

Attachment 4:

Working Towards the TransformTO Vision: Net Zero Strategy Action Plan (2026 – 2030)



Land Acknowledgement

The City of Toronto acknowledges that we are on the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples. The City also acknowledges that Toronto is covered by Treaty 13 signed with the Mississaugas of the Credit, and the Williams Treaties signed with multiple Mississaugas and Chippewa bands.

Since its inception in 2017, Toronto's TransformTO climate strategy has been based primarily on a western scientific perspective. When the updated Net Zero Strategy (NZS) was adopted by City Council in 2021, City Council directed staff to work with Indigenous rights holders and urban Indigenous communities to share knowledge and learnings to inform climate action. The Net Zero Strategy Action Plan (2026-2030) explores the results of a jurisdictional scan of what relationships with Indigenous communities look like in other Canadian cities with specific focus on climate action work. The Plan introduces actions that the City will take, informed by what has been learned through this work and engagement with community.

The foundational part of the important work that the City needs to do is relationship building, which will lead to more meaningful engagement with Indigenous communities on climate and resilience. This work is still in an early stage but will be invaluable towards developing a more holistic understanding of Toronto's past and future climate and informing how we build a more climate resilient city for all residents. The City of Toronto recognizes the importance of working alongside Indigenous communities and is committed to strengthening the links between climate action and the City's Reconciliation Action Plan (RAP).

For more information, please visit the [TransformTO webpage](#) and the [Reconciliation Action Plan webpage](#).

African Ancestral Acknowledgement

The City of Toronto acknowledges all Treaty peoples – including those who came here as settlers – as migrants either in this generation or in generations past – and those of us who came here involuntarily, particularly those brought to these lands as a result of the Trans-Atlantic Slave Trade and Slavery. We pay tribute to those ancestors of African origin and descent.

Upon adoption of the TransformTO Net Zero Strategy in 2021, City Council directed staff to centre the voices of equity-deserving communities in the implementation of the Strategy. The City is committed to acting in support of and in solidarity with Black communities on climate and resilience. Indications of this commitment in the Net Zero Strategy Action Plan include a new Black-led climate action grants program; a continued desire to be guided by the perspectives, experience and expertise of the Climate Advisory Group; and an increased focus of climate engagement activities in areas of the city identified for investment, in equity deserving communities and on community priorities.

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Executive Summary

The City of Toronto is working toward the TransformTO vision of an equitable, healthy, prosperous and resilient city that meets the climate ambition of net zero greenhouse gas (GHG) emissions. Toronto City Council, in 2021, adopted the TransformTO Net Zero Strategy (NZS), a target of net zero GHG emissions community-wide by 2040, and the first climate action plan for 2022-2025. The NZS Action Plan for 2026-2030, outlined in this report, builds on the work done to date and retains the net zero GHG ambition but also recognizes that action is being carried forward under a different policy context and different economic and social conditions.

There are two essential types of climate action. *Mitigation*, or reducing GHG emissions to limit future climate change, is the focus of this report. The City's work on *adaptation*, which involves preparing for and responding to the impacts already being experienced and those to come, is closely integrated with this GHG-reduction work and is the focus of another report, *Progress and Priorities for Enhancing Toronto's Climate Resilience*.

Approach

The NZS Action Plan (2026-2030) ("the Plan") focuses on opportunities with greater impact on GHG reductions. It also includes enabling actions that engage and connect people and facilitate climate action. The Plan retains Toronto's original ambition but also takes care not to overburden already challenged members of the community. Each section of the Plan includes equity considerations and the co-benefits of climate action, such as resilience, health and economic prosperity. (See Section 2 of this report for the actions and considerations.)

The Plan is informed by engagement with the public, the City's Climate Advisory Group and other stakeholders and was co-developed with City Divisions, Agencies and Corporations. The Plan considers the importance of building relationships with local Indigenous communities to enable the City to better work alongside Indigenous climate partners, and the findings from a jurisdictional scan of Indigenous-municipal relationships in Canadian municipal climate planning. Evidence of Toronto's changing climate today and forecasts of increasingly extreme weather underscore the Plan's sense of urgency. The Plan is also informed by technical modelling which identified the GHG-reduction potential of planned climate actions as well as supportive federal and provincial policies. However, a shifting policy landscape at other levels of government is an ongoing source of uncertainty. (See Section 3 of this report for the background and context.)

