

Clause 10 in Report No. 15 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on November 16, 2017.

10

Long Term Residual Waste Strategy

Committee of the Whole recommends:

1. Receipt of the presentation by Laura McDowell, Director, Environmental Promotion and Protection, Environmental Services.
2. Adoption of the following recommendations contained in the report dated October 12, 2017 from the Commissioner of Environmental Services:
 1. Council authorize amendments to the Region's residual waste management contracts as summarized in Attachment 1 to secure additional energy-from-waste capacity and extend the term of its primary landfill contract.
 2. Council authorize the Commissioner of Environmental Services to execute amending agreements with each of the contractors to formalize the amendments summarized in Attachment 1.
 3. Council authorize the Commissioner of Environmental Services to exercise the option to renew the contracts as summarized in Attachment 1.

Report dated October 12, 2017 from the Commissioner of Environmental Services now follows:

1. Recommendations

It is recommended that:

1. Council authorize amendments to the Region's residual waste management contracts as summarized in Attachment 1 to secure additional energy-from-waste capacity and extend the term of its primary landfill contract.
2. Council authorize the Commissioner of Environmental Services to execute amending agreements with each of the contractors to formalize the amendments summarized in Attachment 1.

3. Council authorize the Commissioner of Environmental Services to exercise the option to renew the contracts as summarized in Attachment 1.
2. Purpose

This report seeks authority to secure additional energy-from-waste and long term landfill capacity to maintain 90 per cent diversion from landfill and ensure availability of diverse long term waste disposal options.

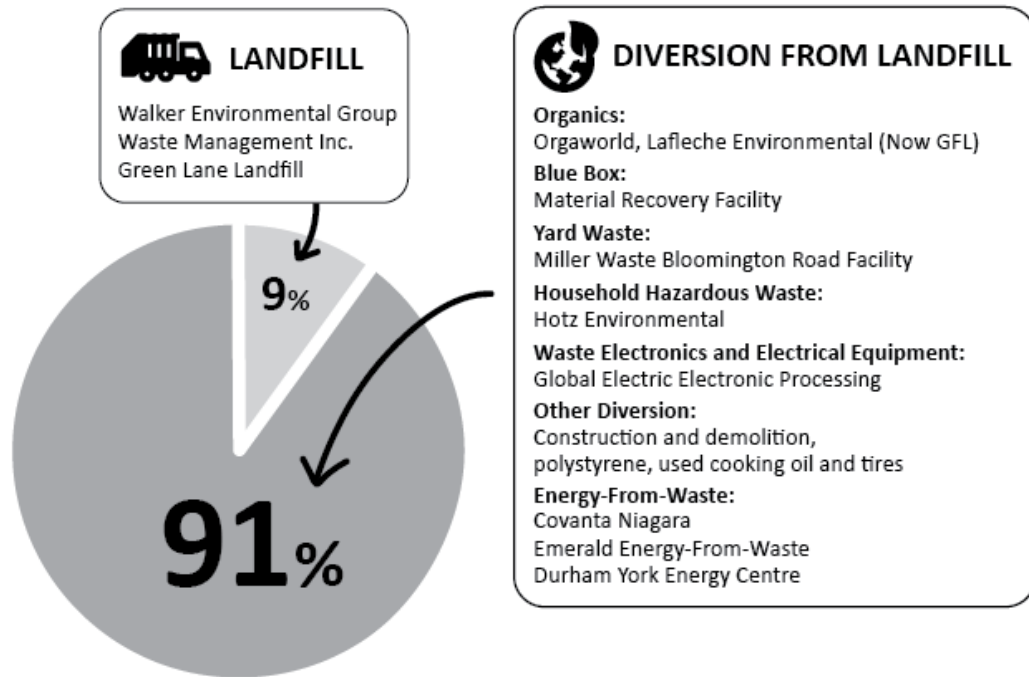
3. Background and Previous Council Direction

York Region exceeds 90 per cent target for diversion from landfill

York Region achieved 91 per cent diversion from landfill in 2016, exceeding the 90 per cent target established in the Regional Official Plan, 2010, as summarized in Figure 1. This milestone was achieved through the ongoing success of blue box, green bin, yard waste, and other diversion initiatives together with the Region's commitment to recovering energy from non-recyclable residual waste.

Reducing landfill disposal to only nine per cent of total tonnes managed helps make York Region a provincial leader in sustainable waste management.

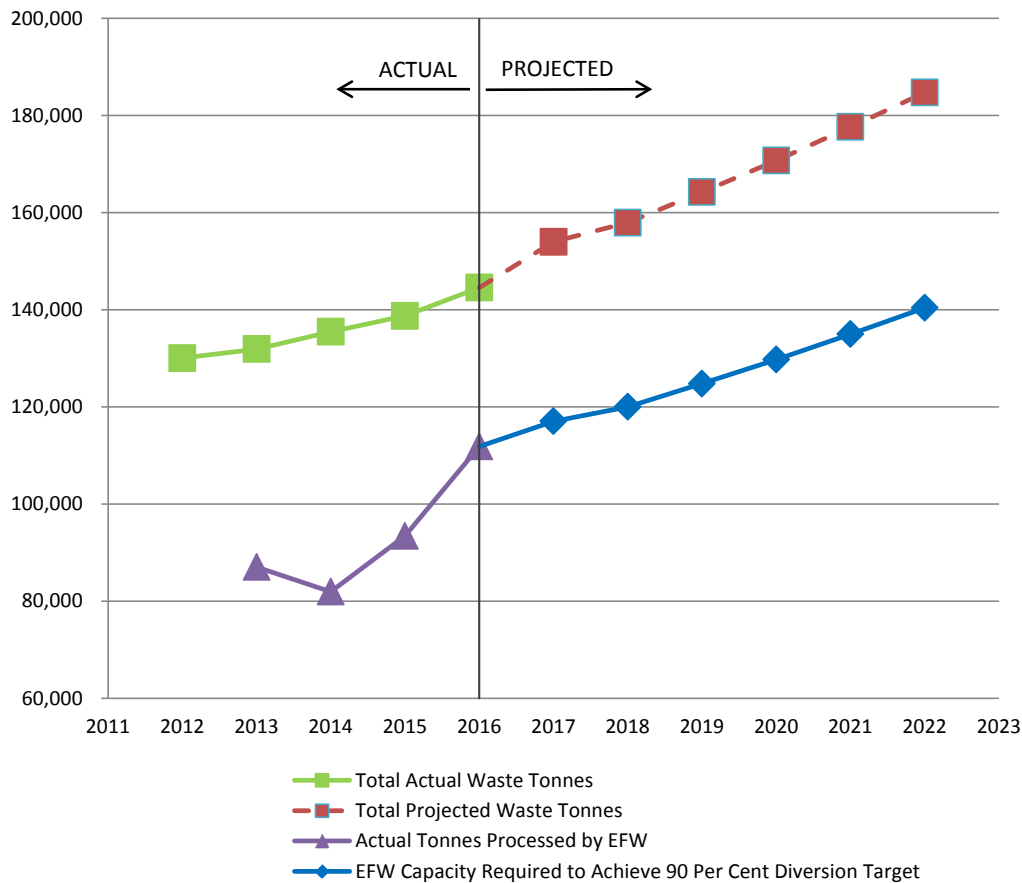
Figure 1
2016 York Region Diversion from Landfill



Additional energy-from-waste capacity required to continue achieving diversion from landfill target

Achieving 90 per cent diversion from landfill in future years will continue to be a challenge as residual waste tonnages increase (as seen in Figure 2) and create additional pressure on diversion programs.

