

Waste Management

2023–2026 Business Plan
and 2023 Budget

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Executive Summary

Mission: To provide reliable, cost-effective, customer-focused services that maximize resource recovery, support innovation and foster a circular economy.

Services we provide:

- Collection, processing and disposal of waste from residents and eligible small businesses and recycling from schools within the Cities of Brampton and Mississauga and the Town of Caledon.
- Operation of six Community Recycling Centres where residents can drop off a wide range of recyclable materials and re-usable items.
- Management of 21 former landfills, including ongoing monitoring and/or management of landfill gas and leachate.
- Promotion and education to encourage reduction, reuse and recycling and to educate residents and students about Peel’s programs.
- Advocacy for fair and progressive Provincial and Federal waste management legislation, regulations and programs.
- Leadership on issues affecting the waste sector in collaboration with various government and industry associations.

Interesting facts about this service:

- Peel operates the second largest municipal waste management program in the province (second only to Toronto).
- Peel provides collection services to approximately 345,000 curbside households and 107,000 multi-residential units.
- Peel manages 570,000 tonnes of waste annually from its 1.5 million residents.
- In 2021, Peel diverted 50% of waste from landfill.

- In 2021, a total of 525,000 customers visited Peel’s Community Recycling Centres.
- Since 2019, a 13 percent increase in green bin organics and a 21 percent increase in Community Recycling Centre users.

Highlights of the Business Plan include:

- Transition of Peel’s Blue Box program to producers.
- Transition of Peel’s in-house green bin organics processing to 3rd party processing.
- Finalization and implementation of the Waste Management Financial Plan.
- Implementation of mixed waste processing to recover additional resources from Peel’s garbage stream.
- Commencement of Peel’s next/new waste collection contracts.

| Net Investment (\$000s) | 2023 | 2024 | 2025 | 2026 |
|-------------------------|---------|---------|---------|---------|
| Operating | 136,263 | 140,423 | 145,173 | 150,972 |
| Capital | 15,360 | 23,666 | 10,500 | 19,850 |
| Full Time Equivalents | 236.3 | 241.7 | 244.0 | 246.2 |

Core Services

Vision, Mission, Goals of Service and Service Delivery Model

Vision

A Community where people have the ability to acknowledge and utilize the full value of resources and nothing goes to waste.

Mission

To provide reliable, cost-effective, customer-focused services that maximize resource recovery, support innovation and foster a circular economy.

Goals of Service

1. Minimize residential waste generation.
2. Maximize the recovery of resources from residential waste in a way that fosters the growth of the circular economy.
3. Design and deliver waste management services that meet the needs of the customer in a cost-effective manner.
4. 75 percent 3Rs diversion by 2034.
5. Net Zero GHG emissions from residential waste management.

Service Delivery Model



Service Levels and Trends

Service Levels

Waste Management services are delivered through a number of operational activities. The existing service levels for these activities are summarized below.

Curbside Waste Collection: Peel provides waste collection services to curbside households using third-party service providers under contract to and overseen by the Region. Residents are provided with Peel-owned carts for their organics, recycling and garbage. Collection is performed on a four-days a week schedule that includes the following services:

- Bi-weekly collection of blue box and garbage (including bulky items)
- Weekly collection of green bin
- Seasonal yard waste collection from March to December
- Battery collection twice a year
- Waste exemption periods with no set out limits 3 times a year

Multi-Residential Waste Collections: Waste collection services are provided to multi-residential households using third-party service providers under contract to and overseen by the Region. Garbage is collected from multi-residential buildings twice a week and recycling is collected once a week. Some buildings receive twice-a-week pickup for recycling due to storage space restrictions. Diversion at multi-residential buildings is tracked and buildings are issued quarterly report cards, outlining the amount of garbage and recycling collected by Peel and indicating their performance relative to similar buildings.

A multi-residential waste diversion working group made up of building owners and property managers and coordinated by Regional staff has been established to focus on resource recovery in multi-residential buildings. Textiles are collected through third-party drop-off bins at various multi-residential buildings across Peel. Some buildings have battery collection year-round through third-party collection receptacles located within the buildings.

Business Improvement Areas and Other Services: Peel also provides service to small businesses in Business Improvement Areas (BIAs) and along residential collection routes, to municipal and Regional facilities, and to schools, including:

- once-weekly or twice-weekly public space litter container collection
- twice-weekly collection of cart-based garbage from BIAs and other locations that receive cart-based garbage collection services
- weekly collection of cart-based recyclables in BIAs and schools in Brampton and Mississauga
- twice-weekly collection of garbage and weekly collection of recycling from Regional and Municipal facilities

Processing: Collected waste is taken to the Peel Integrated Waste Management Facility (PIWMF) on Torbram Road in Brampton or to one of Peel's third-party transfer stations. From there, it is either processed in-house, hauled to one of Peel's third-party processing contractors for processing or hauled to Peel's contracted landfill for disposal. The PIWMF is a Peel-owned facility that includes: a single-stream material recovery facility, an organics composting facility, and a waste transfer station. A third-party contractor operates the Material Recovery Facility (MRF) and markets the recovered material. In light of the upcoming transition of the blue box program

to full producer responsibility in 2024, Peel is in the process of selling the MRF equipment and leasing the MRF building. Peel is also moving towards third-party processing of green bin organic materials, moving away from in-house processing at its two composting facilities.