The Plan advances critical steps to achieve net zero. The critical steps were introduced in the Net Zero Strategy and have been updated to reflect new information and advice. The Plan re-orientates the City toward more equitable climate action and applies an equity lens in all critical steps. Focusing on equity, advancing reconciliation and encouraging economic development are cross-cutting areas of focus throughout the Plan. All actions in the Plan contribute to advancing the critical steps and cross-cutting areas of focus.

Critical Steps to Net Zero	
	Accelerate a rapid and significant reduction in fossil (natural) gas use in buildings.
	Increase local and renewable energy to contribute to a resilient, carbon-free grid.
	Increase access to low carbon transportation options, including walking, biking, public transit and EVs.
	Address emissions from waste and wastewater.
	Demonstrate carbon accountability locally and globally by establishing a carbon budget.

Figure ES.1. The critical steps for success to meet net zero GHG emissions.

Key insights

In some areas, the City continues to demonstrate leadership among municipalities globally; in other areas, the City faces significant challenges. The greatest source of emissions in Toronto is fossil (natural) gas heating in residential buildings (26 per cent of Toronto's community-wide emissions) and gasoline used in passenger vehicles (22 per cent of community-wide emissions). Though there has been an overall downward trend in emissions over time by sector (buildings, transportation and waste) since 1990, the pace of emissions reduction will not meet the 2025 or 2030 community-wide targets.

Achieving Toronto's climate goals will require coordination with, and prioritization of, strong climate action policy leadership alongside adequate and stable long-term funding, policy and program supports from other levels of government. A shifting policy and program landscape in recent months at other levels of governments is an ongoing source of uncertainty for those looking to take action to reduce emissions and the businesses and supply chains that enable those actions. Since the beginning of 2025, there have been a number of global, national and provincial actions that directly impact the City's ability to achieve its net zero target, including its ability to establish a successful Building Emission Performance Standards (BEPS) program. These include the removal of a consumer carbon price, the non-renewal of federal funding to support home and building energy retrofits in the recent federal budget, and imposition of tariffs and legislative changes that make more challenging the ability of municipalities to implement climate-positive programs. Given these challenges, along with the affordability and economic competitiveness questions raised by Toronto City Council this past July ([2025.EX25.6](#)), City staff have not brought forward a bylaw for consideration and will continue to review opportunities to address these challenges before seeking Council direction on a bylaw.

The Toronto Green Standard for new buildings, and the TTC's Green Bus Program are among the largest community-wide GHG reductions the City is implementing, according to technical modelling. The modelling indicates that the City corporate actions with the largest anticipated GHG reductions are the TTC Green Bus Program and actions related to decarbonizing existing City buildings and fleets.

The current economic climate, combined with recent changes in policy at other levels of government, particularly the loss of consumer carbon pricing as indicated by the City's technical modelling, are creating challenges for climate action. Achieving the critical steps to net zero will require leadership and significant ongoing support from other levels of government, the private sector, non-governmental organizations and residents.

The Plan

The NZS Action Plan (2026-2030) sets out 17 actions, plus sub-actions, organized under the critical steps, and cross-cutting areas of focus (see Section 2 for detail):

Table ES.1. Overview of the NZS Action Plan (2026 – 2030)

Critical step: Accelerate a rapid and significant reduction in fossil (natural) gas use in buildings:
Action 1: Develop and implement support programs for voluntary action in residential buildings.
Action 2: Uphold Toronto Green Standard performance measures to achieve more resilient, low GHG new construction.
Action 3: Lead by example by moving City of Toronto buildings toward net zero.
Critical step: Increase local renewable energy to contribute to a resilient, carbon-free grid:
Action 4: Facilitate installation of new renewable energy capacity and storage and promote innovative practices.
Action 5: Develop a plan that identifies the feasible scale of low carbon thermal energy networks (district energy systems) located in the City and engage in understanding how partnerships with the academic and business communities may facilitate their implementation.
Critical step: Increase access to low carbon transportation options, including walking, biking, public transit and electric vehicles:
Action 6: Enhance the transit network by improving service levels, speed and reliability, and accessibility.