Figure 2
Tonnes of Residual Waste per Year



Residual waste projection is based on current growth rate

The projected residual waste tonnes are modeled based on the Region’s historic growth rate for this waste stream resulting in a need to manage over 180,000 tonnes of material by 2022. In 2016, the Region was able to achieve 91 per cent diversion from landfill by processing about three quarters of the residual waste stream through energy-from-waste facilities.

Upcoming changes to the Region’s waste program are likely to reduce the projected growth rate of residual waste shown in Figure 2. These changes listed below reduce the requirement for additional capacity.

- 1) **Loss of residue from the blue box** – Currently, the Region processes approximately 15,000 tonnes of residual waste from the blue box annually. With the implementation of the *Waste Free Ontario Act, 2016*, it is unknown if the Region will still be responsible for processing this residual waste material. Should the blue box processing transition to producers, blue box residue will no longer be managed by the Region.
- 2) **Decrease in Community Environmental Centre growth rate** – The Community Environmental Centres are currently the fastest growing source of residual waste in the Region. With the proposed increase in user fees, staff believe a slower growth rate can be anticipated going forward.
- 3) **SM4RT Living Initiatives** – Ongoing initiatives designed to reduce waste generation through the SM4RT Living Program.

The projected waste generation rates shown in Figure 2 as well as the impact of these future changes listed above have informed the contract amendments described later in this report. These proposed contract amendments are sufficient to achieve the Region's target of 90 per cent diversion through 2020.

Staff will continue to actively monitor residual waste tonnage and diversion rates to ensure the Region maximizes its ability to divert waste from landfill. If additional processing through energy-from-waste capacity is not available when required, the Region has sufficient landfill capacity to manage the projected waste quantities.

Currently, Region has secured up to 100,000 tonnes of energy-from-waste capacity

The Region currently has up to 100,000 tonnes of energy-from-waste capacity secured through various contracts as outlined in Table 1.

Table 1
Summary of Existing Residual Waste Contracts

Contract	Contract Type¹	Minimum Annual Tonnage	Maximum Annual Tonnage	Actual Tonnage (2016)	Expiry Year
Durham York Energy Centre ²	EFW	30,000	30,000	32,202	2036
Emerald EFW ³	EFW	10,000	12,400	30,737	2028
Covanta Niagara (U.S.A.) ⁴	EFW	45,000	57,600	48,910	2023
EFW Subtotal		85,000	100,000	111,849	
Walker Environmental Group	Landfill	10,000	50,000	31,271	2020
Waste Management Canada	Landfill	None	20,000	995	2020
Green Lane Landfill ⁵		None	78,000		2022
Landfill Subtotal		10,000	148,000	32,266	
Total		95,000	248,000	144,115	

1. EFW = "Energy-From-Waste"
2. Initial 20-year term of Durham York Energy Centre operating contract expires January 2036. Regions may exercise optional extension terms to January 2046. Facility is co-owned by Durham and York Regions.
3. Council has authorized up to 30,400 tonnes to be processed at Emerald, However, Emerald is only contractually obligated to accept 12,400 tonnes annually, with all additional tonnes being contingent on available capacity. Emerald contract can be extended to 2028 at the sole discretion of York Region.
4. Covanta Niagara contract can be extended to 2028 upon mutual agreement of parties and otherwise expires in 2023.
5. Green Lane Landfill contract is considered an emergency contingency only. Minimum tonnage of 25,000 tonnes waived by agreement with Toronto staff. During the five-year optional extension term through December 31, 2022, the maximum tonnage is reduced to 78,000 tonnes per year in accordance with the original contract.

In 2016, York Region's energy-from-waste processors agreed to accept residual waste in quantities that exceeded their combined maximum contractual tonnage obligations by 11,849 tonnes, helping to achieve the Region's 91 per cent diversion rate. However this capacity is not guaranteed to be available on an annual basis. To maintain the Region's diversion from landfill goals, additional energy-from-waste capacity must be secured.

4. Analysis and Implications

Durham York Energy Centre has limited additional capacity available to York Region in the short to medium-term

While expansion of the Durham York Energy Centre is possible over the long term, it is best planned when the existing facility performance is proven over the next 5 to 10 years. A facility expansion will require a period of several years to complete, and it would also require at least 100,000 additional tonnes of waste per year to be cost effective. While this option is being pursued, York Region needs guaranteed energy-from-waste capacity in the short to medium term.

Durham Region's long term waste plan includes diversion initiatives that may result in surplus capacity available at Durham York Energy Centre after 2020. However, Durham would retain right-of-first-refusal for this additional tonnage to accommodate their own long-term growth, making the capacity unguaranteed. While York Region may be able to use some of Durham's surplus capacity if and when it becomes available, additional guaranteed short to medium-term capacity is needed.

Increasing direct curbside deliveries to Emerald EFW provides additional guaranteed energy-from-waste capacity at reduced cost

The original contract with Emerald EFW (Formerly Algonquin Power) included annual processing of 10,000 to 12,400 tonnes of residual waste delivered directly from the curbside in the City of Vaughan. In 2016 Council increased the upset limit of the contract to allow for delivery of up to 30,400 tonnes annually, with the additional tonnage coming from the Region's transfer stations. While Emerald agreed to accept some additional tonnage at their discretion, they would not guarantee availability of capacity above the original 12,400 tonne annual maximum without a larger guaranteed minimum commitment from the Region.

Emerald EFW has offered to increase the maximum annual limit on curbside deliveries from 12,400 to 25,000 tonnes per year at the existing contract price, subject to Council approval. In exchange, the Region would be required to increase minimum annual curbside deliveries from 10,000 to 20,000 tonnes per year. As discussed later in this report, increasing direct deliveries from the curb reduces overall costs by avoiding transfer station and trucking fees. Staff recommend that the offer from Emerald EFW be accepted, and that the contract be amended to reflect the revised curbside tonnages. The contract amendments would take effect on January 1, 2018 to coincide with the start of the new Vaughan curbside collection contract and extend through the remainder of Vaughan's contract term to 2026, with two optional 1 year term extensions.

Proposed fee for additional curbside collection costs is offset by reduced transfer station and trucking fees, resulting in \$145,000 net annual savings to the Region

Miller Waste Systems currently provides curbside collection of residual waste in the City of Vaughan. The Vaughan curbside collection trucks deliver waste from their morning collection routes directly to Emerald EFW in Brampton. Afternoon routes deliver their material to the Earl Turcott transfer station in Markham, in proximity to the facility where Miller's trucks are parked at night.

Vaughan recently awarded Miller a new eight-year contract for garbage collection commencing January 2018. In bidding this contract Miller assumed that morning collection trucks would continue to go directly to Emerald EFW and that afternoon trucks would return to the Earl Turcott transfer station.

Increasing direct deliveries to Emerald EFW would require Miller's curbside trucks to make a second trip to Brampton in the afternoon before returning to the parking facility in Markham. Miller has requested an annual payment of \$115,000 from the Region as compensation for additional costs they will incur for additional driver time, mileage and 407 fees. This fee has been reviewed by Regional staff and is reasonable.

Increasing direct deliveries to Emerald EFW by 12,600 tonnes per year as proposed in this report will save the Region approximately \$260,000 in transfer station and trucking fees annually. This cost savings would more than offset the \$115,000 annual fee requested by Miller, resulting in a net savings of \$145,000 annually, which reduces cost increases on the Covanta Niagara contract. Staff recommend that Council authorize the annual \$115,000 payment to Miller until the next procurement of curbside collection services in Vaughan, or until the additional curbside deliveries to Emerald are no longer required.

