Recycle as many materials as possible into new products
4. Recover energy from waste that cannot be managed in other ways

Building circular economy knowledge and capacity will be essential to help accelerate the transition for a lasting recovery. The linear model of waste management is reactive in a time of crisis, while a circular economy anticipates possible risks of future crises and has built-in capabilities to ensure the Region's resilience.

**The Region's focus on a circular economy can support a strong recovery from the impacts of the COVID-19 pandemic.**



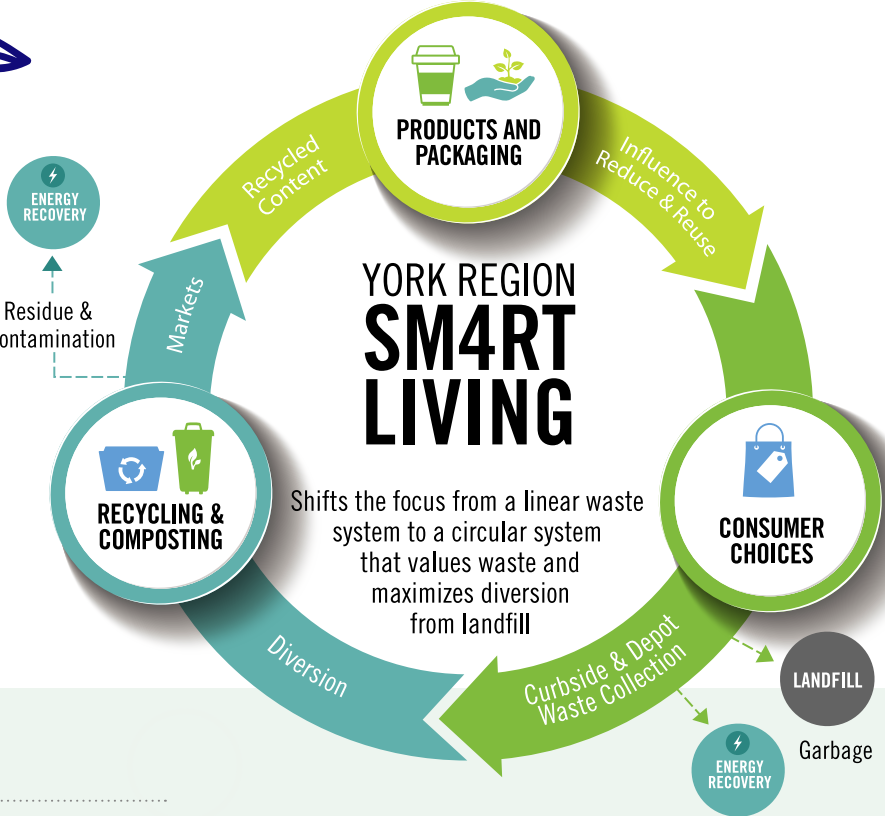
## LINEAR ECONOMY

Where we are



## CIRCULAR ECONOMY

Where we want to be



### Products and Packaging

- Advocating to the Province to make producers responsible for capture and recycling of their products to drive better packaging and product design that is more recyclable and durable for reuse
- Advocating for provincial leadership to drive change and create opportunities for innovative solutions that result in increased diversion and improved environmental outcomes

### Influence Consumer Choices

- Providing residents opportunities for reuse and repair through innovative programs such as Repair Cafés, Curbside Giveaway Days and textile diversion
- Building community partnerships to expand programs and shift mindsets and behaviours to reduce consumption and increase reuse

### Increasing Diversion through Recycling and Composting

- Providing convenient, accessible and efficient collection programs to single-family and multi-residential homes
- Reclaiming energy and resources such as metals from residual waste
- Proactively planning for long-term capacity needs and leveraging technology to improve efficiency of infrastructure
- Maximizing opportunities for recycled material to become new products and packaging





Images taken prior to COVID-19

## Building on Success: SM4RT Living Plan Objectives and Actions

As approved by York Regional Council in April 2020, the updated SM4RT Living Plan outlines a revised visionary goal and a mission to guide the Region towards its long-term targets. The priorities included in the Plan are organized into three objectives and several key actions which are summarized in the table that follows. These key actions will be monitored and results will be reported to Council on an annual basis beginning in 2021. Some actions have been delayed due to public health restrictions and broader impacts of COVID-19.

## VISIONARY GOAL

A world in which nothing goes to waste.

## MISSION

The local municipalities and the Region lead the way through partnering, innovating and inspiring change.



## The SM4RT Living Plan: Objectives and Actions



### OBJECTIVE 1: Successfully navigate legislative changes

This is about responding flexibly and using legislative changes to continually improve SM4RT Living.	●	Region and local municipalities leverage existing framework for collaborative decision-making to navigate legislative changes.
	●	Region and local municipalities ensure compliance with changing legislation (e.g., Food and Organics Waste Policy Statement and Resource Recovery and Circular Economy Act), including reviewing Official Plan and bylaws.
	●	Local municipalities and Region explore legal mechanisms to ensure producers manage their waste as required in the Region.
	●	During the transition to full producer responsibility, Region and local municipal partners continue to monitor and address blue box contamination and Region ensures the Materials Recovery Facility performs as needed.

### OBJECTIVE 2: Use resources and infrastructure more strategically to achieve SM4RT Living

This is about focusing efforts, innovating and improving coordination to create a more seamless, cost-effective system and do more with available resources.	●	Region and local municipalities leverage technology to improve data collection, analysis and information sharing from facilities and operations, in support of greater efficiency and more strategic decisions.
	●	Region and local municipalities maintain leadership in waste diversion by researching and sharing best practices, approaches and technologies, particularly for multi-residential buildings. Local municipalities take the lead in testing and applying new approaches and sharing lessons learned.
	●	Local municipalities include standards for waste diversion and material storage and collection in the approval process for new multi-residential developments.
	●	Region contracts for anaerobic processing capacity to diversify its portfolio and inform future investment decisions.
	●	Region and local municipalities work towards consistent messaging and education to reduce food waste, including promoting backyard composting to help manage SSO pressures and costs.
	●	Local municipalities and Region apply best practices and tools to work towards consistency in waste collection services, messaging, enforcement and performance monitoring.
	●	Region works with other Ontario municipalities to standardize record-keeping and data reporting across the province to provide consistent evidence for advocacy positions.
	●	Region secures long-term contracts to recover energy from residual materials.

### OBJECTIVE 3: Inspire people across the Region to embrace SM4RT Living and advance the circular economy

This is about the value of partners and pioneers in igniting the uptake of SM4RT Living and the circular economy across our communities.	●	Region and local municipalities encourage grassroots community initiatives that align with SM4RT Living philosophy.
	●	Region improves support for partnerships, including establishing a \$100,000 Circular Economy grant program that would help community partners, new social enterprises and businesses advance SM4RT Living Plan goals.
	●	Region identifies and promotes how SM4RT Living connects to broader Regional initiatives around healthy communities and social well-being and builds linkages where appropriate.
	●	Through strategic partnerships, the Region and local municipalities support opportunities for residents to repair, share, reuse and repurpose items.
	●	Region and local municipalities work to implement an "Ask First" voluntary program across the Region to reduce single-use items, and show leadership by reducing consumption at their own facilities. Region and local municipalities assess results of "Ask First" program, review federal and provincial policies if available, and determine if a mandatory approach is needed.
	●	Region and local municipalities advocate for provincial and/or federal policies and legislation that advance the circular economy.
	●	Region researches, consults and shares findings to build understanding of the circular economy in York Region and how it connects to SM4RT Living. Region encourages residents, not-for-profit groups, businesses and others in York Region to move to the circular economy.

● ONGOING ● INITIATED ● DELAYED



# WASTE GENERATION



## TARGETS



### GREEN BIN

71 kilograms per capita by 2031



### GARBAGE

66 kilograms per capita by 2031

## Behaviour Change due to COVID-19 Affected Waste Generation

York Region monitors its progress toward the SM4RT Living Plan waste reduction targets by tracking waste generation.

Waste generation rate measures the tonnage of waste per person (kg/capita) collected curbside. As the Province moves to full producer responsibility for the blue box program, the Region will focus its reporting on green bin (organics) and garbage generation, the two key streams that will remain as mandated municipal responsibilities.

Due to COVID-19, 2020 was an unprecedented year as the way people lived and worked changed drastically. As seen in Graph 1, there was a significant increase in both curbside green bin and curbside garbage generation rates in 2020. For the green bin, the generation rate increased from 84 kilograms per person in 2019 to 92 kilograms per person in 2020, while the garbage generation rate increased from 81 kilograms per person in 2019 to 91 kilograms per person in 2020. Interestingly, there was also a slight increase in the blue box generation rate from 2019 to 2020. This rate was previously on a downward trend. All nine local cities and towns also recorded increases in their green bin and garbage generation rates, as seen in Graphs 2 to 5.