Action 7: Increase access to public electric vehicle (EV) charging while focusing on equitable access and support.
Action 8: Expand and maintain safe cycling and pedestrian infrastructure to enable affordable active transportation.
Action 9: Lead by example by moving City of Toronto vehicles, fuels and transportation infrastructure toward net zero.
Critical step: Address emissions from waste and wastewater:
Action 10: Move Toronto toward a circular economy.
Action 11: Increase the City's local Green Bin organic waste processing capacity and the amount of renewable natural gas (RNG) that can be generated.
Action 12: Lead by example by moving the City's water and wastewater services toward net zero.
Critical step: Demonstrate carbon accountability locally and globally by establishing a carbon budget:
Action 13: Implement the annual Carbon Budget and Emissions Budget processes.
Action 14: Identify and implement opportunities for further alignment between the City's procurement policies and the TransformTO Net Zero Strategy, including updating the Environmentally Responsible Procurement Policy and enhancing specifications, evaluation criteria and disposal of surplus goods.
Cross-cutting: Focus on equity, advance reconciliation and encourage economic development.
Action 15: Support Indigenous climate action and advance the Reconciliation Action Plan.
Action 16: Focus climate outreach and engagement on community priorities and equity.
Action 17: Continue to grow Toronto's green industries and train the workforce required to develop, deploy and maintain net zero technologies.

Opportunities and challenges identified through modelling

Supportive federal and provincial policies are critical for Toronto to meet its net zero ambitions. Technical modelling indicates that the federal light-duty zero-emission vehicle (ZEV) mandate (paused and undergoing review), and the federal consumer carbon price (removed in April 2025) were the highest-impact GHG-reduction policies

modelled for Toronto community-wide, though they are outside of the City's control. The recent loss of the consumer carbon price will significantly limit how quickly Toronto and other cities can reach net zero target, unless it is replaced by another effective price signal. Modelling also highlights the importance of a strong, federal ZEV mandate. (See Section 3.6 of this report for a summary of modelling results.)

Community-wide modelling to 2040 shows a significant gap between anticipated emissions after planned climate actions are implemented, and the net zero by 2040 target. This gap is substantially greater when only City-led actions are considered and federal and provincial policies are removed. The combination of the Business-as-Planned (BAP) scenario, which includes most quantifiable City-led actions covered in the NZS Action Plan (2026-2030), and the two additional quantifiable actions in the NZS Action Plan (2026-2030), anticipate a decline in emissions by approximately eight per cent (1.1 MtCO₂e) compared to the Business-as-Usual (BAU) scenario by 2040¹. As such, a significant gap remains between the BAP emissions trajectory and the level required to reach the City's 2040 net-zero target.

The highest-impact climate actions that the City is undertaking to reduce GHG emissions community-wide are the Toronto Green Standard (TGS) and TTC's Green Bus Program. Key emission sources community-wide, such as fossil (natural) gas in buildings, and gasoline and diesel fuel in vehicles, require an expansion of approaches.

Modelling indicates that if TGS V4 continues to be applied to all new multi-unit residential, commercial and institutional buildings, based on projections, it has the potential to achieve a cumulative emissions reduction over 2023-2040 of 5.5 MtCO₂e, a 62 per cent reduction compared to the emissions from the new buildings in the BAU scenario. Advancing higher performance could unlock an additional 1 MtCO₂e reduction towards the TransformTO goals. Following changes proposed by the Province through Bill 17, City staff understand the province is looking at potential legislative or other changes that could impact mandatory TGS requirements. However, there are no changes to the TGS at this time.

While community emissions remain challenging to address, the City has made policy changes, dedicated budget and driven operational commitments to make corporate emissions targets more achievable. City corporate modelling shows a smaller gap between anticipated emissions from corporate sources after planned climate actions are implemented, and the 2040 net zero target. The greatest corporate GHG-reducing actions modelled are the TTC Green Bus Program and actions related to decarbonizing existing City buildings and fleets.