Deliveries to Emerald EFW from the transfer stations provide additional guaranteed energy-from-waste capacity at a competitive price

In addition to increasing the limit on curbside deliveries, effective January 1, 2018 Emerald EFW has offered to transport and process between 7,000 and 8,000 tonnes of residual waste per year from the transfer stations at a combined price of \$75 per tonne, subject to inflation and fuel cost adjustments. This material was processed at Emerald in 2016, but the capacity was not guaranteed to be available in future years.

The proposed price for transportation and processing is competitive with York Region's average costs for other energy-from-waste facilities as summarized in Table 2.

Emerald’s proposed \$75 per-tonne price for transportation and processing represents an increase of \$5.84 per tonne over their base 2017 price of \$69.16 per tonne for processing only. By comparison, a competitively tendered price for transportation would likely add at least \$10 per tonne.

Table 2
Average Residual Waste Transportation and Processing Cost per Tonne

Contractor	Contract Type ¹	Transportation and Processing Cost Per Tonne (\$CDN)
Emerald EFW (Direct from Curb) ²	EFW	\$69.16
Emerald EFW (from Transfer Station) ³	EFW	\$75.00
Covanta Niagara ⁴	EFW	\$78.41
Durham York Energy Centre ⁵	EFW	\$72.04
Walker Environmental Group ⁶	Landfill	\$71.02
Waste Management of Canada ⁷	Landfill	\$71.66

1. EFW = “Energy-From-Waste”
2. Emerald EFW’s 2017 base processing fee with no transportation included.
3. Emerald EFW’s proposed 2018 rate for transportation and processing
4. Average Q1 & Q2 2017 cost per tonne in Canadian dollars including currency adjustments, transportation, and customs brokerage fees.
5. Estimated 2017 per-tonne operating cost, net of electricity and metal recovery revenue, including property taxes and transportation. Cost per tonne excludes amortized capital costs.
6. Current contract rate including transportation and disposal.
7. Current contract price for transportation and disposal assuming an average load size of 32 tonnes with 60 per cent originating from Earl Turcott Waste Management Centre, 30 per cent originating from York Region Waste Management Centre, and 10 per cent originating from Georgina Transfer Station.

Increase to Emerald upset limit will cover proposed contract amendments and allow for continued use as an alternate processing site

The proposed contract amendments will increase the maximum guaranteed processing capacity available at Emerald EFW from 12,400 to 33,000 tonnes per year. Staff request that the upset limit be increased to allow for an additional 3,000 tonnes per year of unguaranteed processing capacity to be used during maintenance outages at other facilities, subject to availability, This brings the total annual tonnage covered by the upset limit to 36,000 tonnes per year of combined guaranteed and unguaranteed capacity.

Offer of additional capacity at Covanta Niagara will allow York Region to maintain diversion from landfill as tonnage increases

Covanta Niagara is the Region's largest energy-from-waste contract and an important part of the Region's overall residual waste management strategy. Without increased tonnage from Covanta Niagara, the Region will not continue to achieve its annual diversion-from-landfill target of 90 per cent or higher as residual waste tonnages continue to grow. Covanta Niagara has indicated that additional capacity will become available in January 2019 when some of its existing contracts expire. In preliminary discussions, Covanta Niagara has offered to increase the Region's maximum annual tonnage starting in January 2019 from 57,600 tonnes per year to 70,000 tonnes per year at the current contract price in exchange for an increase to the Region's minimum tonnage commitment from 45,000 tonnes per year to 55,000 tonnes per year.

Covanta Niagara is the Region's most cost effective energy-from-waste option for transfer station waste when the Canadian dollar is at parity. However, due to the decline in the Canadian dollar, it is currently 10% higher than Emerald contract current costs, with cost for processing, transportation, currency adjustments, and customs brokerage fees averaging \$78.41 per tonne in the first half of 2017 as shown in Table 2. While this exceeds Emerald EFW's proposed price for transfer station waste by \$3.41 per tonne, Covanta Niagara is still a competitive option, and their offer of increased tonnage starting in January 2019 would provide 12,400 tonnes of additional guaranteed capacity, allowing the Region to continue to meet its diversion-from-landfill goals. As discussed later in this report, the Covanta Niagara contract includes measures that effectively protect the Region against additional currency risk.

Staff recommend that Council authorize an amendment to the Covanta Niagara contract to reflect the revised tonnages commencing January 1, 2019 and continuing through the remainder of the contract term and optional extensions. Staff further request that the Commissioner of Environmental Services be authorized to execute the optional term extension for the Covanta Niagara contract, as amended, for the 5-year term from September 23, 2018 to September 22, 2023.

Landfill contracts provide reliable contingency capacity and disposal option for bulky wastes

Although energy-from-waste is the preferred method of waste disposal, York Region also receives bulky materials such as furniture, bricks, concrete, or asphalt that are not suitable for energy-from-waste processing and must be landfilled. Landfill also provides a dependable contingency disposal option should a short term processing interruption be encountered at one or more energy-from-waste or source separated organics facilities. As shown in Table 1, all of York

Region's current landfill contracts will expire within the next five years, creating a need for a long-term landfill disposal option.

Contract extension with Walker Environmental meets the Region's landfill disposal needs

Walker Environmental has offered to extend the Region's contract for transportation and disposal of up to 50,000 tonnes per year of residual waste for an additional five-year term, which would extend the end date of the contract from June 27, 2020 to June 27, 2025. Walker Environmental is willing to consider additional five-year extensions by mutual agreement, subject to the success of their current efforts to expand their capacity. Walker Environmental is willing to agree to the first five-year term extension at the existing contract price in exchange for agreement by York Region to increase its minimum annual commitment from 10,000 tonnes to 20,000 tonnes per year and implement a monthly average minimum load size of 27 tonnes per truckload of waste.

Hauling to Walker Environmental has smallest carbon footprint for landfill disposal

As shown in Table 2, York Region's current costs for transportation and disposal at the Walker Environmental facility and the Waste Management of Canada facility are comparable, with the price for Waste Management being higher, by \$0.64 per tonne. In addition, Walker Environmental is much closer to York Region than Waste Management as shown on the map in Attachment 2, with a difference in round trip distance of approximately 218 kilometers. Based on annual deliveries of 25,000 tonnes per year, this 218 kilometer reduction in transportation distance would reduce carbon emissions by approximately 250 tonnes of carbon dioxide equivalents per year. Walker Environmental's proximity to Covanta Niagara also facilitates disposal of any loads that are rejected at the United States border.

Staff recommend that Council authorize an amendment to the Walker Environmental contract to extend the term by five years, from June 27, 2020 to June 27, 2025 and to implement the minimum tonnage increase and minimum load size as requested by Walker Environmental.

Proposed amendments provide 33,000 tonnes of additional annual guaranteed energy-from-waste capacity and extend the life of the Walker Environmental landfill contract by five years

The contract amendments proposed in this report provide 33,000 tonnes of additional annual guaranteed energy-from-waste capacity and extend the life of the Walker Environmental landfill contract by five years. A summary of the revised contract tonnages is provided in Table 3.

Table 3
Summary of Amended Residual Waste Contracts¹

Contract	Contract Type²	Minimum Annual Tonnage	Maximum Annual Tonnage	Expiry Year
Durham York Energy Centre	EFW	30,000	30,000	2036
Emerald EFW ²	EFW	27,000	33,000	2028
Covanta Niagara (U.S.A.) ³	EFW	55,000	70,000	2023
EFW Subtotal		112,000	133,000	
Walker Environmental Group	Landfill	20,000	50,000	2025
Waste Management Canada	Landfill	None	20,000	2020
Green Lane Landfill ⁴		None	78,000	2022
Landfill Subtotal		20,000	148,000	
Total		132,000	281,000	

1. See notes for Table 1

2. Emerald EFW maximum tonnage excludes spending authority for additional 3,000 tonnes per year of unguaranteed processing capacity

The additional capacity provided by the amended contracts positions York Region to continue to meet the diversion-from-landfill target and maintain its position of environmental leadership as residual waste tonnages continue to grow.