These notable increases were most likely due to the impacts of COVID-19. The stay-at-home orders issued in early 2020 resulted in different behaviour patterns at home that impacted waste generation and curbside tonnages. Additionally, many people began working from home, shifting waste from the

industrial, commercial and institutional (ICI) sector to the residential waste stream.

Studies done in 2020 concluded there have been considerable changes in waste generation in Canada during the pandemic. One study conducted a few months after the lockdowns started found several Ontario municipalities, representing close to 8.5 million residents, experienced an increase in materials at the curb. These municipalities collected on average 4% more residential garbage and 12% more residential green bin materials.

Additionally, spending more time at home appears to have impacted household food consumption habits. A study conducted by Dalhousie University provided evidence food waste generated by Canadians at home increased during the pandemic, with the average Canadian household generating 13.5% more food waste. As many residents remain at home, this increase in organic waste generation is expected to continue into 2021. The green bin program will continue to be an important way to divert food waste from disposal and recover resources and energy in the waste stream. The Region's planned shift to anaerobic digestion for processing will further reduce greenhouse gas emissions from processing. York Region continues to work with partners to raise awareness and take action to reduce organic waste through continued promotion of the Region's food waste reduction initiative, the Good Food Program. The Region also continues to collaborate with provincial, regional and municipal stakeholders through the Ontario Food Collaborative, which encourages residents to eat well and reduce food waste.

In the initial stages of the pandemic, restrictions such as garbage bag limits in some municipalities and enforcement at the curb were relaxed; these changes could have also resulted in increased generation rates. There was anecdotal evidence that residents were not as diligent with sorting waste due to COVID-19 concerns. Once the pandemic ends, it might be challenging to reverse this and other new waste behaviours. It will be essential to track waste generation trends over the next few years to understand whether changes during the pandemic and resulting differences in the subsequent post-COVID-19 era will affect residents' waste behaviours.

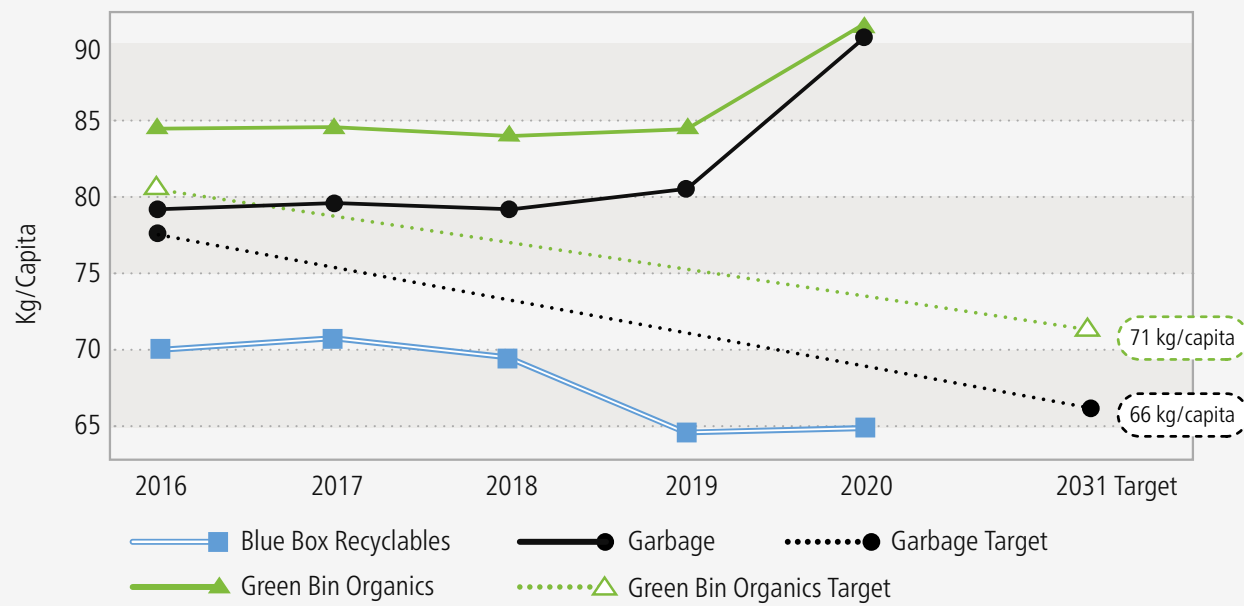
Although the pandemic negatively impacted the Region's waste generation rates, there were noteworthy happenings in 2020 that allowed the Region to continue to serve and remain engaged with residents. This continued engagement will be critical to help reverse the current waste generation direction as the Region recovers and drive long-term behaviour change to help reduce waste generation and move the Region closer to its targets. The Region and local municipalities have been able to maintain curbside and

depot waste management services to residents throughout the pandemic in a manner that prioritized safety. Staff remained flexible and adapted quickly as they navigated a constantly evolving situation.

Through collaboration with its local cities and towns and strengthened partnerships with community groups, the Region was able to pivot in a time of uncertainty and deliver programs in creative and innovative ways. As a result, the Region was still able to positively impact residents. Examples of the Region's collaborations and innovative program delivery are detailed in the 'Partnerships' and 'Community Engagement' sections of this report.

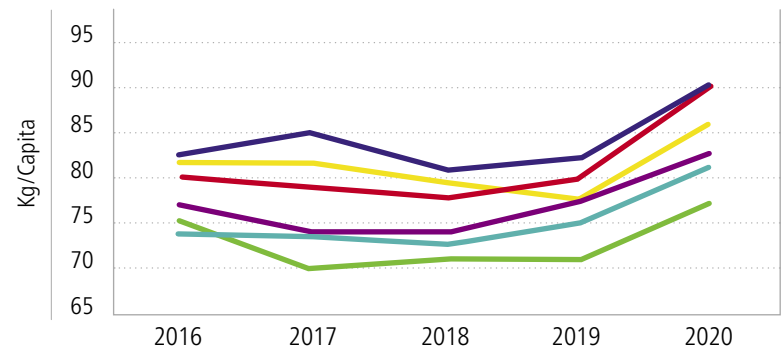
**Through collaboration with its local cities and towns and strengthened partnerships with community groups.**

Graph 1: York Region Residential Curbside Waste Generation Rate (kg/capita)



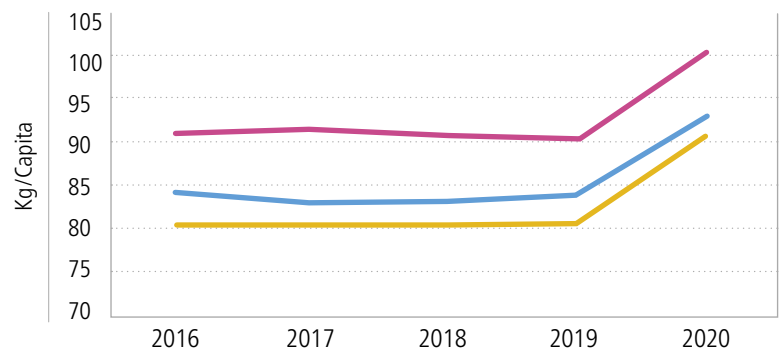


Graph 2: Northern Towns' Green Bin Waste Generation Rate (kg/capita)



Local Town	2016	2017	2018	2019	2020
Aurora	80	78	77	80	90
East Gwillimbury	76	74	74	77	83
Georgina	75	70	71	71	76
King	83	85	81	83	90
Newmarket	74	74	73	75	81
Whitchurch-Stouffville	82	82	79	77	86

Graph 3: Southern Cities' Green Bin Waste Generation Rate (kg/capita)



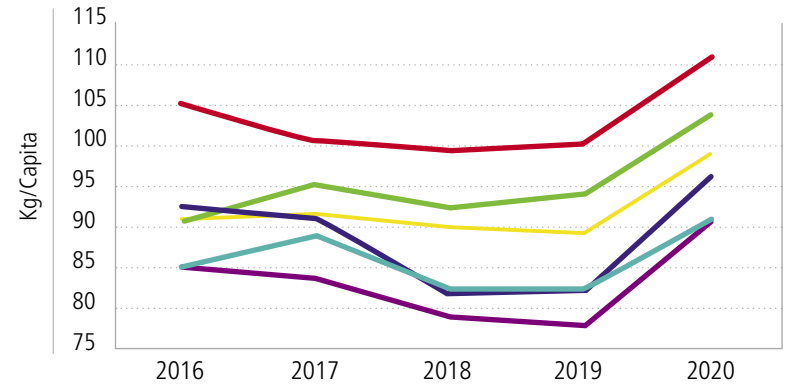
Local City	2016	2017	2018	2019	2020
Markham	91	92	91	91	100
Richmond Hill	81	80	80	81	91
Vaughan	84	83	84	85	93

Looking ahead, the Region is well positioned to recover and get back on track with its targets, based on the continued engagement with residents throughout the pandemic as well as a focus on moving toward a circular economy. Through its SM4RT Living Plan, York Region has identified several initiatives to encourage that mindset shift from a linear (take-make-dispose) model to a circular way of thinking, where everything has value. The Circular Economy Initiatives Fund launched in March 2021 is one such initiative. The Fund will empower community partners to develop and execute waste reduction and reuse projects that are expected to help the Region achieve its waste generation targets.