Community Recycling Centres (CRCs): Residents and eligible small businesses can drop off materials at one of the six CRCs that Peel owns and operates (two in Brampton, two in Caledon and two in Mississauga). These facilities complement and enhance curbside, multi-residential and BIA waste collection programs. Materials accepted at the CRCs include recyclables, garbage, yard waste, household hazardous waste, scrap metal, waste electronic and electrical equipment, shingles, drywall, wood, carpet, mixed plastic, clean fill and construction, renovation and demolition material. All six CRCs accept goods in working condition for reuse. Over 50% of materials received at CRCs are diverted from landfill. The CRCs located in Brampton and Mississauga operate seven days a week from 8:30 a.m. - 4:30 p.m. throughout the year and offer extended hours (8:30 a.m. - 8:00 p.m.) from September to October, with the exception of the Heart Lake CRC that offers extended hours from May to October. The Bolton CRC operates from Tuesday to Saturday from 8:30 a.m. - 4:30 p.m. and the Caledon CRC operates from Monday to Saturday from 8:30 a.m. to 4:30 p.m. All CRC's are closed on statutory holidays.

Promotion and Education: Peel utilizes strategic marketing and communications approaches and channels to create awareness among residents about what waste services are available in Peel and how to properly use them. Built upon the 3Rs (Reduce, Reuse, and Recycle), Peel delivers education and outreach programs including annual resident campaigns and comprehensive school programming for students that encourage active participation in our programs and

positive daily waste habits that contribute toward an environmentally sustainable community for life in Peel.

Advocacy: Waste Management advocates to all levels of government on the issues that benefit the environment and Peel residents. Waste Management works collaboratively with provincial and federal governments to guide the development of green policies and strategies. It also coordinates advocacy efforts with industry associations and other relevant stakeholder groups.

Customer Inquiries and Issues: Residents are able to contact Waste Management with inquiries and waste related issues through the call centre, website, and in-person at Peel's sites.

Maintenance: Waste Management maintains Peel's waste management infrastructure including state of good repair, asset management and landfill monitoring.

Roadmap to a Circular Economy: Peel's long-term waste management plan, the Roadmap to a Circular Economy in Peel, was adopted in 2017 and identifies 17 action items with 50 sub actions that will allow Peel to achieve its 75 percent waste diversion target by 2034.

Trends

Provincial and Federal government legislation, direction, commitments, and initiatives have major impacts on how Peel manages and funds its waste management system.

Significant and rapid transformation of waste management services is being driven by provincial legislation. A number of waste diversion programs have recently, or will soon be, transitioning to a producer responsibility framework. Ontario's iconic municipal blue box programs are transitioning between July 2023 and December 2025 with Peel's program transitioning on October 1, 2024. Waste Management hopes to continue to provide blue box collection services on behalf of producers during the transition period to ensure it is as seamless as possible for our residents. The province has also set food and organic waste diversion targets, and has signalled a potential organics disposal ban, resulting in the development and expansion of organics diversion programs across the province.

An increased focus on addressing climate change at the federal level has seen the introduction of a ban of problematic single-use plastics and a move towards a circular economy. Waste Management is actively exploring low carbon initiatives to reduce GHG emissions from waste such as using Anaerobic Digestion and low-carbon and zero emission waste collection vehicles.

Our waste reduction and resource recovery efforts are also influenced by the continual evolution of the waste stream and the residents we serve. As the cost of waste management services increases, Waste Management is investigating user-fee models to lessen tax increases and incentivize waste diversion.

At the onset of the COVID-19 pandemic, Waste Management saw significant increases in tonnages across all waste streams. Although, the rate of increase has begun to return to normal levels for most waste streams, we do not expect that tonnages will return to pre-pandemic levels, especially for green bin organics which is expected to remain high as long as people work from home. Peel had to change several waste management services during the pandemic including suspending bulky collection, exemption periods, enforcement, compost sales, and conservation days; pivoting to cashless transactions at Community Recycling Centres and offering web-based purchase of bag tags. Peel has resumed most waste related services but is looking to maintain some of the changes that resulted in higher levels of efficiency.

Performance Measures and Results

The Region of Peel is committed to delivering services effectively and efficiently. Peel's performance measures are used to help assess how well we are doing at achieving our goals and where we need to improve operations. The results also inform decision-making and strengthen accountability.

Waste Diversion Measures:

- **Diversion rate for Peel:** Calculated by dividing the annual tonnage waste diverted from landfill through at-home diversion activities, and Peel's waste diversion programs goods by the total annual tonnage managed. For 2021, 50% of Peel's residential waste was reused, recycled or composted.
- **Diversion rate at Community Recycling Centres:** Calculated by dividing the annual tonnage of reusable and recyclable goods by the total annual tonnage managed at the Community Recycling Centres. For 2021, 56% of material dropped off at Community Recycling Centres was reused or recycled.

Financial Stewardship Measures:

- **Net operating cost per household:** Calculated by dividing the annual net operating cost of the program by number of households served. For 2021, the cost was \$271 per household.

Net operating cost per tonne: Calculated by dividing the annual net operating cost of the program by the number of tonnes managed. For 2021, the cost was \$214 per tonne.

Customer Satisfaction Measures:

- **Percentage of Peel residents satisfied with curbside collection services:** Measured in a customer satisfaction survey. For 2022, 94% of Peel residents were satisfied with Peel's curbside collection service.

- **Percentage of Peel residents satisfied with Community Recycling Centre services:** Measured in a customer satisfaction survey. For 2022, 96% of Peel residents were satisfied with Peel's Community Recycling Centre services.