5. Financial Considerations

Covanta Niagara contract contains measures for effective management of currency exchange risk

Covanta Niagara's nominal 2017 processing fee is \$43.77 per tonne, subject to a currency adjustment when the value of the Canadian dollar decreases to less than 0.90 U.S. dollars. In the first half of 2017, the average value of the processing fee after currency adjustments was \$52.37 per tonne, bringing the total cost of processing at Covanta Niagara to \$78.41 per tonne with transportation and customs brokerage fees included.

The contract includes an escape clause that allows the Region to terminate the contract if the exchange rate drops below 0.70 U.S. dollars per Canadian dollar. Table 4 shows the difference in Covanta Niagara’s annual processing cost at 0.90 U.S. dollars per Canadian dollar, where the currency adjustments first take effect, and 0.70 U.S. dollars per Canadian dollar, where the escape clause could be triggered, while processing at the new proposed minimum and maximum processing levels of 55,000 and 70,000 tonnes per year. This defines the Region’s maximum exposure to currency exchange risk under the proposed contract amendments.

Table 4
Impact of exchange rate on Covanta Niagara processing fees^{1,2}

Cost per tonne	Cost to Process Minimum 55,000 Tonnes per Year (CAD)	Cost to Process Maximum 70,000 Tonnes per Year (CAD)
\$43.77/tonne (1 CAD = 0.90 USD [or higher])	\$2,407,350	\$3,063,900
\$56.28/tonne (1 CAD = 0.70 USD)	\$3,095,165	\$3,939,300
Currency Risk	\$687,814	\$875,400

1. “CAD” = Canadian Dollar, “USD” = United States Dollar
2. Costs are based on Covanta’s fee of \$43.77 per tonne for processing only. Transportation costs are provided by a third party and are not subject to currency exchange

As shown on the bottom line of Table 4, the Region’s maximum exposure to currency risk is \$875,400 dollars per year, which can be reduced to \$687,814 dollars per year by reducing deliveries to Covanta Niagara to minimum levels and shifting tonnage to other contracts. Staff consider this risk to be manageable given the environmental benefit of securing up to 12,400 tonnes per year of additional guaranteed energy-from-waste capacity.

No upset limit increase required for Miller curbside collection fee

Staff propose to pay Miller Waste Systems the \$115,000 annual fee for increased curbside collection costs out of the existing purchase order for transfer station operations. Since reductions to transfer station fees will more than offset the curbside collection fee, no adjustment to Miller’s upset limit is required. The combined savings in transfer station fees and transportation fees is estimated to be \$145,000 per year.

Additional processing capacity and transportation fees require increase to the Emerald EFW upset limit

As approved by Council in [June 2016](#), the current Emerald EFW upset limit covers up to 30,400 tonnes of processing per year through the end of the current contract term and optional extension terms. Consequently, the requested increase to 36,000 tonnes per year requires new spending authority for only 5,600 additional tonnes of processing per year. Additional spending authority is also required to cover 8,000 tonnes per year of new transportation services to be provided by Emerald EFW under the proposed contract amendments. The new upset limit of \$37,128,468 to be approved by Council is summarized in Table 5.

Table 5
Summary of Emerald EFW Upset Limit Increase

Description	Maximum Additional Tonnes per Year	Maximum Cost ¹
Additional Processing	5,600	\$4,691,000
Additional Transportation	8,000	\$585,000
Total Increase		\$5,276,000
Previous Upset Limit		\$31,852,468
New Upset Limit		\$37,128,468

1. Estimated maximum cost from January 1, 2018 effective date through expiry of final optional extension term on September 15, 2028 including a two per cent inflationary increase per year on processing and three per cent per year on transportation for inflation and fuel surcharges.

Additional processing capacity requires increase to Covanta Niagara upset limit

Increasing Covanta Niagara's maximum annual tonnage from 57,600 tonnes per year to 70,000 tonnes per year requires spending authority for an additional 12,400 tonnes per year from January 1, 2019, when the additional capacity becomes available, through the end of the final optional renewal term on September 22, 2023. The upset limit increase for approval by Council is summarized in Table 6.

Table 6
Summary of Covanta Niagara Upset Limit Increase

Description	Maximum Additional Tonnes per Year	Maximum Cost ¹
Additional Processing	12,400	\$2,775,000
Previous Upset Limit		\$40,968,000
New Upset Limit		\$43,743,000

1. Estimated maximum cost from January 1, 2019 when additional capacity becomes available through expiry of the optional five year extension term on September 22, 2023 including an allowance of two per cent per year for inflation

Five-year contract extension requires increase to Walker Environmental upset limit

Extending Walker Environmental's contract for transportation and disposal for an additional five years at the maximum rate of 50,000 tonnes per year requires an increase to the contract upset limit. The upset limit increase for approval by Council is summarized in Table 7.

Table 7
Summary of Walker Environmental Upset Limit Increase

Description	Maximum Additional Tonnes per Year	Maximum Cost ¹
Additional Landfill Capacity	50,000	\$19,804,000
Previous Upset Limit		\$34,435,732
New Upset Limit		\$54,239,732

1. Estimated maximum cost to extend the contract from current June 27, 2020 expiry date through June 27, 2025 at the maximum annual disposal rate of 50,000 tonnes per year, including an allowance of two per cent per year for inflation

Contract amendments deliver additional guaranteed energy-from-waste capacity at marginal additional cost

York Region will manage an estimated 154,000 tonnes of residual waste in 2017, but currently has only 100,000 tonnes per year of guaranteed energy-from-waste capacity available. As illustrated in Table 8, the Region would be required to landfill 54,000 tonnes of waste if held to the current contract tonnage limits as compared to only 21,000 tonnes under the proposed amendments. The estimated cost incurred to process the additional 33,000 tonnes at energy-from-waste facilities instead of landfill would be approximately \$26,000 per year, which is effectively cost neutral.

Table 8
Comparison of Annual Costs Under Existing and Amended Contracts

Contract Type	Existing Contracts		Proposed Amendments	
	Tonnes Managed	Annual Cost	Tonnes Managed	Annual Cost ¹
Energy-from-Waste	100,000	\$7,535,000	133,000	\$9,908,000
Landfill	54,000	\$3,838,000	21,000	\$1,491,000
Total	154,000	\$11,373,000	154,000	\$11,399,000

1. Annual costs for transportation and disposal at the unit costs shown in Table 2. Energy-from-waste costs under the proposed scenario include the proposed \$115,000 annual fee to Miller Waste Systems and an allowance for avoided transfer station fees for additional curbside deliveries

6. Local Municipal Impact

York Region works with all 9 local municipal partners to provide sustainable, long term waste management programs and maximize diversion from landfill in a cost effective manner. Together, we have achieved the number one ranking in residential diversion in the large urban category every year since 2012. York Region's various waste contracts contribute to providing sustainable, long-term residual waste management services for all our local municipalities while achieving 90 per cent diversion from landfill.

7. Conclusion

The proposed contract amendments, renewal terms, and upset limit increases to be approved by Council are summarized in Attachment 1. These changes deliver additional guaranteed energy-from-waste capacity at marginal additional annual cost, while minimizing the Region's carbon footprint and maximizing diversion from landfill.

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection, Environmental Services at 1-877-464-9675 ext. 75077.

The Senior Management Group has reviewed this report.