York Region has identified several initiatives that will help encourage that mindset shift from a linear model to a circular way of thinking.

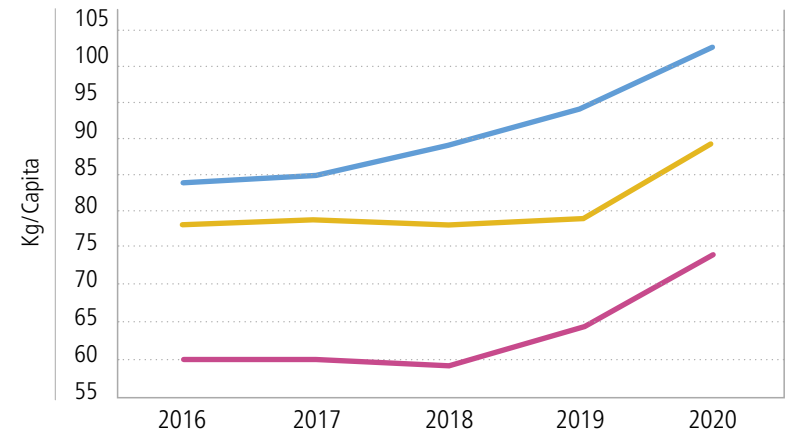


Graph 4: Northern Towns' Residual Waste (Garbage) Generation Rate (kg/capita)



Local Town	2016	2017	2018	2019	2020
Aurora	105	101	99	100	111
East Gwillimbury	85	84	78	77	91
Georgina	91	95	93	94	104
King	93	91	82	83	96
Newmarket	85	88	83	83	91
Whitchurch-Stouffville	91	92	90	89	98

Graph 5: Southern Cities' Residual Waste (Garbage) Generation Rate (kg/capita)



Local City	2016	2017	2018	2019	2020
Markham	60	60	59	64	74
Richmond Hill	77	78	77	78	89
Vaughan	84	85	88	94	103



# PARTNERSHIPS



## Local Municipalities and Community Partners Help the Region Deliver Innovative Programs

York Region and its nine local cities and towns continue to collaborate to provide integrated waste management services and programs focusing on reduction, reuse and recycling initiatives. In 2020, most services were maintained with only a few being modified to adjust to the impacts of COVID-19. The Region was able to adapt and modify in-person programs to deliver drive-through events, increase virtual engagement and education through social media and waste applications and, in some cases, resume activities in reduced family-sized groups. These impacts will continue to affect program delivery for 2021 and modifications for COVID-19 safety protocols will be incorporated into future programs.

**The Region continues to build community partnerships that will help drive innovative programs that promote waste prevention and community building.**

Images taken prior to COVID-19

Waste Reduction and Collection Programs Provided by Local Cities and Towns

Collection Type	Waste Type	Aurora	East Gwillimbury	Georgina	King	Markham	Newmarket	Richmond Hill	Vaughan	Whitchurch-Stouffville
Curbside Collection	Garbage	•	•	•	•	•	•	•	•	•
	Recycling	•	•	•	•	•	•	•	•	•
	Green Bin	•	•	•	•	•	•	•	•	•
	Leaf and Yard Waste	•	•	•	•	•	•	•	•	•
	White Goods	•	•	•	•	•	•	•	•	•
	Bulky Items	•	•	•	•	•	•	•	•	•
Special Programs	Textile Diversion	•	•	•	•	•	•	•	•	•
	Education and Outreach	•	•	•	•	•	•	•	•	•
Multi-Residential Collection	Garbage	•				•	•	•	•	•
	Recycling	•				•	•	•	•	•
	Green Bin					•		•		
	Electronic Waste	•			•	•				•
	Batteries	•				•				
School Collection	Recycling					•				
	Green Bin					•				
Municipal Facilities	Recycling	•			•	•	•	•	•	
	Green Bin	•				•	•	•		
	Batteries	•			•	•	•	•	•	



# DIVERSION ACHIEVEMENTS






## York Region Remains a Leader in Ontario with Verified Diversion Rate of 66% in 2019

York Region, in partnership with its local cities and towns, submits an annual Datacall to the province through the Resource Productivity and Recovery Authority (RPRA/the Authority). The information is used to determine blue box costs and to allocate funding from producers to assist with the cost of operating the Blue Box Program. The Datacall produces a ranking of municipal diversion rates across the province.

**York Region continues to be a leader with the highest verified diversion rate of 66% in 2019 in the large urban category.**

## Resource Productivity and Recovery Authority Annual Waste Diversion

2016	1st Overall in the Province		66%
2017	1st for Large Urban Municipalities		68%
2018	1st for Large Urban Municipalities		68%
2019	1st for Large Urban Municipalities		66%*
2020	Pending Verification		66%**

All values are rounded. The Authority does not recognize energy-from-waste as diversion.

\*Updated to reflect finalized 2019 RPRA diversion rate.

\*\*The 2020 diversion data presented is pending verification by the Authority at the time of printing.

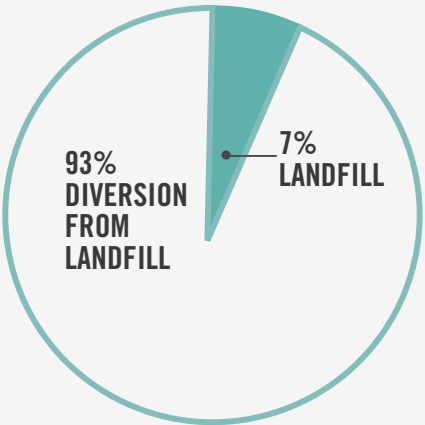
Table 1: Total Tonnes Collected

Material	Tonnes Collected				
	2016	2017	2018	2019	2020
Residual Waste	130,400	134,249	124,319	129,144	145,464
Organics	97,044	97,877	99,065	100,874	112,403
Blue Box	84,468	85,298	83,526	78,243	79,087
Leaf and Yard Waste	37,407	39,477	42,287	42,814	44,216
Other Diversion - Depots	6,196	5,061	2,580	2,659	1,612
Household Hazardous Waste	1,268	1,256	1,219	1,297	1,459
Electronics	1,460	1,344	1,124	1,117	1,205



## York Region continues to exceed the Regional Official Plan goal of 90% waste diversion from landfill.

In 2020, York Region achieved 93% waste diversion from landfill, which includes all tonnes collected through curbside and depot diversion programs and tonnes managed through energy-from-waste.







# BLUE BOX

## DID YOU KNOW?

\*\*\*\*\*

Since the beginning of the pandemic, the Region received over 120,000 masks and gloves (PPE) at its recycling facilities.

## Collaboration to Confront Continued Contamination During COVID-19

As shown in Graph 6, there have been fluctuations in the amount of blue box recyclables collected and marketed in the past five years. In 2020, 79,087 tonnes of blue box recyclables were collected, accounting for 20% of the total material collected in York Region, which was a slight increase in tonnage compared to 2019. This was unusual compared to the overall downward trend seen from 2016 to 2018 that was most likely due to an increased amount of lightweight material like plastics instead of heavier materials such as paper fibers in the recyclables collected.

With the onset of the COVID-19 pandemic in 2020, the ongoing challenge of blue box contamination was exacerbated by personal protective equipment (PPE) such as masks and gloves being placed in the blue box.

Overall, contamination was broad across all cities and towns. Future efforts by the Region will focus on more education to help residents best understand acceptable items for recycling and 'what goes in the blue box'. The Region's estimated contamination rate from in-bound waste audits was 18.8%.

The Region is working with local municipalities on a two-phase approach to reduce blue box contamination. Phase one, developed and implemented by Region and local municipal staff from the southern three municipalities, targeted PPE found in the blue box and was launched in October 2020 through a multi-faceted communication and enforcement campaign.