Organizational Capacity Measures:

Going forward, we will track the

- Percentage of staff who completed mandatory training and the percentage who completed voluntary training or participated in professional development activities, which will measure staff development, capabilities and expertise in waste management.
- Number of invitations for staff to present at conferences and participate on working groups, round tables, committees and boards, as a measure of Peel's leadership and expertise within the sector and by other levels of government.

Internal Business Process Measures to Ensure Efficiency:

- **Participation rate by diversion program:** Measured by curbside set out audits (pilots are under way to automate the process). For 2021, 93% of households participated in blue box program and 70% of households participated in the green bin program.
- **Contamination rate by diversion program:** Measured by processing audits. For 2021, 25% of material collected in the-in blue box program was not blue box program materials and 3% of the material collected in the green bin program was not green bin program material.
- **Percentage of recoverable resources in the garbage:** Measures the amount of blue box material and green bin material in the garbage. For 2021, 48% of the garbage could have been placed in the blue bin or green bin.

- **Percentage of households collected past 6 p.m. (late collections):** Calculated by dividing the number waste collection trucks collecting past 6 p.m. by the number of collection trucks in the fleet. In 2021, 5% of trucks collected past 6 p.m.
- **Percentage of households not collected on their designated collection day (missed collections):** Calculated by dividing the number of households that were not collected on their designated collection day by the total households in Peel. We will track this data for the 2024 Business Plan.
- **Annual number of Community Recycling Centre users:** Measured by the number of customers that visited the Community Recycling Centres. In 2021, 525,000 customers visited Peel's Community Recycling Centres.



Awards and Achievements

Awards

In 2021, Peel's Virtual Waste Workshops aimed at students in grades 2-8 and delivered by Ecosource received the Gold award under the Community Engagement and Outreach Program category of the 2021 Municipal Waste Association's Promotions and Education Awards. .

Achievements

Since the approval of Peel's long-term waste management strategy, "Roadmap to a Circular Economy in Peel", in 2017, eight out of 50 actions have been completed and 30 are ongoing or in progress.

Peel has strongly advocated for better management of problematic plastics. In 2021, the Director of Waste Management was selected to present the municipal and Peel-specific perspective on single-use plastics to the federal Standing Committee on Environment and Sustainable Development leading to the proposed federal standards for recycling and compostable labelling.

In 2021, in collaboration with the Toronto and York and on behalf of all Ontario municipalities, Peel led the municipal review and renegotiation of the Hazardous Special Products collection agreement with a Producer Responsibility Organization as part of the transition to a producer responsibility system for hazardous waste materials.

In 2022, Peel was selected to participate in the National Zero Waste Council's Circular Cities and Region's Initiative to develop a circular opportunities strategy for Peel.

The 2023-2026 Business Plan Outlook

Planning for the Future

To help plan for the future, the Waste Management program must examine how to reduce the amount of waste residents produce and how to manage the waste that is generated as effectively and efficiently as possible. As part of this, Waste Management will be looking to deliver on the following:

Blue Box Transition

The Blue Box program is the largest and most well-known waste diversion program in the province. In 2019, the province announced that the Blue Box program would transition to full producer financial and operational responsibility and in 2021 the province approved a Blue Box regulation that sets out the requirements for producers both during and after the transition. Transition of municipal Blue Box programs across the province will occur between July 1, 2023 and December 31, 2025. Peel's program will transition on October 1, 2024. During the transition period, producers are required to maintain the current blue box program. As of January 1, 2026, producers are then required to implement an expanded and standardized Blue Box program across Ontario that meets the regulatory requirements set by the province. Waste Management staff are engaged with external stakeholders such as Producer Responsibility Organizations and the Association of Municipalities of Ontario to better understand and prepare for the potential impacts of the new Blue Box program on the Region's integrated waste management system, including associated policies and programs. In preparation for transition, staff are also exploring the opportunity to provide recyclables collection service on behalf of producers in order to ensure a seamless transition for Peel residents.

Organics and Yard Waste Plan

In 2022 Regional Council approved a new long-term organics and yard waste processing strategy to enable Peel to expand its green bin organics program to include additional materials, process increased tonnage from population growth, contribute to Peel's 3Rs diversion target of 75 per cent by 2034, and meet provincial organics diversion targets. Staff is currently developing an implementation plan. Depending on the approach taken, there is strong potential to contribute to Peel's interim target of reducing GHG emissions by 45 per cent below 2010 levels by 2030 and future ambition of net zero emissions by 2050.

Mixed Waste Processing

The Roadmap identified Mixed Waste Processing as a way to divert recyclables and organics from garbage noting that a pilot project might resolve or mitigate risks prior to a full-scale implementation. Staff is exploring Mixed Waste Processing pilot options, which includes market sounding and requirements for siting such a facility in Peel. Staff will report back to Council with information on how a pilot fits into the Region's long-term waste management strategy and options for procurement in 2023.

Financial Plan

The Roadmap identified a need for significant new funding and revenue sources to implement all the actions required to achieve Peel's diversion target of 75% by 2034. The Waste Management program is developing a Financial Plan that considers a volume-based user fee to incentivize waste diversion and lessen tax increases. In consultation with residents, Waste Management is examining how Peel might pay for waste management services in the future and how community members play a role to build on our progress towards greater environmental responsibility and achieve a financially sustainable waste management future for residents and Peel.

New/Next Collection Contracts

The Waste Management program is in the midst of preparing the request for procurement documents for its next waste collection contracts. The work includes conducting pilot projects (including the AI Technology and Zero Emission Waste Collection Truck Pilots) and an industry sounding to identify both innovative and best practices that will help inform the required service levels, fuel/energy types, and technology that will ultimately give Peel and its' residents best and added value - economically and environmentally - under the future collection contracts.