October 12, 2017

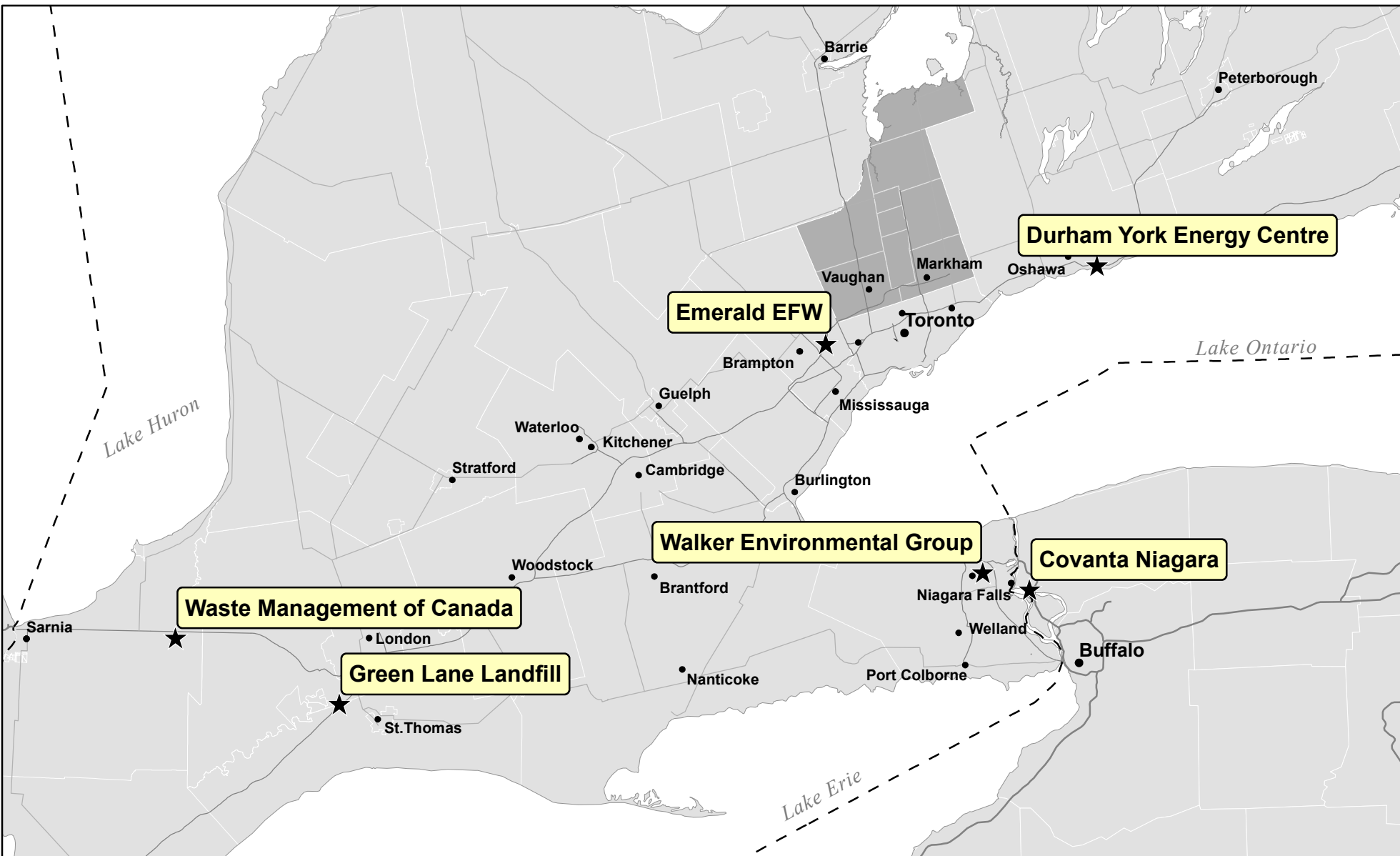
Attachments (2)

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Accessible formats or communication supports are available upon request

**Summary of Contract Amendments, Renewal Terms
and Upset Limit Increases for Council Approval**

Contract	Proposed Amendments and Actions
Emerald EFW	<ul style="list-style-type: none"> • Increase minimum annual tonnes delivered directly from the curb from 10,000 to 20,000 tonnes at the current contract price • Increase the maximum annual tonnes delivered directly from the curb from 12,400 tonnes to 25,000 tonnes at the current contract unit price. • Deliver 7,000 to 8,000 tonnes per year from the Region's transfer stations at a combined price for transportation and processing of \$75 per tonne subject to inflation and fuel cost adjustments. • Increase the upset limit by \$5,276,000 from \$31,852,468 to \$37,128,468. • Exercise the option to renew the contract for an additional five-year term from September 16, 2018 to September 15, 2023. • Amendments to be effective commencing January 1, 2018 and to continue for the remainder of the existing term and the renewal term.
Miller Waste Systems	<ul style="list-style-type: none"> • Authorize the establishment of an additional annual fee of \$115,000 to offset additional costs incurred by increasing direct curbside deliveries to Emerald EFW.
Covanta Niagara	<ul style="list-style-type: none"> • Increase the minimum annual tonnes delivered from 45,000 to 55,000 • Increase the maximum annual tonnes delivered from 57,600 tonnes to 70,000 tonnes • Increase the upset limit of the contract by \$2,775,000 from \$40,968,000 to \$43,743,000 • Exercise the option to renew the contract for an additional five-year term from September 23, 2018 to September 22, 2023. • Amendments to be effective commencing January 1, 2019 and to continue for the remainder of the existing term and the renewal term.
Walker Environmental	<ul style="list-style-type: none"> • Increase the minimum annual tonnes of residual waste delivered to the South Landfill from 10,000 to 20,000 tonnes per year. • Implement a minimum monthly average load size of 27 tonnes per load for each transfer station. • Extend the term of the contract, as amended, for an additional five years from the current expiry date of June 27, 2020 to June 27, 2025. • Increase the upset limit of the contract by \$19,804,000 from \$34,435,732 to \$54,239,732 to accommodate the increased tonnage and contract extension.



Residual Waste Processing and Disposal Facility Locations



Produced by:
 The Regional Municipality of York
 Environmental Services, Environmental Promotion and Protection, April, 2016
 Data Sources:
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Legend

- ★ Facility Location
- City
- Highway
- Regional Boundary
- - - International Border
- Water Body



Long Term Residual Waste Strategy

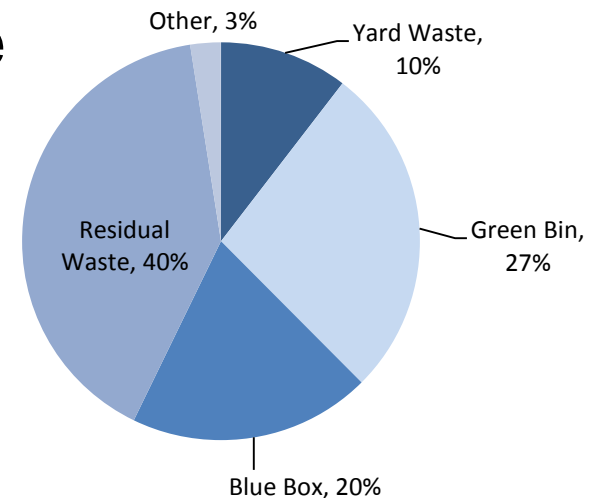
Presentation to
Committee of the Whole

Laura McDowell and Ron Gordon

November 2, 2017

Agenda

- Residual waste management achieved through contracted services
- Region's commitment to diversion from landfill
- Projected waste growth rate
- Securing more energy-from-waste processing capacity to maintain diversion rate
- Financial implications