Toronto needs to "remain on course" with corporate emission reductions. To continue the City's progress toward net zero corporate emissions, the Plan brings forward a new recommendation that will clarify the City Council's previously expressed intent to phase out the purchase and use of fossil fuel powered equipment in City-owned facilities.

¹ These projected emission reductions include reductions anticipated from the Toronto Green Standard version 4 and future versions. As noted in this report, City staff understand the province is looking at potential legislative or other changes that could impact mandatory TGS requirements. However, there are no changes to the TGS at this time.

The City has direct control over six per cent of GHG emissions community-wide in Toronto and has demonstrated strong leadership in its corporate investments and operations. Addressing the remaining 95 per cent of emissions, and achieving the TransformTO vision of an equitable, healthy, prosperous and resilient Toronto, will require collaborative approaches from the City, other orders of government, the private sector and individuals.

Accountability

Accountability mechanisms are a critical piece of ensuring plans and strategies are implemented effectively and stay on course toward key outcomes. The Accountability and Management Framework guiding and coordinating Net Zero Strategy implementation consists of internal and external oversight and advisory tables, and regular reports on implementation progress.

The Climate Change Goals and Governance By-law (Municipal Code Chapter 669) sets out requirements and reporting for the Carbon Budget through the City's annual Budget process, Emissions Budgets for City corporate emission sources from buildings and transportation, and Advanced Plans and Accountability Plans to meet Emissions Budgets. In addition, this report explores climate equity and introduces climate equity indicators to monitor progress over the long term. (See Section 4 of this report for detail on accountability and progress tracking.)

Financial impact

In 2021, when City Council endorsed the NZS, GHG-reduction target of net zero community-wide by 2040 and the Short-term Implementation Plan (2022-2025), the report's Financial Impact Statement, at the time, indicated that, "significant future budget impacts are expected from affected divisions as the implementation of existing programs continue or are accelerated and as new actions are initiated" (2021.IE26.16).

The Carbon Budget Prioritization process, adopted by Toronto City Council in 2023 as part of the Carbon Budget Accountability framework, was implemented in 2024 for the 2025 budget cycle. This process focuses on the costs of new and enhanced climate actions and integrates their prioritization into the City's budget planning.

Although funding is currently allocated to reducing the City's corporate emissions, existing capital plans across City's Divisions, Agencies and Corporations are insufficient to fully implement the current Plan and future Action Plans needed to achieve the 2040 net-zero target. Additional funding will be required, along with consideration of funding mechanisms and trade-offs. For example, prioritizing net-zero initiatives may necessitate reallocating funds from other purposes. Implementation costs for measures outlined in the Plan will be reflected in future budget requests from the responsible Divisions, Agencies, and Corporations. Staff will report back in 2028 with a more comprehensive financial analysis of reaching Toronto's net zero goals by 2040.

1. Introduction

This report presents the TransformTO Net Zero Strategy Action Plan for 2026-2030, “the Plan”. It focuses on actions that can be taken between 2026 and 2030, to reduce greenhouse gas (GHG) emissions in Toronto, with the ultimate goal of achieving net zero GHG emissions community-wide by 2040. Shaped by input from stakeholders and the public, the Plan re-orientes the City toward more equitable climate action and refocuses efforts to advance the critical steps to achieve the City’s net zero target. This Plan builds on the Short-term Implementation Plan (2022-2025) that was adopted by City Council in 2021 and subsequent annual progress reports since that time. It focuses on actions that can be initiated or completed within the 2026-2030 timeframe to get as close to the 65 per cent reduction by 2030 target as possible.

Toronto’s climate is changing and the effects of this are already being seen through more extreme heat and flooding ([Toronto’s Current and Future Climate](#), 2024, p. 11). People who live, work and visit the city, including Toronto’s most vulnerable groups, feel the effects of these changes in different ways. The City of Toronto’s Corporate Strategic Plan articulates a long-term vision where Torontonians live in an affordable, prosperous and resilient city. Addressing climate change requires all levels of government to work together, along with businesses and the public, to make the changes needed to reduce GHG emissions.

Given this plan will take us to 2030, it is important to acknowledge that interim community-wide goals were also endorsed in 2021 by Toronto City Council:

- 30 per cent reduction by 2020 (achieved);
- 45 per cent reduction by 2025;
- 65 per cent reduction by 2030; and
- net zero by 2040.