Asset Management

In 2017, the Province of Ontario introduced Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure, which came into effect on January 1, 2018.

The regulation required all municipalities to prepare and publish the following: a Strategic Asset Management Policy ; enhanced Asset Management Plans for core infrastructure which includes roads and bridges; and enhanced Asset Management Plans for all remaining non-core assets. In March 2021 the provincial government amended the regulation to adjust the deadlines for asset management plans for core municipal infrastructure from July 1, 2021 to July 1, 2022 and for all other municipal infrastructure assets from July 1, 2023 to July 1, 2024.

Waste Management, through participation in the corporate Enterprise Asset Management (EAM) program, which includes implementing a new technological solution (Maximo) to manage assets more effectively, will increase its maturity in Asset Management to meet the new regulatory requirements.

The EAM Team supports Waste Management in the management/maintenance of its assets through the development of an enterprise asset management strategy, investment plans, practices and tools, including the implementation and maintenance of an integrated EAM system (Maximo), which allow Waste Management to make informed decisions with respect to asset maintenance practices to reduce risks and optimize performance to meet and maintain program services needs.

Service Delivery

Peel's population continues to grow and housing will become intensified which means that our waste management system needs to evolve to support this growth and also the intensification that will come with it. In order for Peel's Waste Management program to meet operational service levels in the coming years, the Roadmap to a Circular Economy in Peel was developed, setting the direction for the development and implementation of several waste management initiatives intended to improve the service provided to our customers, minimize waste generation and maximize resource recovery. Waste Management is in the process of updating the Waste Collection Design Standards Manual to better support intensification, including an aging population, and align with upcoming regulatory changes (i.e. Blue Box transition). The Waste Collection Design Standards Manual sets out features that must be incorporated into the design of a variety for developments in Peel that must be met in order to received Regional collection of waste.

Climate Change

The actions in the Roadmap to a Circular Economy consider the impacts that Waste Management operations may have on climate change. Staff is focused on reducing Green House Gas (GHG) emissions associated with Peel's Waste Management program and investing in climate friendly initiatives. Current curbside waste collection contracts include a requirement that waste collection vehicles use compressed natural gas as fuel, which generates lower GHG emissions than using diesel and some of Peel's organic waste materials are sent to third-party anaerobic digestion facilities for processing enabling the production of renewable fuels. Waste Management is also conducting an electric waste collection vehicle pilot, in partnership with one of its collection contractors, as an initial step towards developing a Green Fleet strategy.

People and Culture

The Waste Management program is actively preparing for the coming changes in our workplace demographics. With 10 per cent of our workforce being eligible to retire in the next five years, effective succession planning and talent management strategies are essential. These strategies will also be integral to fostering a culture of employee innovation and satisfaction going forward.

Finding Efficiencies

Continuous Improvement

The objective of Peel's Continuous Improvement Program is to optimize service delivery and maximize value for tax dollars spent. The completion of continuous improvement initiatives positively impacts client experience, employee engagement, cost savings and cost avoidance.

Highlights of the many projects and improvements completed include:

- Business Continuity and Emergency Contingency Plan – Waste management team has developed and implemented comprehensive contingency plans to deliver public services during emergencies, including labour disruptions and pandemics, with minimal cost or service disruptions.
- Enforcement Plan – Waste Management has implemented curbside and multi-residential enforcement programs to reduce contamination in the blue box and other waste collection programs, which will reduce collection and processing costs, result in cleaner recovered commodities and better prepare Peel for the transition of the blue box program.
- Cart Team – Waste Collection created a team of curbside cart customer service representatives that investigate cart damage complaints sent in by residents to determine the cause of the damage, which in many cases results in a charge back to the collection contractor, and to perform minor repairs. This service results in faster service for residents and a net savings to Peel.
- Material Recovery Facility Improvements - In 2018, Regional Council approved a capital upgrade to Peel's Material Recovery Facility's sorting equipment. In early 2020, the upgrade was completed and the facility now houses advanced recovery technology capable of recovering recyclable materials that meet the rigorous quality standards from industries utilizing post-consumer recyclable material. Some or all of that investment should be recovered through the sale of the equipment and lease of the building described elsewhere in this document.
- Heart Lake Community Recycling Centre (CRC) operations – In April 2022, the operation of the Heart Lake CRC was brought in-house, integrating it into Peel's CRC network. Operational efficiencies include the ability to reallocate staff among the six CRCs, utilization of the established haulages network, and the consolidation of processing and disposal contracts, all of which resulted in operational cost savings.

Transforming Our Business with Technology

Technology plays a critical role in the delivery of efficiencies in the Waste Management program. By updating existing technology systems and bringing new systems online, Waste Management will continue to improve service delivery and increase efficiencies, for internal business processes and for our residents as well.

Community Recycling Centre Cashless Payment System

As part of Waste Management's COVID-19 response, the Community Recycling Centres implemented a cashless payment system, only accepting debit and credit for payment of disposal fees, which sped up the processing time, reduced lineups and eliminated the time and cost for staff to manage cash.

Digital Roadmap

Waste Management is developing an integrated IT system that will link existing data sources and automate outputs. This includes piloting a dedicated IT team for Waste Management.

AI (Artificial Intelligence) Project

Peel will be partnering with IRIS and one of our waste collection contractors in a pilot that assesses the performance of Artificial Intelligence technology to determine if Peel's set-out study process can be automated. Set-out studies are used to determine program participation rates and resident understanding of our programs. This pilot will allow the data to be collected throughout Peel on a real-time basis, with less staff resources and time required. This information will lead to more accurate and timely reporting and can be used to develop and implement highly targeted communications campaigns and enforcement.