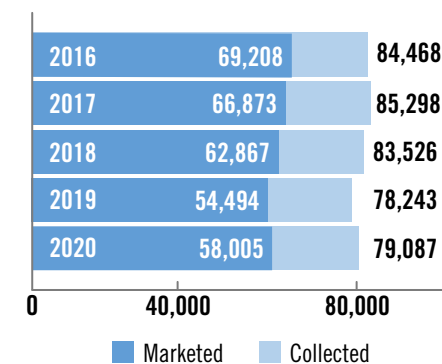


Phase two will explore how to expand efforts to address contamination across all nine cities and towns targeting common offenders such as bagged materials. An integrative and collaborative approach is needed to address broader contamination as no two communities are alike and specific tactics are required to address different problematic materials based on community needs. Addressing contamination will not only result in a more

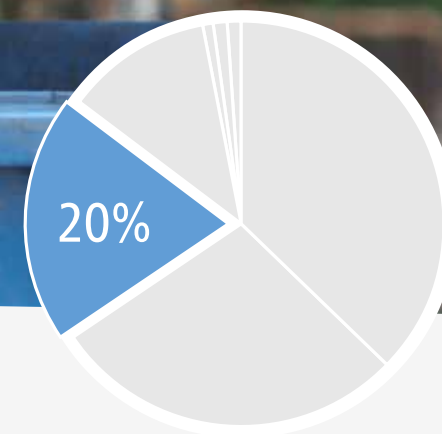
resilient integrated waste management system where residents can trust what they place in the blue box will be recycled, but it will also contribute towards a smooth transition to full producer responsibility.

In 2019, the Region completed a \$1.4M capital upgrade to reduce contamination within the mixed paper bales; this resulted in a slight increase in York Region's marketable blue box tonnes from 2019 to 2020 as shown in Graph 6. Notwithstanding these measures, approximately 634 tonnes of collected mixed paper could not be marketed due to contamination in 2020 and had to be managed through energy-from-waste facilities. This is a significant reduction from the 4,311 tonnes that could not be marketed due to contamination in 2019. The upgrade also resulted in a large increase of mixed paper bales marketed in North American end markets. In 2020, unlike previous years, the majority of blue box tonnages marketed (86%) were sent to North American destinations for processing with only 14% of blue box tonnages sent to overseas markets as shown in Graphs 7 and 8. This is a significant and positive shift towards securing closer recycling destinations.

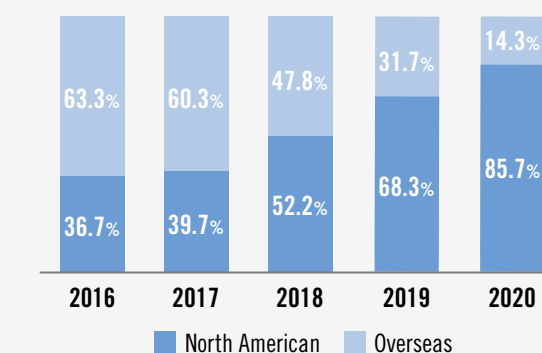
Graph 6: Blue Box Tonnes Collected and Marketed



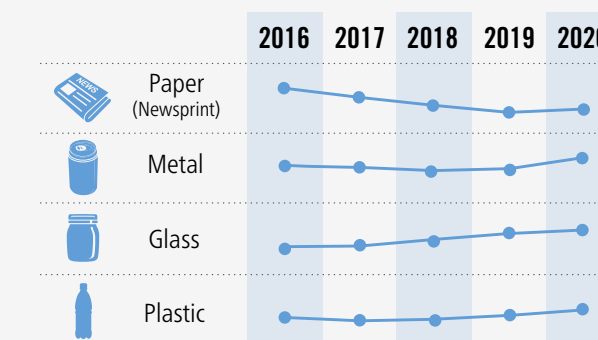
**Note:** 2020 Blue Box Residue Rate - 25.5% of collected blue box material was rejected during processing.



Graph 7: End Market of York Region Blue Box Material



Graph 8: Trend of Marketed Blue Box Tonnes



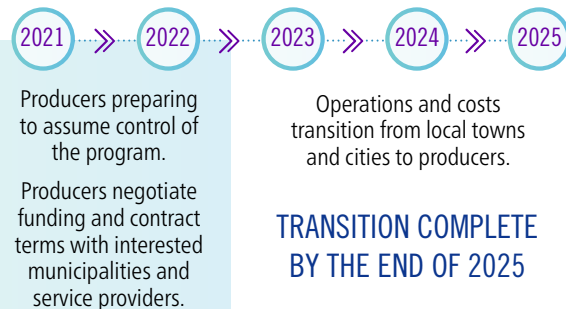




Addressing contamination will not only promote a more resilient integrated waste management system, but it will also contribute towards a smooth transition to full producer responsibility.

## Transition Toward a New Blue Box Program

The Ontario Ministry of the Environment, Conservation and Parks (Ministry) is moving ahead with a new provincial framework that makes producers fully responsible for the Blue Box Program. In 2020, York Region participated in working groups, webinars and consultations that informed the development of the proposed Blue Box regulations and Stewardship Ontario's wind-up plan. Led by the Association of Municipalities of Ontario (AMO), municipalities self-nominated their preferred transition date through Council resolutions to aid the development of a transition schedule. In June, all nine local municipal councils and Regional Council passed resolutions to request transition in 2025, as the later transition date allowed greater certainty and minimized risk. In October 2020, the Ministry released the proposed Regulation (including proposed regulatory amendments to make producers responsible for operating the Blue Box Program under the Resource Recovery and Circular Economy Act, 2016) for public comment. York Region staff submitted comments that included local municipal feedback and concerns and aligned with other municipal peers through the Association of Municipalities of Ontario and the Municipal 3Rs Collaborative. The Ministry is expected to finalize the Blue Box regulation in 2021.



During transition, the Region will work towards a seamless shift for residents. The Ministry has directed that residents should experience the same or improved access to blue box services and the list of acceptable materials will be consistent across Ontario under the producer-led Blue Box Program. As the process continues, York Region will remain engaged through the Association of Municipalities of Ontario and the Municipal 3Rs Collaborative, actively participate in consultations, and will continue to align current and future programs with the shift to full producer responsibility.

## Managing Blue Box Contamination



In an ideal state, the blue box program is more convenient, less complex and produces good environmental outcomes.

Delivering a blue box program that meets these standards will give residents confidence that products or packaging labelled as recyclable will be properly recycled through the program.

- ✓ Leverage data
- ✓ Work with partners
- ✓ Target education
- ✓ Modify as needed





# ORGANIC WASTE

## DID YOU KNOW?

★★★★★

You can save time, money and food waste by trying these simple tips:

- Shop your pantry, fridge and freezer first
- Prepare a meal with your family
- Plan a night for leftovers
- Create and shop with a list
- Choose local food
- Buy only what you need
- Store or freeze food properly to keep it longer
- Organize shelves so older items are up front
- Make meals using perishable items first
- Serve smaller portions
- Compost fruit and veggie peels

## York Region Has a Long-Term Plan for Securing Organics Processing Capacity

Organic waste represents 29% of the total waste collected in York Region. As shown in Graph 9, York Region residents generated 112,403 tonnes of source separated organics in 2020, a notable increase of an additional 12,000 tonnes compared to 2019. In 2020, there were 111,532 tonnes of source separated organics, including leachate, shipped to contracted composting facilities in Ontario for processing. This was also an increase of 11,217 tonnes compared to the previous year.

York Region has secured reliable organic waste processing capacity until 2027 as shown in Table 2. The Region's long-term plan, approved by Regional Council in 2020, favours anaerobic digestion technology over aerobic composting. This technology is expected to reduce the Region's greenhouse gas emissions by up to 15,000 tonnes per year. In 2021, York Region will issue a request for proposals to provide anaerobic digestion capacity for processing the Region's organics at privately-owned facilities. To incentivize a facility to locate close to York Region, proposals will be evaluated using a greenhouse gas (GHG) emissions calculation. The GHG calculation will consider emissions from the transportation of unprocessed Source Separated Organics, transportation of end products and residues, process energy requirements, and biogas end-use among other factors. Proponents will be required to use anaerobic digestion technology to produce energy and soil amendment products. The request for proposals will include transportation and anaerobic digestion processing for a period of 20 years, currently projected to start as early as 2024.



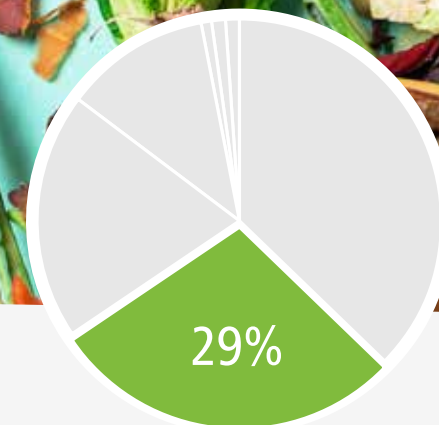
## Staff Provided Recommendations for the Amendments to the Province's Food and Organic Waste Policy Statement

The Ministry of Environment Conservation and Parks proposed amendments to the Food and Organic Waste Policy Statement at the end of 2020. While the Provincial Food and Organic Waste Policy Statement aligns with the Region's existing commitments and leadership on food waste reduction and organics diversion through our Good Food and green bin programs, some of the proposed changes raised concerns and the Region and local cities and towns collaborated on comments to the Province.