The City’s corporate lead-by-example GHG-reduction 2030 target, from 2008 levels, is:

- City of Toronto corporate greenhouse gas emissions are reduced by 65 per cent.

This report walks through important background, inputs and context that informed the Plan. These considerations include Toronto’s changing climate, progress on GHG emission reductions to date, the need for intergovernmental collaboration, Indigenous relationships, the benefits of climate action, public and stakeholder engagement, and technical modelling. The report also describes the accountability and management processes that are in place to track progress over time. Processes include advisory and oversight bodies, annual reporting, the Climate Change Goals and Governance bylaw (Municipal Code Chapter 669) and key performance indicators. As part of the City’s approach to centre equity in the Plan, new climate equity indicators are introduced.

2. The Plan

This Net Zero Strategy Action Plan (2026-2030) (“the Plan”) focuses on opportunities with greater impact on GHG reductions, and over which the City has control and authority to implement. This plan cannot require actions outside the City’s jurisdiction (i.e., provincial and federal governments), nor can it, for the most part, require actions for non-governmental organizations, private sector businesses and Toronto residents.

The City has developed a Plan that balances community-wide and City corporate “leading-by-example” actions through the continuation of the good work already being done to combat climate change and proposing new and enhanced actions to propel us forward. The City of Toronto has direct control over six per cent of GHG emissions in Toronto and has some influence over additional emissions that can be controlled by other levels of government, the private sector and individual residents. Collectively, the Plan aims to directly result in the reduction of GHGs in the City’s key emissions sectors (buildings and transportation) and indirectly promote GHG mitigation by playing a supporting/enabling role on the path to achieving net zero.

2.1 Overview of the Plan’s approach

The Plan is structured around Critical Steps to achieve net zero

The City has previously identified critical steps to achieving a net zero GHG future. These critical steps represent the largest opportunities to advance progress on aligning with the net zero path, both within the City corporation and across Toronto. They do not provide an exhaustive list of everything that can or should be done, rather they focus attention, effort and resources on those areas most central to achieving our climate goals.

Addressing GHG emissions from waste and wastewater is being introduced in the Plan as a new critical step for success in meeting net zero GHG emissions. The City’s 2023 Sector-Based Emissions Inventory identified that water and wastewater treatment, and waste, together account for 31 per cent of GHG emissions from the City’s corporate operations.

The Plan outlines what the City of Toronto will do to move forward on the critical steps. In some areas, the City continues to demonstrate leadership among municipalities globally; in other areas the City faces significant challenges. Achieving the critical steps to net zero will require leadership and significant ongoing support from other levels of government, the private sector, non-governmental organizations and residents.

Critical Steps to Net Zero	
	Accelerate a rapid and significant reduction in fossil (natural) gas use in buildings.
	Increase local and renewable energy to contribute to a resilient, carbon-free grid.
	Increase access to low carbon transportation options, including walking, biking, public transit and EVs.
	Address emissions from waste and wastewater.
	Demonstrate carbon accountability locally and globally by establishing a carbon budget.

Figure 2.1.1. The critical steps for success to meet net zero GHG emissions.

1. Accelerate a rapid and significant reduction in fossil (natural) gas use in buildings:

Fossil (natural) gas used in buildings to heat space and water is the single greatest source of GHG in Toronto community-wide. Reducing the use of fossil fuels, including fossil (natural) gas in buildings, is a critical step and without it Toronto will not meet its GHG-reduction targets. Rapidly and significantly reducing fossil (natural) gas use in buildings will take active participation from other levels of government, the private sector and building owners and residents.

2. Increase local renewable energy to contribute to a resilient, carbon-free grid:

Alongside efficient buildings, having a sufficient and resilient supply of affordable, zero-carbon energy is critical to Toronto's net zero success. The GHG-reduction benefits of electrifying buildings and transportation will be realized only if the source of energy transitions from fossil fuels, such as fossil (natural) gas, gasoline and diesel fuel, to zero-GHG electricity generation sources. Toronto will achieve net zero only with a carbon free electricity grid, which will require the provincial government's planning and cooperation. However, GHG emissions generated from Ontario's electricity sources are currently rising as the Province increases reliance on fossil (natural) gas for electricity generation. The City continues to advocate to the Province for cleaner electricity and increased energy conservation, and is participating in the 2024 regional electricity planning processes which covers the years 2023 to 2042. The City can also play a role in increasing local distributed renewable energy generation.

