

The Regional Municipality of York

Committee of the Whole
Environmental Services
June 16, 2022

Report of the Commissioner of Public Works

2021 Annual Waste Management Report

1. Recommendation

1. 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 2021 Annual Waste Management Report (Attachment 1) which summarizes the Region's waste reduction and diversion initiatives and provides an update on implementation of the 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:

- The Region and its local municipal partners achieved 92% diversion from landfill in 2021, 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 65% has been reported by the Region for 2021 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
- Waste generation rates stabilized following sharp increases in 2020, due to the pandemic. Curbside green bin generation rate only increased slightly, while there was a small decrease in the garbage generation rate in 2021

- \$100,000 awarded to six community projects through the Circular Economy Initiatives Fund, demonstrating the Region's commitment to building community capacity in the circular economy

3. Background

SM4RT Living Plan drives actions to advance circular economy in York Region

As approved by Council in [April 2020](#), the updated SM4RT Living Plan establishes a vision and long-term targets to move towards a world without waste. With a strong focus on partnerships and innovation, the Plan continues to guide waste policy and programming in the Region and emphasizes the importance of transitioning to a circular economy. Objective 3 in the SM4RT Living Plan recognizes that grassroot support is needed to drive such change; the Region therefore remains committed to strengthening partnerships with local municipalities, community groups and businesses through programs such as the Circular Economy Initiatives Fund and a circular economy stakeholder group.

York Region and its local municipal partners continue to be leaders in diversion

Despite ongoing recovery from COVID-19 impacts, York Region remains a leader in the field. Together with its local municipal partners, the Region again exceeded the Official Plan goal of 90% diversion from landfill, achieving 92% diversion from landfill in 2021. The Region has exceeded its diversion from landfill target since the target was established in 2016; however, the rate has decreased slightly from the 2020 rate of 93%. The diversion from landfill 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. It includes all tonnes collected through local municipal curbside programs, waste depot diversion programs and tonnes managed through energy-from-waste.

As seen in Table 1 below, York Region also leads large urban municipalities in Ontario in diversion as reported by the Resource Productivity and Recovery Authority. Since 2012, York Region has ranked first among large urban municipalities, verified through the Resource Productivity and Recovery Authority Annual Datacall. In 2020 (the latest year for which there is verified data) York Region achieved the highest verified diversion rate of 66% in the large urban municipal diversion category. The Region has submitted a 2021 diversion rate of 65% to the RPRA for verification. This provincial diversion rate differs from the York Region diversion from landfill rate (referred to above), as energy-from-waste is not recognized by the Resource Productivity and Recovery Authority as diversion.

Table 1
2020 Large Urban Municipal Verified Diversion Ranking

Rank	Municipality	2020 Diversion Rate
1	Regional Municipality of York	65.8%
2	Regional Municipality of Halton	54.5%
3	Regional Municipality of Peel	51.5%
4	City of Toronto	52.2%
5	City of London	43.9%
6	City of Hamilton	41.6%

4. Analysis

Waste generation rates stabilized in 2021 after significant increase in 2020 due to the pandemic

In 2020, York Region experienced higher than typical tonnages at the curb. There were significant changes in consumption and waste disposal behaviours at home as the pandemic impacted various aspects of life, including jobs and recreational activities.

In 2021, waste generation rates plateaued with green bin generation rate recording a slight increase from 92 kilograms per person in 2020 to 93 kilograms per person in 2021, and garbage generation rate decreasing slightly from 91 kilograms per person in 2020 to 90 kilograms per person in 2021 (Attachment 1, page 9). Many people continued to work from home throughout 2021 and it appears that consumption and waste disposal habits formed during the early part of the pandemic are still impacting waste generated at the curb. The Region and its local municipal partners will continue to monitor waste generation trends to understand medium and long-term impacts of COVID-19.

Region continues to anticipate waste trends and plan for long-term capacity needs

The Region is currently procuring long-term organics processing. As seen in Table 2 below, there are several interim contracts in place to ensure the Region's processing needs are being met.

Table 2
Status of Region's Long-term Processing Contracts

Contract	Facility Details	Status Update
Interim organics processing contracts	Convertus – London, Ontario – processing up to 2027	Renewal term activated under Commissioner as per Council
	GFL – Lafleche - Moose Creek, Ontario – processing up to 2027	Renewal term activated under Commissioner as per Council
	Cornerstone – Elmira and Leamington, Ontario processing up to 2027	Approved by Council in April CAA report
Energy from Waste (EFW) contracts	Emerald – Brampton, Ontario – current contract term expires September 2023	Update is on June Council agenda in a Private Report
	Covanta Niagara – Niagara Falls, New York – current contract term expires September 2023	

Region and local municipalities continue to adapt programming to provide services while maintaining safety measures

Throughout 2021, the Region continued to work with local municipal and community partners to maintain waste operations and deliver waste reduction and education programs. Despite the ongoing pandemic, the Region's waste depots returned to pre-pandemic service levels by reinstating the concrete recycling program and accepting cash payments. The depots remained compliant with COVID-19 safety protocols to ensure the health and safety of workers and residents. Attachment 1 (page 18) outlines site visit trends at the Region's Community Environmental Centres (CECs) and waste depots.