The Region's plans to shift to anaerobic digestion for processing green bin materials supports the policy direction to maximize resource recovery and supports development of capacity for local organics processing. However, there are concerns with the proposed amendments to the Policy Statement encouraging the inclusion of compostable products and packaging in municipal green bin programs. Establishing producer responsibility must be a priority as producers continue to advertise products and packaging as compostable despite being incompatible with most municipal green bin programs. Once these incompatible materials are placed in the green bin and fail to break down, the result is increased costs for processing, increased residue rates and reduced consumer confidence in the waste management system. Producers, not municipalities, must be held responsible for finding cost-effective solutions to manage their compostable packaging.

Regional comments also included the recommendation for collaboration with the federal government to improve national compostable standards to align with single-use plastics strategy (for items such as straws, plastic takeout containers and grocery bags). This stakeholder collaboration among producers, municipalities, facility owners and standards agencies is key to the development of certification standards and labelling requirements, and finding innovative and environmentally-beneficial solutions to ensure these products can be managed and recovered for beneficial use.

**Anaerobic digestion technology is expected to reduce the Region's greenhouse gas emissions by up to 15,000 tonnes per year.**



Graph 9: Source Separated Organics Tonnes Collected and Processed

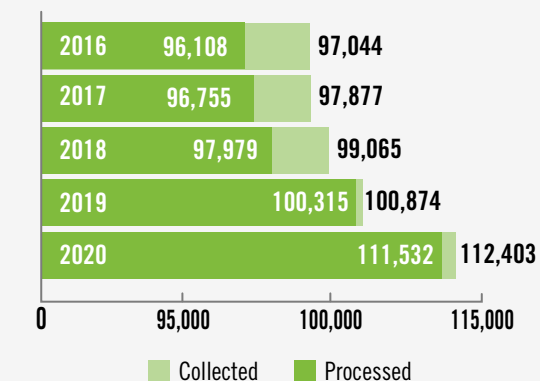


Table 2: Organic Waste Processing Facility Contracts

Facility	Current Term Expiry Date	Extension Term Expiry Date
Cornerstone Renewables (Elmira and Leamington, ON)	June 30, 2022	N/A
GFL Environmental (Moose Creek, ON)	June 30, 2020	June 2027
Convertus (Formerly Renewi) (London, ON and Ottawa, ON)	June 30, 2022	June 2027





# LEAF & YARD WASTE

## DID YOU KNOW?

★★★★★

Residents can drop off excess yard waste for a fee at three waste depot locations in York Region: the Georgina Transfer Station, the McCleary Court Community Environmental Centre (as of September 2, 2020) and the Bloomington Yard Waste Depot (owned and operated by Miller Waste), where yard waste will be turned into nutrient-rich compost. Residents can reduce their yard waste by leaf mulching, grass cycling (leaving clippings on the lawn) and backyard composting.

## Composting Benefits Gardens, Enriches Soil and Reduces Waste

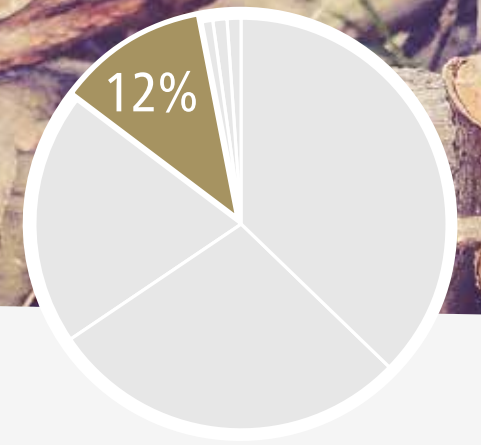
Yard waste is the most unpredictable waste stream as the tonnages collected are directly affected by weather and may also be impacted by invasive species infestations. During storms or wet conditions, the Region experiences more leaf and yard waste than during dry or drought conditions. Extreme weather events like ice storms, windstorms or early/late seasonal changes can affect the amount of leaf and yard waste generated making it difficult to predict collection capacity and timing.

In 2020, York Region residents generated 44,216 tonnes of leaf and yard waste, representing 12% of total waste collected as seen in Graph 10. This is a slight increase of 2,000 tonnes that may have occurred from more residents being at home and choosing to participate in outdoor activities such as gardening and cleanups. Gardening proved to be a popular pandemic pastime as the Region and its partners sold 1,430 backyard composters to residents in 2020 through a modified sale event that included curbside pickup and delivery options for the first time. These new backyard composting households will be diverting an estimated 143 tonnes of organics from the curb each year they use their composter.

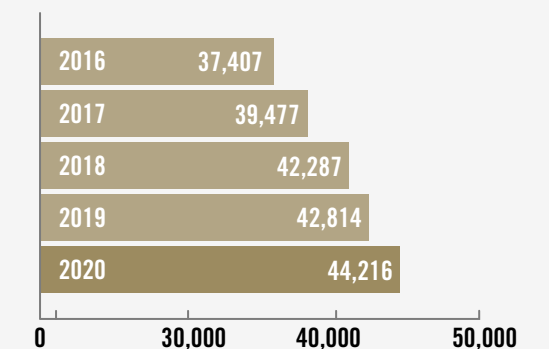
Due to the high demand observed at the Bloomington Yard Waste Depot, yard waste for the cities of Richmond Hill and Vaughan was collected every two weeks as of April 20. Miller Waste composts all yard waste collected in York Region at their Bloomington Facility.



Image taken prior to COVID-19



Graph 10: Leaf and Yard Waste Tonnes Collected



Gardening proved to be a popular pandemic pastime as the Region and its partners sold 1,430 backyard composters to residents in 2020, through a modified sale event that included curbside pickup and delivery options for the first time.





# DEPOT COLLECTION

## DID YOU KNOW?

\*\*\*\*\*

In 2020, residents recycled 17,399 kgs of cooking oil at York Region Waste Depots.

## Increased Use of Depots Despite Program Changes due to COVID-19 Impacts

From the start of the pandemic in March 2020, York Region's five public drop-off waste depots quickly adapted operations, providing convenient service for residents and small businesses to drop off a variety of waste materials. Modified services and changes to drop-off areas were implemented to ensure safety of staff and the public at the sites. The depots remained in compliance and observed all COVID-19 safety protocols by: streamlining operations on-site to maintain required physical distancing for resident drop-off; performing daily cleaning and disinfection; implementing a no cash policy for payment of fees; and providing clear communication through signage at sites, website updates and York Region's Contact Centre. At the operational level, there were contingency plans for staffing; masks were mandatory for all staff where physical distancing could not be maintained.

Some diversion programs were temporarily suspended at the beginning of the pandemic to allow for increased physical distancing at the site; however, they resumed when it was safe to do so.

**York Region collected 2,664 tonnes of divertible materials through depot collection in 2020.**

## Depot Modifications due to COVID-19

- March 27: Elgin Mills Community Environmental Centre, Georgina Transfer Station and McCleary Court Environmental Centre limited services to only household hazardous waste (HHW) and garbage while Markham and East Gwillimbury HHW Depots accepted HHW only
- May 8: Leaf and yard waste service was reinstated at the Georgina Transfer Station
- May 14: Depots resumed collection of e-waste and scrap metal
- June 3: Collection services for tires, cardboard, blue box and shredded paper resumed
- July 8: Textile diversion service resumed after being briefly suspended at the request of Diabetes Canada from March until July. There was a surge in usage of this service when the program resumed on July 8 and for the remainder of the year, suggesting residents may have used their time at home to clean out closets



The recycling programs for construction and demolition concrete, drywall, clean wood and polystyrene foam are currently on hold until the sites can accommodate normal traffic conditions without restrictions on physical distancing between customers and staff. Staff will assess when it is safe to accommodate more on-site sorting and collection of these materials.

As shown in Table 3, during the pandemic, there was a significant increase in demand for depot services overall. There was a large increase in visitors accessing Georgina Transfer Station, Elgin Mills and McCleary Court Community Environmental Centres as shown in Graph 11. The number of visitors to the sites increased by approximately 13,000 in total, with McCleary Court recording a 13% increase in visitors.

York Region collected 2,664 tonnes of divertible materials through depot collection in 2020. Divertible materials include cooking oil, refrigerated appliances, scrap metal, shredded paper and tires.

In 2020, there was a slight increase in the number of tires collected at York Region Depots with a total of 300 tonnes of tires collected in 2020 compared to 291 tonnes in 2019.