Virtual Waste Workshops

Waste Management partners with Ecosource to deliver waste education to schools. Students learn about the 3R's, proper sorting and other waste topics. As part of Waste Management's COVID-19 response, school workshops shifted to a virtual environment, offering real time and engaging sessions that encourage students to reduce waste at home and school.

Waste Reminders

As of 2019, residents can access a digital waste collection calendar and can also sign up to receive regular waste reminder notifications, choosing either email, text messages, phone calls or calendar notifications.

Online Waste Management Services

As of 2016, residents can access the following online waste management services: report cart problems and request cart changes (i.e., broken or damaged carts, lost or missing carts, change size of carts), report waste not picked up, order garbage bag tags, and send waste feedback or complaints. The ability for residents to track the status of their service requests through the resident portal is being investigated.

Zero Emission Waste Collection Truck Pilot

Peel is partnering with one of its waste collection contractors to pilot a fully electric waste collection vehicle to gain knowledge that will help it expand the use of electric waste collection vehicles as part of future waste collection contracts to contribute to Peel's climate change goals.

Technology Systems on Waste Collection Vehicles

Peel's waste collection contractors' fleets are equipped with the following technology systems, which allows Peel to monitor the delivery of services and take action to improve waste collection service delivery and program participation.

- Curbside collection vehicles are equipped with a fleet management solution that is used to monitor fleet and driver performance, and fuel consumption. The GPS displays in real-time the precise waste collection vehicle location, as well as historic vehicle activity, which helps to confirm service delivery and deficiencies, such as streets missed for collection.
- Multi-residential collection vehicles are equipped with GPS, RFID (Radio-Frequency Identification) tag reading equipment and on-board weigh scales that gathers detailed records of lift activities at multi-residential buildings. This information is used to provide service confirmation, track waste diversion, property information and Peel assets at multi-residential buildings.

Maintaining our Infrastructure

To ensure waste management service levels meet residents' needs, waste management infrastructure must be well maintained. This requires that we define and implement a reasonable state of good repair of waste management infrastructure.

Highlights of the major state of good repair projects for the 2023 Capital Budget include:

Replacement of Transtors at the Brampton Community Recycling

Centre: Transtors are modular containers that residents deposit material into at the Community Recycling Centres. Transtors are hydraulically actuated to transfer the material into transfer trailers for shipment to recycling or disposal facilities. The Transtor units have reached the end of their service life and require full replacement. The budget request for this project is \$3.5 million.

Repair and Replacement of Perimeter Fencing: Sections of the perimeter security fencing at the Battleford and Fewster Community Recycling Centres require repair or replacement. The budget request for this project is \$380,000.

Rehabilitation of the North Sheridan Landfill Site: On site water drainage issues are adversely affecting the perimeter landfill gas collection system. Improvements to site drainage and landfill gas infrastructure are required to increase system reliability and performance to control offsite landfill gas migration. The budget request for this project is \$1 million.

Proposed Operating Budget

This part of the Business Plan sets out the financial resources required to deliver the proposed 2023-2026 Business Plan. Information is provided by major expenditures and revenue. The costs to maintain existing service levels and operationalize prior decisions are identified in the base budget changes separately from proposed changes. The net cost for the service in 2022 was \$130.3 million and the proposed budget for 2023 is \$136.3 million

Net Expenditures: \$136.3 million (Total Expenditures: \$170.2 million)

| Description | Proposed 2023 Budget | Approved 2022 Budget | \$ Change Over 2022 | % Change Over 2022 |
|--|----------------------|----------------------|---------------------|--------------------|
| Operating Costs | 113,150 | 112,087 | 1,063 | 0.9% |
| Labour Costs | 26,583 | 25,727 | 856 | 3.3% |
| Reserve Contributions | 27,635 | 27,635 | | 0% |
| Debt Charges | - | - | - | - |
| Grant Payments | - | - | - | - |
| Facility, IT, HR and other support costs | 52,735 | 49,628 | 3,107 | 6.3 |
| Recoveries | (49,863) | (46,975) | (2,888) | 6.1% |
| Total Expenditures | 170,239 | 168,101 | 2,138 | 1.3% |
| Grants and Subsidies | (16,791) | (16,041) | (750) | 4.7% |
| Supplementary Taxes | - | - | - | - |
| Fees and Service Charges | (14,191) | (17,027) | 2,836 | (16.7)% |
| Transfer from Development Charges | - | - | - | - |
| Contributions from Reserves | (2,994) | (4,729) | 1,735 | (36.7)% |
| Total Revenues | (33,976) | (37,798) | 3,822 | (10.1)% |
| Total Net Expenditure | \$136,263 | \$130,304 | \$5,960 | 4.6% |