The 2021 Annual Waste Management Report (pages 20-21) showcases community engagement activities across the Region. As the pandemic evolved and some restrictions eased, a few community partners were able to restart in-person reuse initiatives in 2021 with strict adherence to health and safety guidelines. Towards the end of the year, one in-person Repair Café event was hosted by NewMakelt in Newmarket. Vaughan Public Library also opened a new Lendery location, ending the year with 19 items in its inventory and 35 active

members. Newmarket Public Library reopened its Lendery and had 172 active members and 84 items in its inventory at the end of 2021.

York Region's leadership in circular economy concept supports post-pandemic recovery and long-term economic, environmental and social benefits

As approved by Council in [May 2022](#), a circular economy supports the Region's Vision. One of the key action areas identified in the Region's Circular Economy Roadmap is 'Community Capacity and Connections', highlighting the Region's commitment to empowering the community through collaborations, education and investment.

In 2021, the Region launched the Circular Economy Initiatives Fund (CEIF), which provided funding of \$5,000 to \$25,000 to [six non-profit organizations](#) to support projects that reduce waste and promote a circular economy (Table 3).

Table 3
Circular Economy Initiatives Fund Projects

Organization	Project
Circular Innovation Council	Community-based virtual hub to encourage residents to share, reuse, and repair
Free Geek Toronto	Series of electronic waste collection and repair events to encourage giving unwanted technology a second life
Furniture Bank	Campaign to raise awareness of furniture removal services to divert household items from landfill
Impact Zero	A searchable, detailed directory of circular businesses in York Region
Stouffville Strawberry Festival	Reducing waste at the 2022 Strawberry Festival
Willowgrove	Series of workshops teaching children to construct their own compost and greenhouse systems

All six funded projects are expected to help reduce residential waste and support circular economy practices. The Region has started accepting applications for a second round of funding for projects taking place in 2023.

Plans are also underway to establish a working group composed of circular economy champions from local businesses and organizations who will support and facilitate circular opportunities in their own sectors locally. Building community knowledge and capacity on circular economy as communities recover from the pandemic will help embed a systemic

shift that will build long-term resilience. This shift will generate business and economic opportunities, while providing environmental and social benefits, such as health and ecosystem balance, job creation, greater affordability, food security, and community empowerment.

York Region remains engaged in consultations as federal and provincial governments move forward with waste regulations

Regional staff continue to monitor the evolving waste landscape in Canada, providing feedback on various proposed legislation at both the federal and provincial levels. Table 4 highlights regulatory changes and consultations in 2021 and early 2022 and the Region's feedback/position.

Table 4
Regulatory Advocacy Work in 2021

Administrative Penalties Regulation

- September 2021: Ministry proposed a new administrative penalties regulation to help ensure that regulated producers, manufacturers and importers comply with requirements for collection and end-of-life management of materials they supply in Ontario
 - November 2021: York Region responded with recommendations, including providing municipalities exemption from producer requirements
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Blue Box

- April 2021: Region issues letter to Minister of Environment, Conservation and Parks, copying the Premier's office, to advocate for release and finalization of the Blue Box regulation
 - June 2021: Ministry released the final regulation to make producers fully responsible for the Blue Box Program by the end of 2025
 - April 2022: Ministry announced amendments to the Blue Box regulation including the removal of the requirement on Producer Responsibility Organizations (PROs) to create an allocation table. Instead PROs representing more than 66% of Blue Box tonnes are required to submit an operational plan for how they will operate the system by July 1, 2022. Also included was an exemption for newspaper publishers from collection, management, and promotion and education requirements
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Hazardous and Special Products

- February 2021: proposed regulations released
 - March 2021: York Region and local municipalities responded with feedback expressing extreme disappointment that the draft did not include key material types and lacked targets
 - June 2021: Ministry posted final producer responsibility regulation
 - October 2021: transition to individual producer responsibility
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Single-Use Plastics

- December 2021: Federal government released Draft Federal Single-Use Plastics Prohibition Regulations
 - [March 2022](#): York Region and local municipalities responded with feedback expressing concern regarding the lack of clarity around applicability to compostable plastic alternatives and recommending further exploration of accessibility exemptions
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Tires, Batteries and Electrical and Electronic Equipment (EEE)

- November 2021: Ministry posted Proposed Amendments to the Producer Responsibility Regulations for Tires, Batteries and Electrical and Electronic Equipment
 - January 2022: York Region responded with recommendations, including maintaining reporting, third-party auditing, record keeping and enforcement measures to ensure effective oversight
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5. Financial

COVID-19 related tonnages and inflation had an additional \$2.2M impact on Region's waste management costs in 2021

The additional waste generated during the pandemic resulted in an additional \$2.2 million in the department's net operating budget in 2021. In late 2021 and continuing in 2022, inflationary pressures are being felt in waste management's operating activities. These inflationary increases impact both processing and haulage costs as fuel prices escalate. Table 5 outlines the impact of COVID-19 on the Region's waste program costs in 2021.