## DEPOT VISITORS



**Elgin Mills CEC**  
**86,622**

**Georgina Transfer Station**  
**86,382**

**McCleary Court CEC**  
**69,105**

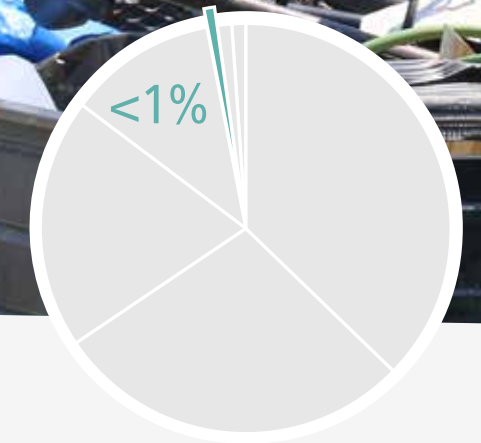
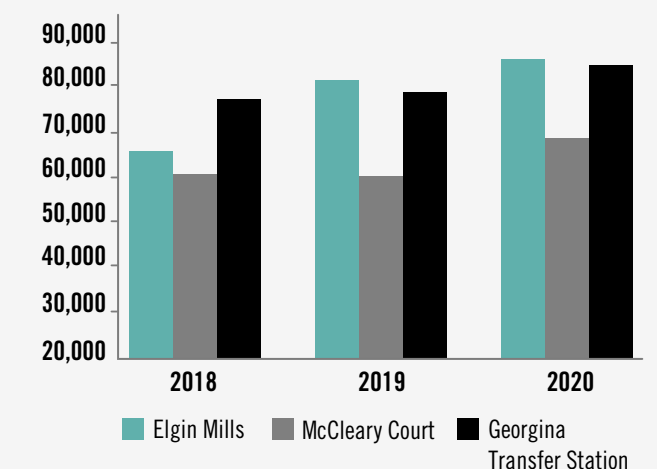


Table 3: Total Tonnes of All Materials Collected at Community Environmental Centres (CEC) and Georgina Transfer Station

TOTAL TONNES COLLECTED			
Location	2018	2019	2020
Elgin Mills CEC	9,057	10,470	11,240
McCleary Court CEC	7,055	7,020	7,853
Georgina Transfer Station	15,020	14,484	15,300
Total Tonnages	31,132	31,975	34,393

Graph 11: Total Visits to Community Environmental Centres (CEC) and Georgina Transfer Station







# ELECTRONIC WASTE

## DID YOU KNOW?

\*\*\*\*\*

*During the pandemic, there has been more reliance than ever on electronic devices and the importance of proper disposal is more evident. Bringing electronics to a local waste depot allows for the recovery of valuable materials including gold, platinum, glass and other metals that can be used for new products and devices.*

## Electronic Waste Program Completely Transitioned to Full Producer Responsibility

The Minister of the Environment, Conservation and Parks directed Ontario Electronic Stewardship (OES) to wind up the Waste Electrical and Electronic Equipment (WEEE) Program on December 31, 2020 to enable the transition of end-of-life electrical and electronic equipment to individual producer responsibility under the *Resource Recovery and Circular Economy Act, 2016*. Region staff have been actively involved in consultations on the regulation for the new program, which came into effect on January 1, 2021.

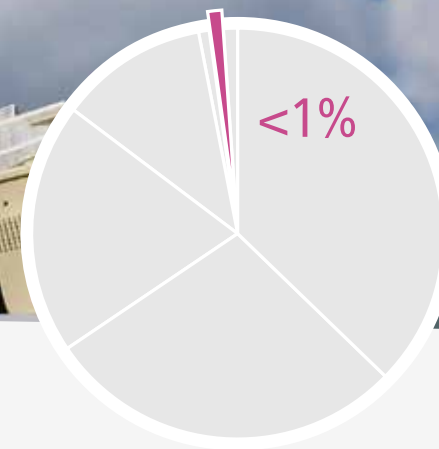
The Region has several concerns about the new Electrical and Electronic Equipment (EEE) Regulation. Earlier drafts of the regulation included a broader range of material types than what is designated under the final regulation, reducing the overall diversion potential of the program. Inconsistent environmental handling fees are also permitted under the new recycling regulations which can lead to consumer confusion. Consumer education is needed to increase understanding of the new system. Under the new regulation, producers are required to reuse, refurbish or recycle 55% of their designated materials at first, with targets increasing each year up to 70% in 2025. However, penalties for non-compliance are not yet set out in the regulations for producers not meeting the target. The Region has taken steps to ensure the changing regulation will not result in service disruptions to residents.



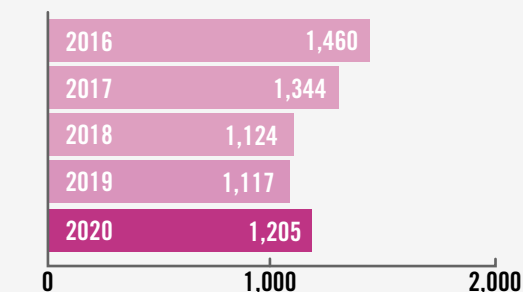
The Region has entered into a new contract for e-waste services with Com2 Recycling, which is a registered Producer Responsibility Organization (PRO) under the new regime. The new e-waste contract allows the Region to continue offering an inclusive electronics program product mix, in addition to what is included in the EEE regulation. Under the new regulation, there is a reporting requirement to document customer information for anyone dropping off EEE-designated material weighing over 50 kg. This has not been observed at the sites as no one has exceeded the limit to date.

York Region provides residents with a network of drop-off facilities for electronic waste, including Georgina Transfer Station, East Gwillimbury Household Hazardous Waste (HHW) and Recycling Depot, Markham HHW Depot and McCleary Court and Elgin Mills Community Environmental Centres (CEC). There was a minor impact due to COVID-19 with a six-week hold on e-waste collection due to service level reductions at the depots; however, for the remainder of the year service levels were maintained. As shown in Graph 12, Regional depots collected 1,205 tonnes of electronic waste in 2020 which was an increase compared to 1,117 tonnes collection in 2019. In part, this increase may have been a result of some of the electronic waste collection events held by the local cities and towns being cancelled. Additionally, due to COVID-19, residents may have had more opportunities to clean up unwanted items at home from garages and basements and with the lack of local events, residents brought their electronic waste to the Region's sites.

*Image taken prior to COVID-19*



Graph 12: Waste Electrical and Electronic Equipment Tonnes Collected



**Under the new regulation, producers are required to reuse, refurbish or recycle 55% of their designated materials, with the targets increasing each year up to 70% in 2025.**





# HAZARDOUS WASTE

## DID YOU KNOW?

\*\*\*\*\*

Despite refillable propane tanks having take-back programs, York Region has seen on average 35,000 kg per year over the last three years.

## Battery Program Transitioned to Full Producer Responsibility in 2020

On June 30, 2020, the program wind-up for single-use batteries occurred while the electronic waste program wind-up was delayed until December 31, 2020. Following the transition of the battery recycling program, a new batteries regulation came into effect on July 1, 2020. Moving forward, when consumers discard their batteries, battery producers will be individually accountable and financially responsible for collecting and reusing, refurbishing or recycling these items. The new regulation includes both single-use and rechargeable batteries that weigh 5 kg or less and are not embedded in products. To date, there has been no impact to residents dropping off batteries at the depots. York Region has an agreement with Call2Recycle (C2R) for the collection of these batteries.

Under the Region's agreement with C2R, the Region will receive revenue for batteries collected. Operationally, there were some changes implemented at the depots to ensure compliance with requirements under the new agreement. These include taping battery terminals and some adjustment to packing and shipping which the depot contractors manage on our behalf. Proper battery disposal includes battery terminal protection so that terminals do not touch metal surfaces or other batteries that can spark, causing fire or explosions. None of these changes resulted in additional costs to the Region or service interruptions at the depots. All Regional HHW Depots collect batteries and each site accepts up to 15 kg of batteries per day from residents.

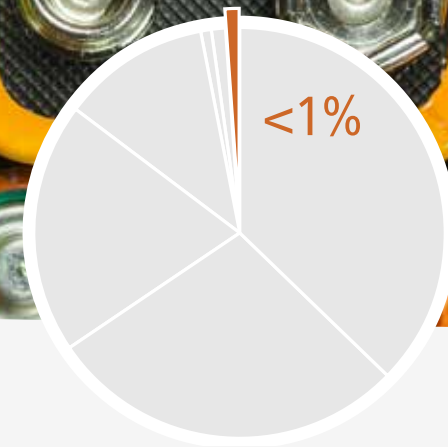
The Region's Municipal Hazardous or Special Waste (MHSW) diversion programs capture and divert potentially dangerous hazardous materials and help avoid contamination of other waste streams. The Region provides MHSW collection services to residents to meet Environmental Compliance Approval (ECA) requirements for waste disposal facilities, including the Durham York Energy Centre (energy-from-waste). Municipalities strive to ensure hazardous materials are captured as they present significant risks to human health and the environment.

York Region collected 1,459 tonnes of MHSW materials at Regional public drop-off depots in 2020 as shown in Graph 13. This slight increase may have been a result of staff having a better process to screen residents at the site and direct them to the proper site for disposals. Municipal depots ensure materials are safely managed to end-of-life and divert harmful substances from landfill, waterways and forests. MHSW items contain materials that can be recovered, refined and reused in manufacturing new products, reducing the need for virgin resources.