3. Increase access to low carbon transportation, including walking, biking, public transit and electric vehicles (EVs):

Increasing access to low carbon transportation, including walking, cycling, public transit and EVs is critical to reducing emissions from transportation, Toronto's second-largest GHG emissions sector. Safe, affordable, convenient and reliable infrastructure and services to encourage increased cycling, walking and transit improve affordability and access to mobility, while improving air quality and health. Improvements in transit service, transit priority and multi-modal infrastructure, as outlined in this Plan, connect with and support other City priorities including the City's Vision Zero Road Safety Plan and Congestion Management Plan. Transitioning vehicles from fossil fuels to electricity generated from clean sources is critical to reaching Toronto's GHG targets and will require leadership from other levels of government.

4. Address emissions from waste and wastewater:

Addressing GHG emissions from waste and wastewater is being introduced in this Plan as a new critical step for success in meeting net zero GHG. Waste continues to be the third largest source of community-wide emissions, according to the City's 2023 Sector-Based Emissions Inventory. In terms of corporate emissions, the Inventory identified that water and wastewater treatment, and waste, together accounted for 31 per cent of GHG emissions from the City's corporate operations—mostly coming from wastewater treatment activities. In the Inventory, the category of emissions from water and wastewater processing activities accounted for 27 per cent of the City's corporate emissions.

The majority of GHG emissions from wastewater treatment are "process emissions" released during biological treatment rather than by fossil fuel combustion. These process emissions, methane (CH₄) and nitrous oxide (N₂O), have global warming potentials 28 and 265 times greater than carbon dioxide (CO₂), respectively, highlighting the importance of controlling the treatment environment to reduce these emissions to the extent possible.

5. Demonstrate carbon accountability locally and globally by establishing a carbon budget:

Carbon accountability processes are critical for guiding and tracking progress toward GHG targets. The City has established a Carbon Budget process that is being implemented annually. The Carbon Budget process is a means for identifying and prioritizing impactful GHG reduction actions (projects, programs, policies) in the City's annual budget and commenced with the 2025 Budget process. In 2023, City Council adopted the Carbon Accountability governance system that included, among other elements, a new Climate Change Goals and Governance chapter for the Municipal Code setting out a Carbon Budget process to identify and prioritize impactful GHG reduction actions in the City's annual budget, alongside five-year emission budgets, with required planning and reporting processes.

As required by the Climate Change Goals and Governance By-law (Municipal Code Chapter 669), for the first time Divisions and Agencies responsible for the City's

buildings and transportation developed Advanced Plans to identify how these emission budgets will be met over 2026-2030, and corresponding Accountability Plans.

In the big picture, focusing productive and collaborative attention on these five critical steps is necessary if Toronto is to meet its GHG-reduction targets.

High-impact actions to reduce GHG emissions

The Plan focuses on opportunities with greater impact on GHG reduction, so that limited resources can be focused on material reductions. The Plan also includes actions that enable or support climate progress. The actions were prioritized for inclusion based on three criteria:

1. Magnitude of GHG-reduction impact. Actions that lead to the most substantial reduction in GHGs were prioritized. This criterion was informed by technical modelling using the Local Emissions for Net Zero (LENZ) modelling suite, based on carbon dioxide equivalents (CO₂e).
2. Scale and scope of envisioned implementation. Prioritized actions maximize impact through scalability across various neighbourhoods, sectors and contexts, and they have long-term endurance, enforceability and policy integration.
3. Other benefits. Prioritized actions are cost-effective; ensure benefits are equitably distributed; address disparities and vulnerabilities; improve affordability, resilience, health or safety; or support other City priorities.

There are 17 actions in the plan and they are divided up into the most emitting sectors.