Table 5
2021 Net Operating Impact of COVID-19 by Waste Stream

Waste Stream	Additional Tonnage Due to COVID-19	Net Operating Impact (000s)
Garbage	7,500	\$639
Blue Box	3,600	(\$51)
Organics	9,800	\$1,521
Total	20,900	\$2,109

Region and local municipalities continue to deliver high quality waste management services to households for less than \$1/day

In 2021, the Region managed over 380,000 tonnes of material from curbside and depot programs at an average Regional cost of \$125 per tonne. Despite the additional costs due to the pandemic presented in Table 5, the Region and local municipalities continue to deliver leading waste management programs and services for about \$300 per household per year. The annual cost of this service is less than the cost for comparable utilities such as cell phones, electricity and natural gas.

Blue Box revenues increased in 2021 due to higher commodity prices

Commodity markets for blue box materials have been robust and led to significantly higher blue box revenues in the past year. This has helped offset higher waste program costs due to COVID-19. The average revenue for one tonne of blue box material increased from approximately \$70 per tonne in 2020 to over \$180 per tonne in 2021, resulting in total blue box revenue of \$10.5M in 2021. These elevated prices have continued into 2022 and will likely persist until supply chain issues are alleviated.

Changes in the formula for calculating the distribution of steward funding also came into effect in 2021. Municipalities will now receive 50% of their net verified costs as reported through the prescribed datacall until they transition into the new producer responsibility system. This approach simplifies the process, replacing the Municipal Funding Allocation Model previously used by the Resource Productivity and Recovery Authority to allocate funding based on various factors, including cost and performance comparison between municipalities. The impact to the Region is negligible, with an approximate 1% reduction in funding. This reduction is due primarily to the removal of best practices scoring, on which the Region would score high in the past.

6. Local Impact

Continued collaboration with local municipal partners advances efforts to improve quality of recyclables at the curb

In 2021, York Region continued to work with its local municipal partners to manage blue box contamination, including addressing COVID-19 related personal protective equipment (ex. masks disposed in the blue box). Waste audits show a slight increase in the Region's contamination rate, moving from 18.8% in 2020 to 19.6% in 2021. Across the Region, local municipal contamination rates ranged from 16% to 25%. Local municipalities are committed to sharing blue box contamination messaging through communication channels that work best in their communities. As efforts move forward, the Region respects local municipalities' autonomy as each community has unique problematic materials and approaches to addressing contamination. Going forward, staff will continue to monitor and track contamination progress through waste audits and monitoring at the Materials Recovery Facility.

York Region's Blue Box Program is scheduled to transition to Ontario's full producer responsibility in 2025. Once the transition occurs, materials eligible for blue box will expand to include some materials not accepted in the Region's current Blue Box Program, such as plastic bags, coffee cups, and styrofoam. To minimize confusion for residents, contamination reduction efforts will consider the future Blue Box Program under the producer responsibility framework.

Residents and businesses support plans by Region and local municipalities to reduce reliance on single-use items

Addressing single-use items is part of York Region's strategy to advance the circular economy. The SM4RT Living Plan outlines actions that target reduction of single-use items, aligning with the federal government's direction. As shared with Council in [March 2022](#), the Region and its local municipalities are developing supports to help businesses, residents and local accessibility organizations implement voluntary changes and adapt to the federal government's planned ban on six categories of single-use plastics.

Consultations with businesses are currently underway to inform development of communication materials aimed at reducing reliance on single-use items and easing compliance with federal regulation when it comes into effect. Regional staff also consulted the York Region Accessibility Advisory Committee and stakeholder organizations for insights on how these changes could affect the disability community. Information gathered is being used to inform creation of educational resources, advocacy responses and future programming.

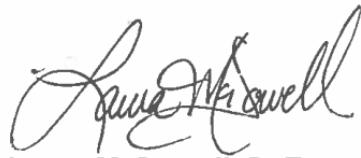
Staff expect to begin implementing single-use items reduction programming with residents and businesses later in 2022. Plans include collaborating with local municipalities and partners to develop and launch an "ask first" program pilot supported with targeted communications and education efforts.

7. Conclusion

Performance of the Region's integrated waste management system in 2021 shows that York Region remains a leader. Based on diversion rates and commitment to advancing a circular economy, the Region and its local municipal partners are well placed to move towards its visionary goal of a world in which nothing goes to waste. The Region's emphasis on a circular economy supports a strong recovery from the impacts of the pandemic. Waste generation rates have stabilized, and programs and strategies are already in place to help increase residents' knowledge, influence behaviours and promote a mindset shift towards circularity.

For more information on this report, please contact David Szeptycki, Director of Environmental Promotion and Protection at 1-877-464-9675 ext. 75723. Accessible formats or communication supports are available upon request.

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Attachments (1)

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