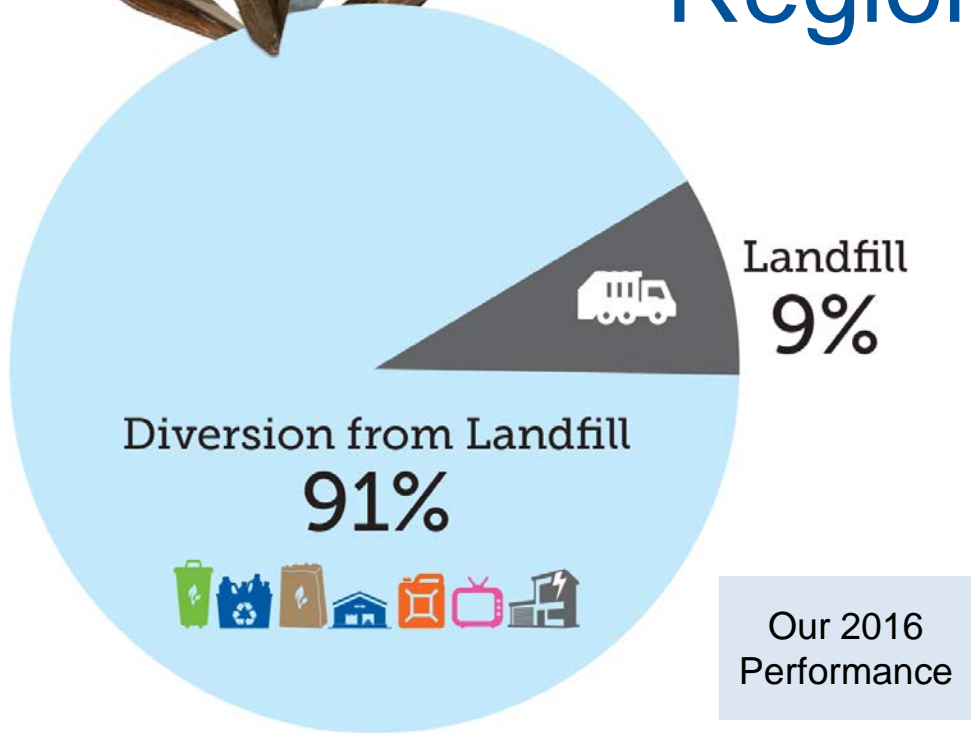
Residual waste management highly contracted out

- 6 contracts for residual waste
- 20 contracts for total waste management leverages private sector expertise and resources
- Additional energy-from-waste and landfill contract capacity and contract extensions provide certainty in delivering service and meeting targets to 2023



Diversity is resilience in managing over 350,000 tonnes of solid waste per year

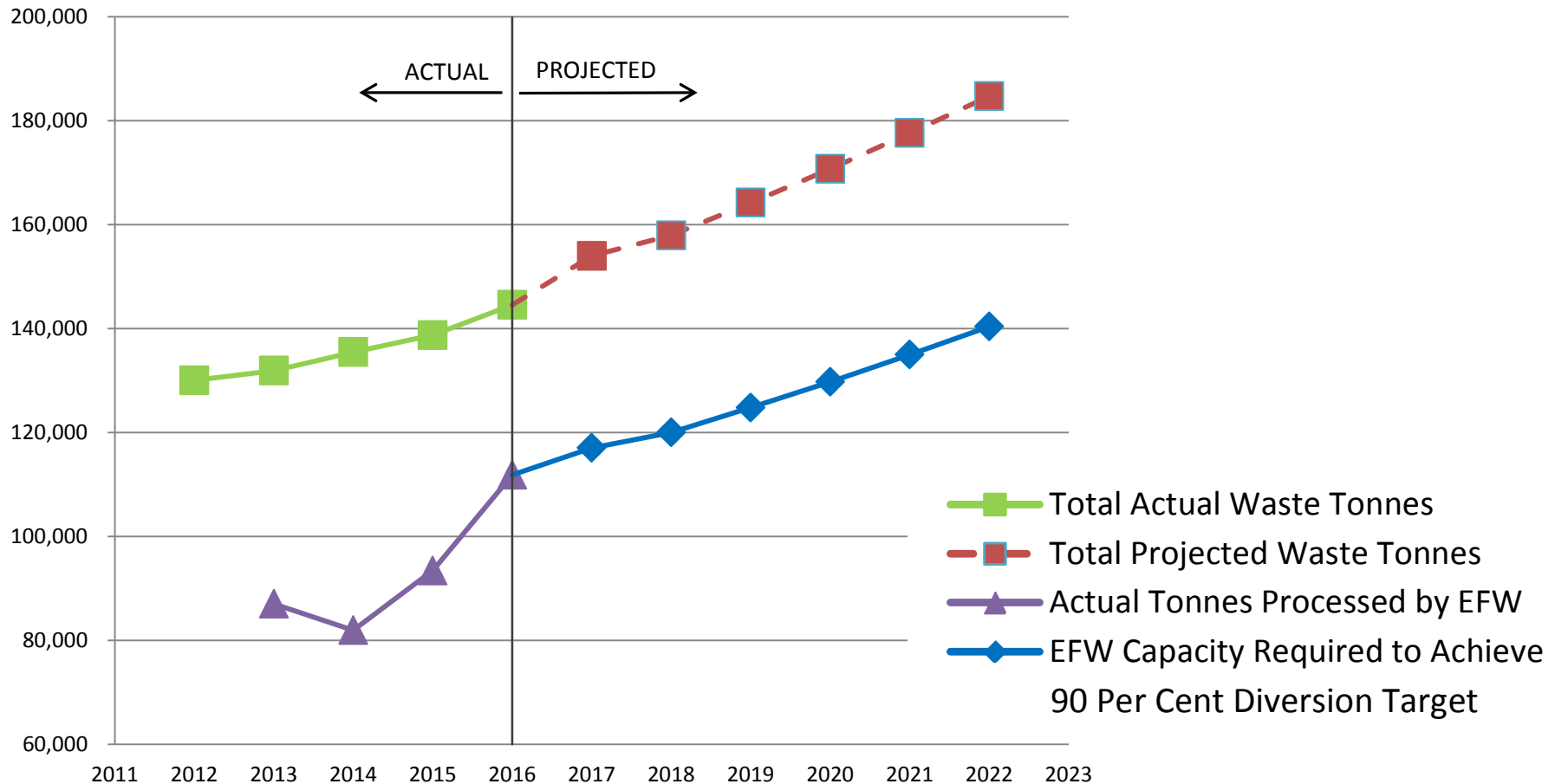
90 per cent target established in the Region's Official Plan



- Organics
- Blue Box
- Leaf & Yard Waste
- Depots
- Household Hazardous Waste
- Electronics
- Energy-from-waste
- Landfill