Note: May not add up due to rounding

2023 Operating Budget Pressures

| \$'000 | Total Expenditures | Total Revenue | Net Cost 2023 vs 2022 | |
|---|--------------------|----------------|--------------------------|-------------|
| 2022 Revised Cost of Service | 168,101 | 37,798 | 130,304 | % |
| Geography | (527) | (527) | - | |
| Cost of Living/Inflation Labour costs/Goods and services, etc. | 6,337 | 557 | 5,780 | |
| Base Subsidy/Recoveries Higher Extended Producer Responsibility funding | - | 750 | (750) | |
| Cost Mitigation Efficiencies identified from operational cost reviews | (187) | - | (187) | |
| Other Pressures¹ | | | | |
| • Processing and disposal of organics & blue box material (new contract) | (4,091) | (4,842) | 751 | |
| Base Budget Changes Subtotal | 1,532 | (4,062) | 5,619 | |
| Growth | - | - | - | |
| Service Level Demand² | | | | |
| • Collection and processing cost due to tonnage increase - growth | 366 | - | 366 | |
| • Pulling forward expected savings from future Blue Box transition | - | - | - | |
| Service Level Changes Subtotal | 366 | - | 366 | |
| New/Discontinued Services | | | | |
| • Zero Emission Waste Collection Vehicle Pilot Project | 240 | 240 | - | |
| New/(Discontinued) Services Subtotal | 240 | 240 | - | |
| Total 2023 Budget Change | 2,138 | (3,822) | 5,960 | |
| 2023 Proposed Budget | 170,239 | 33,976 | 136,263 | 4.6% |

Note: May not add up due to rounding

Operating budget pressure notes:

Other Pressures¹

- Peel will be entering into new contracts for Blue Box progressing and Organic and Yard Waste processing in 2023; the operating budget reflects current estimates.

Service Level Demand²

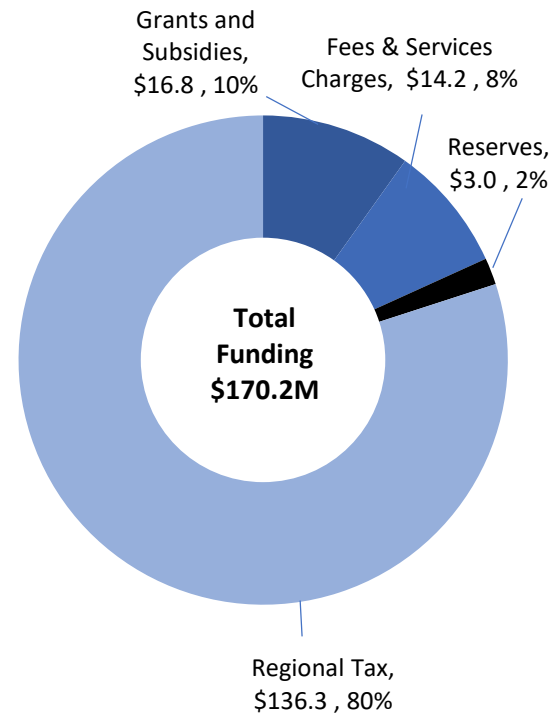
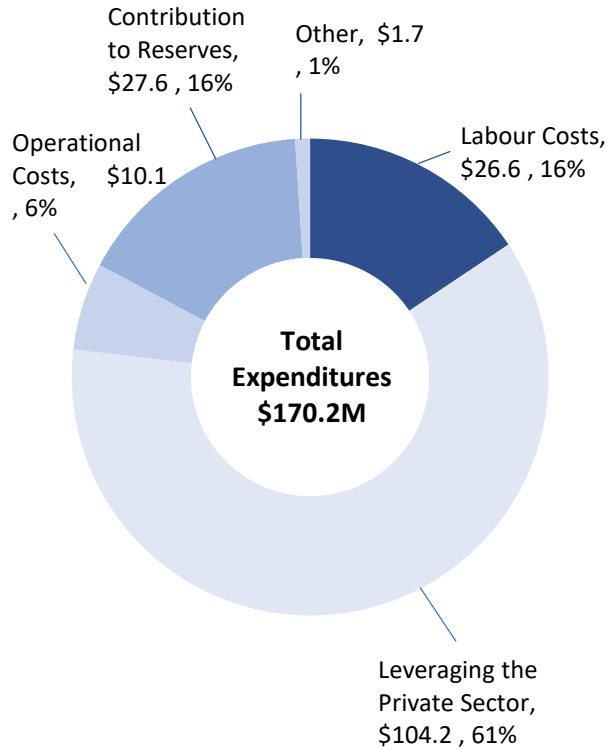
- 2023 Budget continues to utilize expected savings from future Blue Box transition drawing \$2,754 from working fund reserve to smooth out operating impact over 4-year period; same amount of reserve draw was used in the 2022 Budget.

Staffing Resources to Achieve Level of Service

| 2022 | 2023 | 2024 | 2025 | 2026 |
|-------|-------|-------|-------|-------|
| 235.9 | 236.3 | 241.7 | 244.0 | 246.2 |

Note: Staffing resources are regular positions (Full Time Equivalent, FTE)

2023 Total Expenditures & Funding Source (In \$M)



2023 Budget Risks

- Tonnage continues increasing due to population growth.
- Staff continue to assess permanent impacts of COVID-19 on tonnage and waste management service delivery.
- Blue Box Transition in 2024 will have significant impact on Waste Management. Staff continue to assess and plan for the transition.