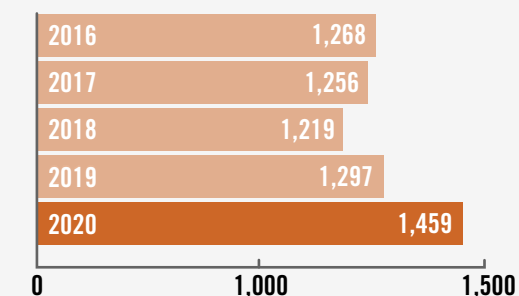


## Current Hazardous Waste Program will Transition to Full Producer Responsibility in 2021

Stewardship Ontario (SO) operates the current MHSW program, which allows residents to safely dispose of household products that require special handling. Under the Waste Diversion Transition Act, collection, processing and disposal of such materials are funded by brand owners and first importers of these products who will continue to operate until the MHSW program fully transitions to full producer responsibility on June 30, 2021. Early in 2021, the Ministry of Environment, Conservation and Parks released a proposed regulation for comment. The content of the draft regulation was disappointing to municipalities. In the case of fertilizers, the proposed regulations suggest that producers can leverage their education program and influence consumers to 'use it up' instead of having targets for the safe collection and disposal of this material. This messaging directly conflicts with other provincial policies and regulations to reduce the usage of phosphorus and prevent its negative effects on waterways. Region staff will continue to engage and ensure the program remains effective after transition.



Graph 13: Household Hazardous Waste Tonnes Collected



Paint (latex and alkyd)  
**615,604 kg**



Motor Oil (bulk)  
**149,684 kg**



Batteries (single-use/rechargeable)  
**64,179 kg**



Propane Tanks & Cylinders  
**51,579 kg**



Aerosol Containers  
**36,305 kg**





# RESIDUAL WASTE



## DID YOU KNOW?

\*\*\*\*\*

Each York Region resident generated an average of 91 kg of household garbage in 2020.

## Landfill Diversion Target Continues to be Achieved Through Successful Diversion Programs and Energy Recovery

As seen in Table 4 and Graph 14, the Region managed 166,261 tonnes of residual waste in 2020. This included tonnes collected at the curb and drop-off waste depots, as well as highly contaminated recyclables that are unmarketable and residue from the blue box program. Materials that were placed in the blue box but could not be recycled were placed in the residual waste stream and sent to energy-from-waste facilities. The Region shipped 141,605 tonnes of residual waste for energy recovery: 59,923 tonnes to Covanta Niagara in New York State, 49,409 tonnes to Emerald Energy from Waste in Brampton, Ontario and the remaining 32,273 tonnes to the Durham York Energy Centre (DYEC) in Clarington, Ontario. The DYEC continues to operate in full compliance with regulatory emissions limits which are among the most stringent in the world.

York Region achieved 93% diversion from landfill in 2020, exceeding the 90% target established in the Regional Official Plan. This was achieved through successful diversion programs and commitment to sustainable waste management programs. Material sent for energy recovery includes curbside garbage collection and blue box residue. Landfill disposal remains a last resort for managing Regional waste materials once all other diversion options have been exhausted. Bulky items like mattresses and sofas can block the feed chute and ash discharger in energy-from-waste facilities making them unsuitable for



energy recovery. In 2020, York Region sent a total of 25,517 tonnes of residual waste to landfill with 25,491 tonnes of residual waste to Walker South Landfill in Thorold, Ontario and 25 tonnes to Twin Creeks Landfill in Watford, Ontario.

In line with the SM4RT Living goal of a world where nothing goes to waste, York Region prioritizes reduction, reuse and recycling diversion efforts, while the remaining residual waste is managed primarily through energy-from-waste recovery. Energy-from-waste captures the energy content of residual waste, lowers greenhouse gas emissions, recovers metals and reduces the volume of waste going to landfill by 90%.

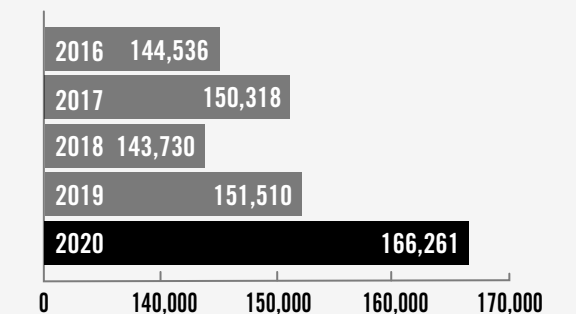


Table 4: Residual Waste Shipments

Destination	Tonnes
Energy-From-Waste	141,605
Landfill	25,517
Year-End Carry Over*	-861
Total Residual Waste	166,261

\*Change in transfer station inventory January 1, 2020 and December 31, 2020.

Graph 14: Residual Waste Collected Including Blue Box Residue Tonnes



In line with the SM4RT Living goal of a world where nothing goes to waste, York Region prioritizes reduction, reuse and recycling diversion.



# COMMUNITY ENGAGEMENT

Despite the pandemic, York Region continued to collaborate with its local municipal partners on public education.

## Partnerships and Innovation Help Region Reach Residents in 2020

The Region amended its approach to community engagement in 2020 as traditional promotion and education activities were restricted due to COVID-19. Despite the pandemic, the Region continued to collaborate with its local municipal city or town partners on public education. One initiative was the blue box enforcement blitz that started in the last quarter of 2020 and continues in 2021. Additionally, the Region strengthened partnerships with various community groups and was able to reach residents through those relationships, when in-person interactions were restricted. An online bike repair program was developed and executed through a partnership with Markham Cycles, which included nine online workshops with 688 participants. As in-person events were cancelled, York Region Food Network (YRFN) as a York Region partner, pivoted from delivering in-person cooking workshops and demonstrations to digital cook-alongs with staff, virtual zero waste workshops, composting demonstration videos and launching the compost learning hub online. Likewise, there were no in-person Good Food outreach events in 2020 due to COVID-19; however, the Region was able to reach residents online through the Region's social media as well as through partnerships with YRFN and Longo's. YRFN also hosted a #LoveYourLeftovers photo contest encouraging participants to share photos of meals inspired by using up leftover foods.

### WASTE WEDNESDAY SOCIAL

**58** POSTS ON FACEBOOK, TWITTER & INSTAGRAM

FACEBOOK & TWITTER:  
**1.5+ M REACHED**

**141+K ENGAGEMENTS**

**14,085 LIKES** | **4,757 SHARES**

**6,137 COMMENTS**

FACEBOOK & INSTAGRAM STORIES:  
**124+ K REACHED**

**62 SHARES** | **59 REPLIES**

Viewers were quizzed on proper waste sorting for blue box and other material.

**5,330 VOTES RIGHT** | **748 VOTES WRONG**

### WIPES, GLOVES & MASKS SOCIAL

**53** POSTS ON FACEBOOK, TWITTER & INSTAGRAM

FACEBOOK & TWITTER:  
**1.5+ M REACHED**

**139+K ENGAGEMENTS**

**13,966 LIKES** | **4,973 SHARES**

**6,075 COMMENTS**

FACEBOOK & INSTAGRAM STORIES:  
**35+ K REACHED**

**20 SHARES** | **23 REPLIES**

Viewers were quizzed on proper waste sorting for gloves, masks and wipes.

**1,301 VOTES RIGHT** | **133 VOTES WRONG**



### TEXTILES

**200** | **1,794**

**MUNICIPAL COLLECTION BINS** | **TONNES OF TEXTILES COLLECTED**



**66**

**CHILD AND YOUTH BIKES DONATED**

All events observed COVID-19 safety protocols

**569** BOOTH VISITS

**436** VOLUNTEER HRS.

**29** SESSIONS

**340** BIKE TUNE-UPS

**63** GIVEAWAYS

### COMPOSTING



**1,430**

**COMPOSTERS SOLD**

**143** **TONNES OF ORGANICS DIVERTED**



**LOVE YOUR LEFTOVERS CAMPAIGN**

**85** USES OF **#LOVEYOURLEFTOVERS**

**34** PHOTOS SUBMITTED | **10** AVERAGE POSTS PER DAY | **550** PEOPLE ENGAGED | **433** YOUTUBE VIDEO VIEWS



**194** **ACTIVE USERS**

Before COVID-19



**50** **EVENT ATTENDEES**

Before COVID-19





# IN SUMMARY

Together with community partners, new and innovative programming is being implemented through the updated SM4RT Living Plan program.