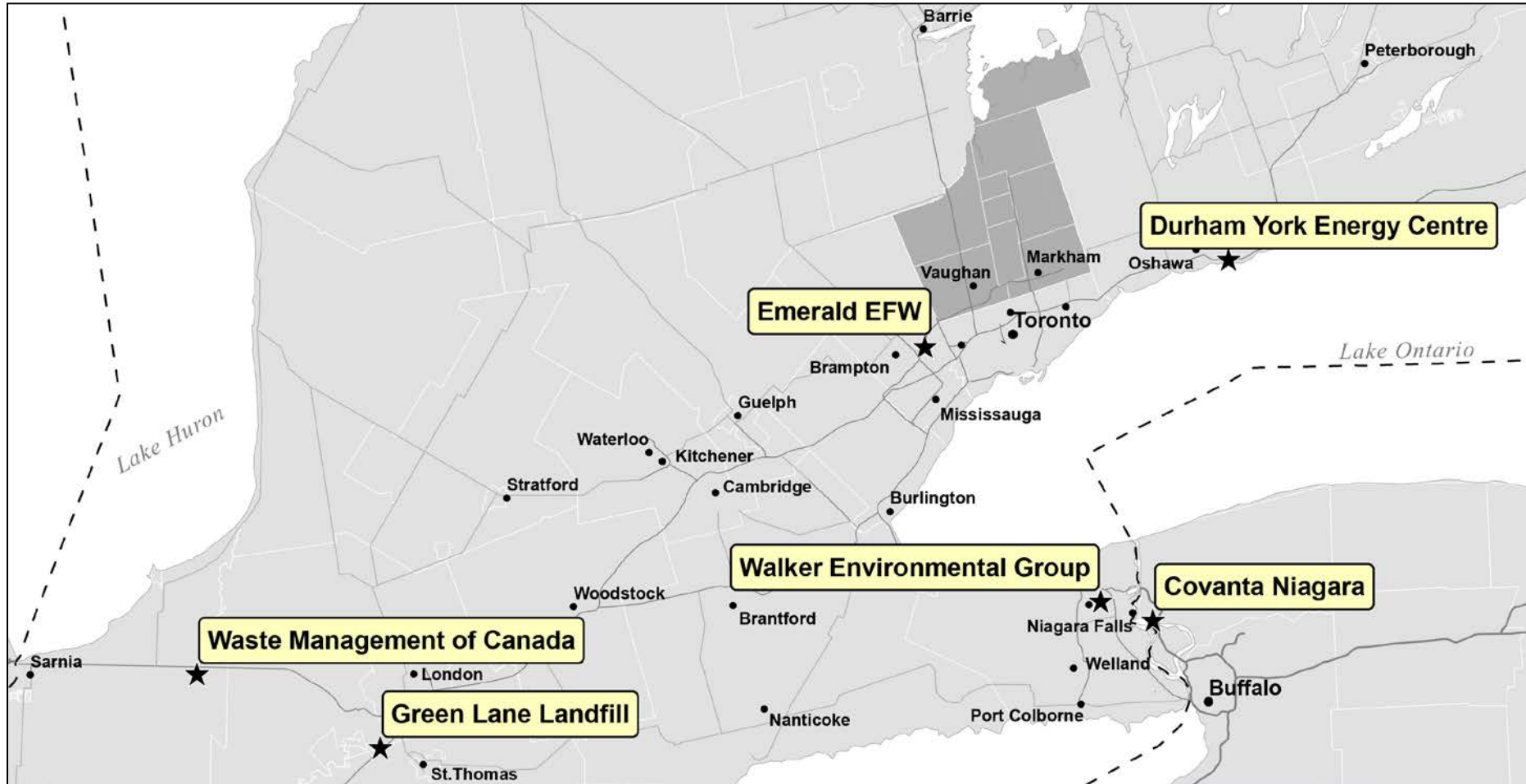
York Region continues to be a leader in waste management

Residual waste continues to grow



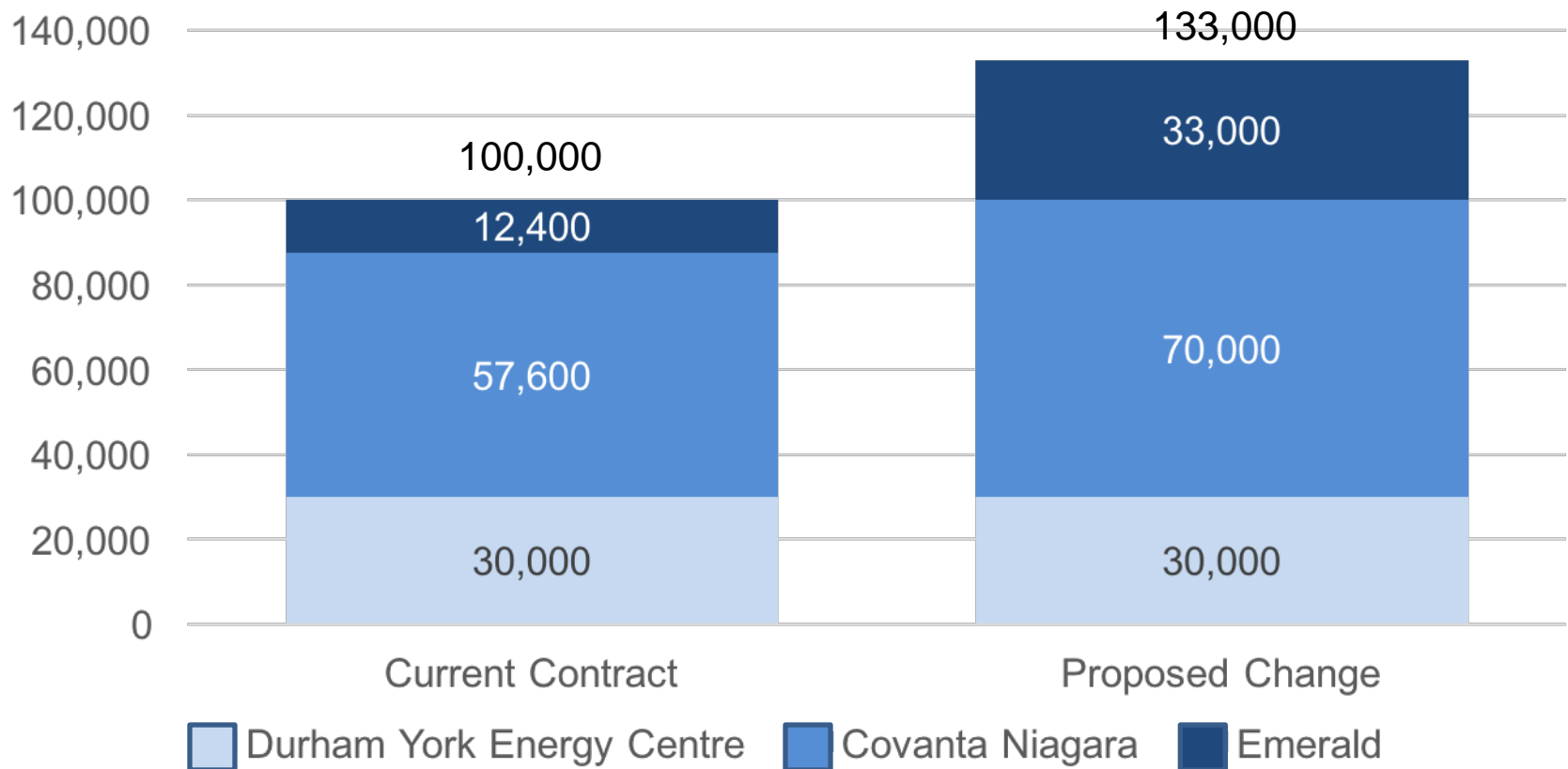
At least 75% of residual waste must be processed at energy-from-waste facilities annually to meet 90% diversion target