2024 - 2026 Operating Forecast

| | Budget | | | Forecast | | | | | |
|--------------------------|----------|----------|----------|----------|----------|----------|-------|----------|----------|
| | 2022 | 2023 | | 2024 | | 2025 | | 2026 | |
| | \$'000 | \$'000 | % | \$'000 | % | \$'000 | % | \$'000 | % |
| Total Expenditure | 168,101 | 170,239 | 1.30% | 168,918 | (0.80%) | 175,215 | 3.70% | 177,075 | 1.10% |
| Total Revenue | (37,798) | (33,976) | (10.10%) | (28,495) | (16.10%) | (30,042) | 5.40% | (26,103) | (13.10%) |
| Net Expenditure | 130,304 | 136,263 | 4.60% | 140,423 | 3.10% | 145,173 | 3.40% | 150,972 | 4.00% |

Note: May not add up due to rounding

Proposed Capital Budget

Capital Budget: \$15.4 million (Ten Year Plan: \$380.9 million)

2023 Capital Budget Overview

The following table provides a summary of Waste Management’s planned capital project activity for 2023, including funding sources for both new capital project requests in 2023 and projects carried forward to 2023.

| Capital Plan By Funding Source | Carry-forward from Prior Years (WIP) (\$'000) | 2023 Capital Budget (\$'000) | Total Capital in 2023 (\$'000) |
|--------------------------------|---|------------------------------|--------------------------------|
| DC Growth | - | - | - |
| Externally Funded | 1,363 | - | 1,363 |
| Non-DC Internal | 51,071 | 15,360 | 66,431 |
| Total Expenditures | 52,434 | 15,360 | 67,794 |
| # of Projects | 67 | 5 | 72 |

Existing Capital Projects - \$52.4M

- The existing capital plan includes 67 active projects totaling \$52.4M. Funds are budgeted to maintain Region of Peel waste management infrastructure and equipment in a state of good repair as well as continue to develop infrastructure to increase Peel’s diversion rate.

2023 Capital Budget - \$15.4M

Key highlights:

- \$8.2M to maintain facilities and equipment in state of good repair, including replacement of Peel Curing Gore Covers, site improvements and weight scale system upgrade and replacement at our Community Recycling Centres (CRC)
- \$3.6M for purchase and replacement of Waste Collection Containers
- \$1.5M for for Caledon Landfill land acquisition and closure
- \$2.1M for environmental monitoring of Regional Landfill sites

See Appendix I for details.

2023 Financing Sources and Funding Status (\$'000)

| <u>Projects</u> | <u>Name</u> | <u>Description</u> | 2023 | | | | |
|-------------------------|--|---|----------------------|----------------------------|-------------------------------------|-------------------------|---------------------|
| | | | <i>Total Expense</i> | <i>Development Charges</i> | <i>Reserves & Reserve Funds</i> | <i>External Funding</i> | <i>Debt Funding</i> |
| 196350 | Caledon Landfill Land Acquisition and Closure Plan | To complete property and property rights acquisitions with the Town of Caledon and neighbouring landowners and to create a closure plan to close the inactive Caledon Landfill site | 1,500 | 0 | 1,500 | 0 | 0 |
| 236390 | Waste Facilities State of Good Repair Envelope (SOGRE) | Site improvement and maintenance at all Waste Management facilities, including replacement of Peel Curing Gore Covers for organic waste treatment | 6,661 | 0 | 6,661 | 0 | 0 |
| 236510 | Landfill Management Abatement | To address capital expenditures at landfill sites and waste operation's sites in Peel | 715 | 0 | 715 | 0 | 0 |
| 236580 | Landfill Monitoring and Remediation | Administration and studies related to environmental monitoring at Regional Landfill sites | 1,385 | 0 | 1,385 | 0 | 0 |
| 236630 | Waste Collection Containers | To purchase and replace garbage, blue, green and kitchen carts for auto collection for existing and new households | 3,599 | 0 | 3,599 | 0 | 0 |
| 236935 | Weight scale system upgrade / replacement | To upgrade/replace weight scale systems at Community Recycling Centres to gather and track information | 1,500 | 0 | 1,500 | 0 | 0 |
| Waste Management | | | 15,360 | 0 | 15,360 | 0 | 0 |
| Waste Management | | | 15,360 | 0 | 15,360 | 0 | 0 |

2023 Budget Risks

- Material and labour contract cost increases due to inflation, COVID-19 protocols, and supply chain interruptions and/or shortages

Operating Impact of 2023 Capital Budget

- None

Proposed Capital Plan

2023 - 2032 10-Year Capital Plan - \$380.9M

By Project Classification:

| | | |
|---|--|--|
| State of Good Repair \$51.4M | DC Funded Growth \$0.0M | Non-DC Funded Growth & Other \$329.6M |
|---|--|--|

Key Highlights:

- \$195.0M for design and construction of Mixed Waste Processing Facility
- \$96.0M to purchase and replace Waste collection containers
- \$51.4M to maintain facilities and equipment in State of Good Repair
- \$38.6M for landfill site management and other

See Appendix II for details.

Service: Waste Management

Appendix II

2023 Ten Year Combined Capital Program (\$'000)

| | | | <u>2023</u> | <u>2024</u> | <u>2025</u> | <u>2026</u> | <u>2027</u> | <u>Yrs 6-10</u> | <u>Gross</u> |
|----------------|---|---|-------------|-------------|-------------|-------------|-------------|-----------------|--------------|
| Project | Name | Description | | | | | | | |
| 186360 | Mixed Waste Processing Facility | Design and Construction of facility for processing garbage material and recovering Reduce, Reuse and Recycle (3Rs) material from garbage going to landfill | 0 | 0 | 0 | 0 | 195,000 | 0 | 195,000 |
| 196350 | Caledon Landfill Land Acquisition and Closure Plan | To complete property and property rights acquisitions with the Town of Caledon and neighbouring landowners and to create a closure plan to close the inactive Caledon Landfill site | 1,500 | 0 | 0 | 0 | 0 | 0 | 1,500 |
| 236390 | Waste Facilities State of Good Repair Envelope (SOGR) | Site improvement and maintenance at all Waste Management facilities, including replacement of Peel Curing Gore Covers for organic waste treatment | 6,661 | 8,870 | 3,712 | 3,799 | 5,962 | 20,851 | 49,856 |
| 236510 | Landfill Management Abatement | To address capital expenditures at landfill sites and waste operation's sites in Peel | 715 | 810 | 480 | 450 | 450 | 2,250 | 5,155 |
| 236580 | Landfill Monitoring and Remediation | Administration and studies related to environmental monitoring at Regional Landfill sites | 1,385 | 1,419 | 1,455 | 1,491 | 1,528 | 8,234 | 15,511 |
| 236630 | Waste Collection Containers | To purchase and replace garbage, blue, green and kitchen carts for auto collection for existing and new households | 3,599 | 4,167 | 4,853 | 6,110 | 6,368 | 70,889 | 95,986 |