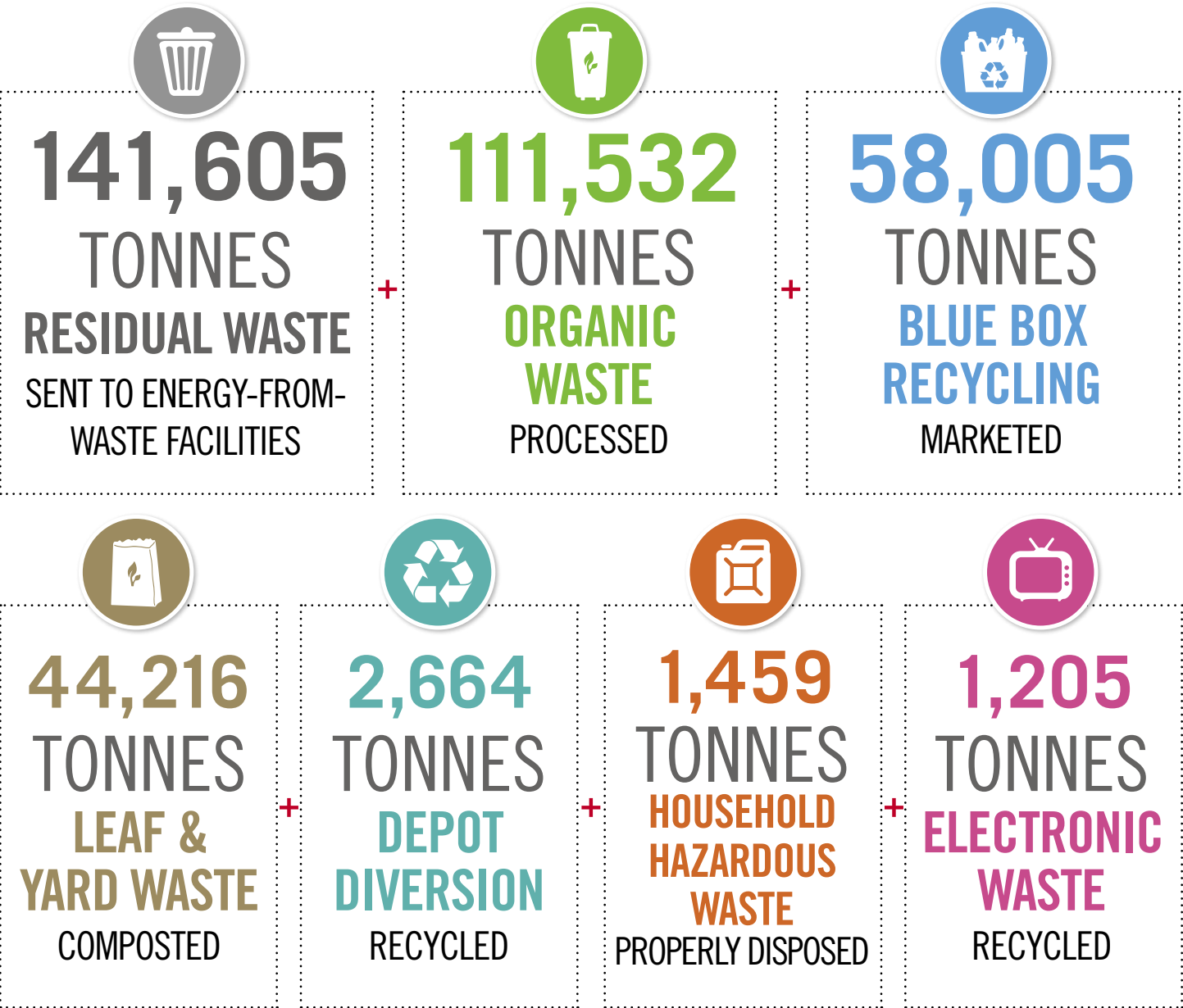


## York Region and its Nine Local Cities and Towns Deliver Innovative Waste Reduction, Reuse, Recycling and Recovery Programs and Services

York Region residents are part of an extensive integrated waste management system delivered with our local cities and towns. Together with community partners, new and innovative programming is being implemented through the updated SM4RT Living Plan program showcasing York Region leadership in sustainable waste management. York Regional and local Councils have made waste reduction and diversion a priority and continue to advocate to federal and provincial governments on waste management issues. As a result of this collaboration, York Region continues to rank first among its peers in the large urban category year after year.



Images taken prior to COVID-19



**93% DIVERSION FROM LANDFILL**





Our Visionary Goal: A world in which nothing goes to waste.

With your help, we hope to accomplish an estimated 166,000 tonnes of waste reduced and 62,000 tonnes of waste reused within the first 18 years of the SM4RT Living Plan.

## THANK YOU TO OUR PARTNERS





**[york.ca/waste](http://york.ca/waste)**

1-866-665-6752 | May 2021



**Wayne Emmerson**

Chairman and CEO



The Regional Municipality of York  
17250 Yonge Street  
Newmarket, Ontario L3Y 6Z1  
Tel: 905-895-1231  
email: [wayne.emmerson@york.ca](mailto:wayne.emmerson@york.ca)

---

April 23, 2021

The Honourable Jeff Yurek  
Minister of the Environment, Conservation and Parks  
777 Bay St., 5<sup>th</sup> Floor  
Toronto, ON M7A 2J3

[jeff.yurek@pc.ola.org](mailto:jeff.yurek@pc.ola.org)

**RE: Transitioning Blue Box Program to Full Producer Responsibility**

Dear Minister:

Thank you for your continued commitment to improving Ontario's waste management system. Your government is to be commended for implementing full producer responsibility and advancing the circular economy in Ontario during these challenging times. York Region has always been a strong supporter of producer responsibility and we appreciate the opportunity to share our leading municipal waste expertise to help inform this process.

York Region is a municipal leader in achieving the highest diversion rate ranking compared to similar large urban municipalities. Despite this success, recycling performance has stalled across the Province due to a fragmented system struggling to manage a rapidly growing and increasingly complex stream of packaging. As such, we are increasingly concerned that the Blue Box regulation has not been finalized as previously indicated by the end of 2020. Further delay will continue to exacerbate the stresses on the program and continue to burden the taxpayer.

**No reason to further delay Blue Box regulation that is based on extensive, balanced consultation with stakeholders**

Your government has conducted an extensive consultation process for this regulation that started with a mediation process between producers and municipal governments that was led by David Lindsay. Changes to the Blue Box program have been welcomed by municipalities, property taxpayers, industry and all Ontarians who want better environmental and economic outcomes. The mediation provided a framework and timelines with much needed certainty, to allow stakeholders to begin planning for the successful transition of the Blue Box to full producer responsibility. This set the stage for the broad municipal-industry consensus achieved through a fair and balanced consultation on the draft regulation.

Municipalities have made contractual and asset management decisions based on the timelines published numerous times by your government. We have been awaiting the final regulation which the Province expected to release early this year. Municipalities have continued to manage the costly challenges from the limited end markets and poor packaging design that this transition is intended to address. These systemic issues cannot be resolved by the current system; further delays releasing the final regulation places the entire transition process at risk, with significant financial consequences for municipalities and producers.



**York Region and its 9 local municipal partners have aligned contracts and budgets with transition period to minimize costs and ensure seamless service delivery for residents**

Delays mean costly contract extensions and additional investments in equipment upgrades and maintenance to continue program delivery for a longer time period. This is on top of the \$7 million net operating costs per year that York Region spends to operate the program. While we appreciate that the pandemic has had significant impacts on the economy and businesses, it has also driven up costs for municipalities seeking to support residents through these trying times. In fact, municipalities are subsidizing the industrial, commercial, and institutional sector as people have continued to work from home over the last year, resulting in increased curbside tonnages in all streams including the Blue Box. The municipal share to fund the Blue Box program in Ontario is currently estimated at \$150 million per year. We cannot ask municipal taxpayers to bear additional costs and disruptions due to a delay in the timelines agreed upon by a majority of stakeholders in this process.

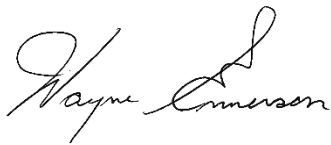
The final regulation should be released as soon as possible and reflect the following agreed upon principles that were included in the draft regulation:

- a broad list of designated materials
- expansion of eligible sources to condominiums, schools, parks and public spaces
- high performance targets to hold producers accountable and drive innovation

Delays or erosion of key policy components of this regulation will impact the Province's ability to achieve circular economy and environmental objectives set out in your government's *Made-in-Ontario Environment Plan* and meet commitments made to the many Ontarians concerned about reducing litter, addressing plastic waste and protecting the environment.

We look forward to this Provincial Government following through on its commitments to transitioning the Blue Box to full producer responsibility as previous governments have failed to do so. The time is now for this Government to release a finalized regulation that includes the agreed upon principles mentioned above and supports a robust and innovative full producer responsibility program for the Blue Box. This will ensure municipal governments, service providers and industry can move ahead with a smooth transition for Ontario.

Sincerely,



Wayne Emmerson  
York Region Chairman and CEO

cc: James Wallace, Chief of Staff to the Premier  
Bruce Macgregor, Chief Administrative Officer, York Region  
Lina Bigioni, Chief of Staff, York Region  
Erin Mahoney, Commissioner of Environmental Services, York Region

eDocs#12837888