Minimizing our carbon footprint



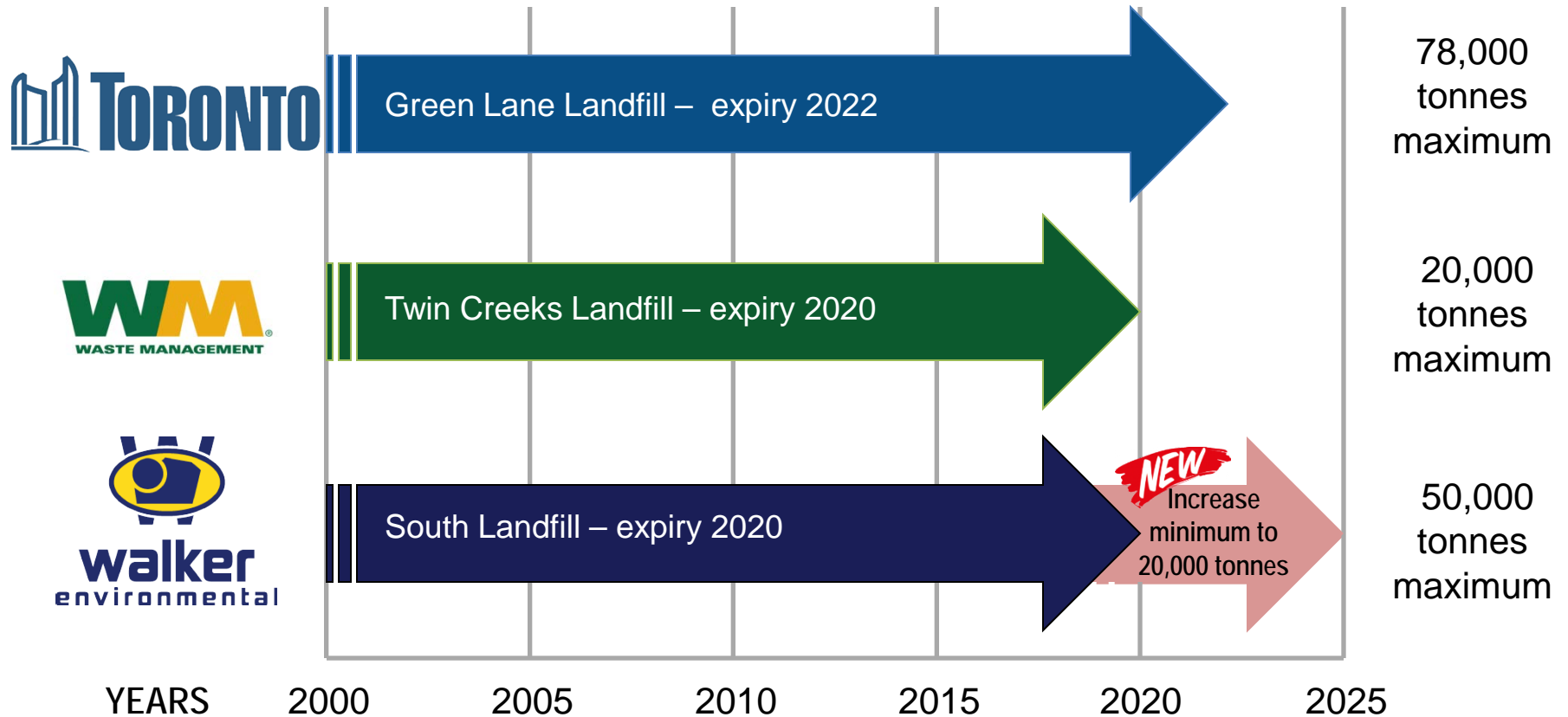
91% of contract capacity is Ontario based

Current energy-from-waste capacity is insufficient



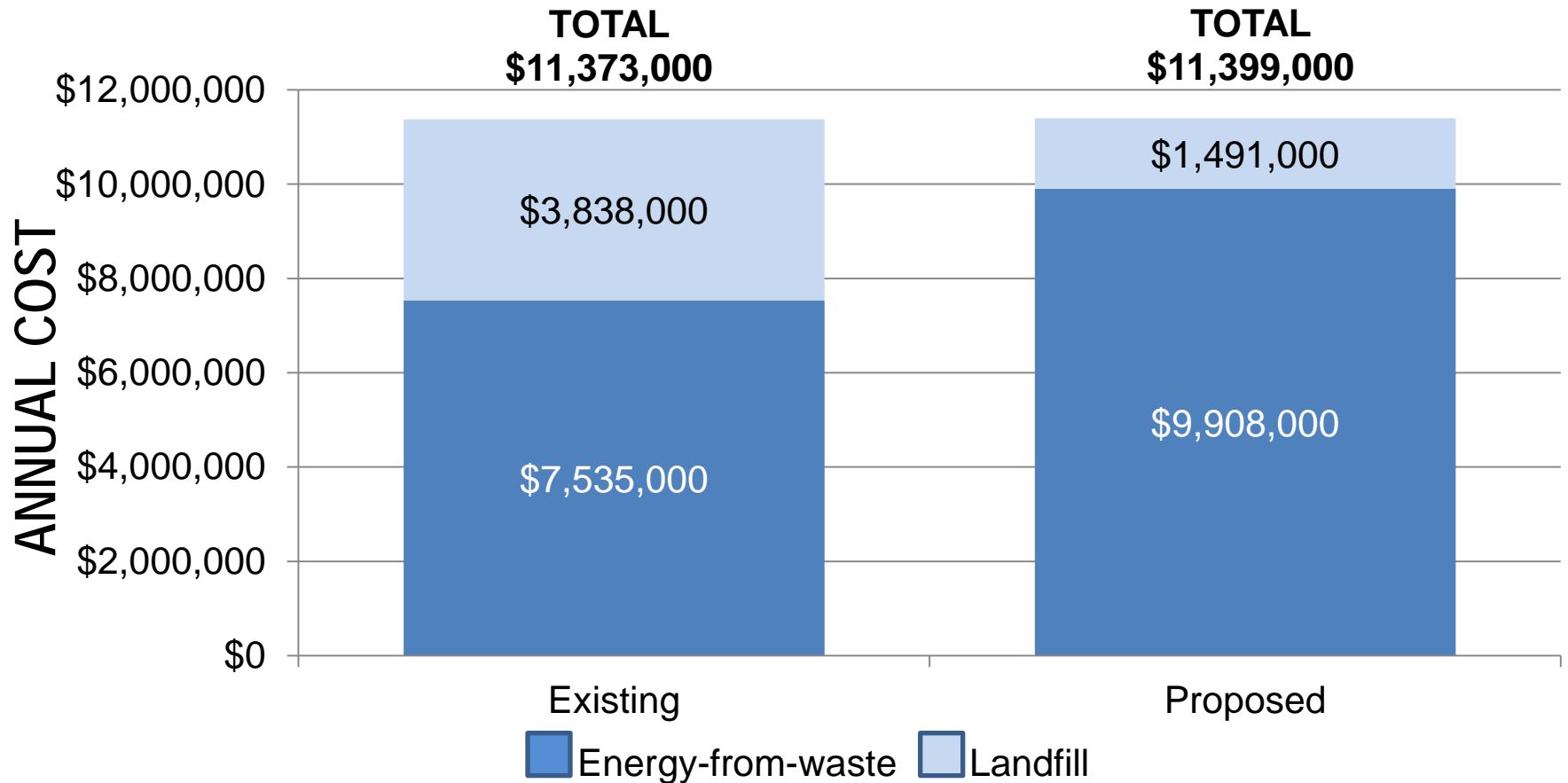
Long term capacity required to continue to meet Regional diversion target

Landfill capacity required for waste not suitable for energy recovery



Staff recommend renewal of Walker contract for 5 years to 2025

Securing additional energy-from-waste tonnage is cost effective



Guaranteed energy-from-waste capacity at marginal additional annual cost

Summary of Recommendations

Emerald Energy-from-waste

- Increase maximum guaranteed processing capacity at Emerald EFW from 12,400 to 33,000 tonnes per year through increase in direct curbside and transfer station material
- Renew existing contract for 5 years (2018-2023)

Covanta Niagara

- Increase annual tonnage range from 45,000 – 57,600 tonnes to 55,000 – 70,000 tonnes
- Renew existing contract for 5 years (2018-2023)

Walker Environmental

- Increase annual minimum tonnage to 20,000 tonnes
- Renew existing contract for 5 years (2020-2025)