Service: Waste Management

Appendix II

2023 Ten Year Combined Capital Program (\$'000)

| | | | <u>2023</u> | <u>2024</u> | <u>2025</u> | <u>2026</u> | <u>2027</u> | <u>Yrs 6-10</u> | <u>Gross</u> |
|-------------------------|---|---|---------------|---------------|---------------|---------------|----------------|-----------------|----------------|
| <u>Project</u> | <u>Name</u> | <u>Description</u> | | | | | | | |
| 236935 | Weight scale system upgrade / replacement | To upgrade/replace weight scale systems at Community Recycling Centres to gather and track information | 1,500 | 0 | 0 | 0 | 0 | 0 | 1,500 |
| 246340 | Enhancement of Peel Curing Facility | Obtain approvals from Ministry of the Environment, Conservation and Parks (MOE) to enhance the site for processing composted material | 0 | 8,400 | 0 | 0 | 0 | 0 | 8,400 |
| 266380 | Britannia Sanitary Landfill Site (BSLS) Flare/Gas Plant Closure | Upgrade/work required to be completed on the flare due to future gas plant closure. Landfill gas will need to be managed by the flare, which will require alterations to the existing flare | 0 | 0 | 0 | 3,000 | 0 | 0 | 3,000 |
| 266581 | North Sheridan Leachate Collection System | Installation of a Leachate Collection system at the North Sheridan Landfill | 0 | 0 | 0 | 5,000 | 0 | 0 | 5,000 |
| Waste Management | | | 15,360 | 23,666 | 10,500 | 19,850 | 209,308 | 102,224 | 380,908 |

Budget Requests

This table presents the costs by Budget Request for proposed new initiatives. Each BR is numbered. Detailed descriptions of the budget requests can be found in the pages following the table.

| Proposed Initiative | Division | Budget Request # | FTEs Requested | Contract FTE Requested | Net Operating Impact \$ | Capital \$ |
|--|------------------|------------------|----------------|------------------------|-------------------------|------------|
| Zero Emission Waste Collection Vehicle Pilot Project | Waste Management | 08 | 0.0 | 0.0 | 0* | 0 |
| TOTAL | | | 0.0 | 0.0 | 0 | 0 |

*Pilot is funded through a draw of \$240,000 from the Tax Rate Stabilization Reserve

Budget Request #: 08

| Proposed Initiative | Department | Division | Service Area |
|--|--------------|------------------|------------------|
| Zero Emission Waste Collection Vehicle Pilot Project | Public Works | Waste Management | Waste Management |

Description of Budget Request

The purpose of the Zero Emission (ZE) Waste Collection Vehicle Pilot project is to test the operational and environmental performance of zero emission, electric waste collection trucks in comparison to the compressed natural gas vehicles currently being used. If the pilot is successful, ZE vehicles could be specified in Peel's next waste collection contract, which could contribute to the achievement of Peel's Greenhouse Gas (GHG) emission targets.

Required Annual Operating Investment

| Impacts | 2023 \$ | 2024 \$ | 2025 \$ | 2026 \$ |
|-------------------------------------|------------|------------|------------|------------|
| Gross Expenditures | 240,000 | - | - | (60,000) |
| Less: Internal and Capital Recovery | - | - | - | - |
| Total Expense | 240,000 | - | - | (60,000) |
| Reserves (Tax Rate Stabilization) | 240,000 | - | - | (60,000) |
| External Funding | - | - | - | - |
| Other Revenue | - | - | - | - |
| Total Revenue | 240,000 | - | - | (60,000) |
| Net Impact - Tax | - | - | - | - |
| Net Impact - Utility Rate | - | - | - | - |
| FTEs | - | - | - | - |
| New Contracts | - | - | - | - |

No Capital Investment Required

Why Staff Recommend this Initiative

The driver of this pilot is a reduction in greenhouse gas emissions. Electric waste collection vehicle manufacturers claim their vehicles emit little to zero GHG emissions, in comparison to the compressed natural gas vehicles currently used by Peel or diesel waste collection vehicles still used in the industry. This pilot will confirm these claims and gather operational, environmental and experiential data that can be included in Peel's next collection contract.

Details of Service Change

One of Peel's curbside collection contractors has proposed that they lease one or two zero emission, electric waste collection vehicles and the necessary charging infrastructure and that Peel would purchase data from the pilot at a fee of approximately \$10K to \$20K a month (depending on the number of vehicles tested, one or two) for the remainder of the current collection contract. Peel would compile and analyze this data and produce a final report on the pilot's findings.

Service Impact

Peel's current collection contractor will procure, operate and maintain the vehicles and will send data on a regular basis to Peel staff for analysis and to monitor progress on the pilot's outcomes. They will also ensure that resident waste collection service levels are not impacted by having Compressed natural gas (CNG) vehicles as backup in case the ZE vehicles are unable to collect from pilot areas sufficiently.