Cross-cutting: Focus on equity, advance reconciliation and encourage economic development

The Plan also outlines cross-cutting activities that the City will take, which apply to many critical steps. With this Plan, the City demonstrates that actions have positive equity outcomes when barriers and challenges that communities face in climate action are addressed. This includes making City climate-related engagement, programs and policies more inclusive, and also being more deliberate in understanding and aligning with the priorities and needs of Black, Indigenous and equity-deserving communities. Not all the actions address or improve equity and that is noted in the information below. Action to encourage economic development across all sectors is also included in the plan, as workforce development in green industries can increase opportunities for all groups.

For a discussion of the City's relationships with Indigenous communities, please see section 3.4.

The actions included in this Plan were developed with an equity lens, and equity considerations are noted throughout the Plan. For the first time, a set of climate equity indicators is being introduced to track progress over time. For a discussion of climate equity and the climate equity indicators please see section 4.3.

Approach to City of Toronto corporate actions

The Plan includes actions to address GHG emissions from both community-wide sources and City of Toronto corporate sources. Emissions from City of Toronto facilities, vehicles and operations, which are under the City's direct control, make up six percent

of the community-wide GHG emissions. The Plan includes corporate lead-by-example actions that address emissions from the City itself.

The majority of corporate lead-by-example actions noted in this plan were developed through a new process identified in the Climate Change Goals and Governance by-law (Municipal Code Chapter 669). For the first time Divisions and Agencies responsible for the City's buildings and transportation (vehicle fleets) developed corporate Advanced Plans, and corresponding Accountability Plans, to identify how GHG emission budgets for corporate buildings and transportation will be met over 2026-2030.

The majority of the corporate actions identified in this Plan come from the corporate Advanced Plans. Additionally, this Plan includes some corporate lead-by-example actions that do not relate to buildings or transportation and therefore were not included in the corporate Advanced Plans. For instance, the Plan includes actions to address wastewater treatment process emissions that are not related to the burning of fossil fuels and are outside the scope of the corporate Advanced Plans.

2.2 Critical Step: Buildings

Buildings

Critical Step: Accelerate a rapid and significant reduction in fossil (natural) gas use in buildings.

The climate actions in this section:



- Support programs and resources that give equity-deserving groups the opportunity to access affordable, healthy and safe housing.
- Improve the affordability and accessibility of home energy retrofits for those facing financial barriers.
- Ensure that information, resources and benefits of net zero buildings (energy efficiency, cost savings, improved living conditions) are accessible to everyone including owners and renters.

Co-benefits:



- Reduce barriers, including for people who currently lack cooling, to efficient heat pumps that heat in winter and cool in summer.
- Ensure that redevelopments include affordable housing units that are designed to be climate resilient, affordable and accessible to vulnerable groups.



- Increase energy efficient heating and cooling and comfort with the transition to electric heat pumps.
- Contribute to the growth of the low-carbon heating, ventilation and cooling sector, and the potential for local job development.



- Improve environmental conditions, air quality and comfort by promoting measures such as improved insulation, air sealing, more efficient heating and cooling.
- Reduce barriers to cooling during extreme heat.

Overview of high-impact GHG-reduction activities:

Rapidly reducing fossil (natural) gas use in buildings is the most important step for achieving net zero emissions in Toronto, because this is the single greatest source of GHG pollution community-wide.

This Plan outlines on the following pages the new and enhanced activities planned for 2026-2030 to address this source. Some of the key GHG-reduction policies and programs (actions) for the buildings sector are:

Develop and implement support programs for voluntary emissions reductions

actions in all buildings: The City will enable voluntary action across all types of buildings by developing new and enhancing existing support resources and programs. The objective will be to encourage owners to plan for and implement retrofit measures to reduce energy consumption and emissions from their buildings. A key retrofit measure is fuel switching to an electric heat pump, a technology that provides both winter heating and summer cooling, which can play a critical role in increasing occupant comfort and resilience particularly during extreme heat days for vulnerable populations who do not currently have access to cooling in their homes.

Uphold Toronto Green Standard (TGS) performance measures: The Toronto Green Standard is Toronto's sustainable design and performance requirements for new private and city-owned developments community-wide since 2010. TGS Version 4 came into effect May 1, 2022 for new planning applications. The Standard consists of tiers of performance with Tier 1 being mandatory and applied through the planning approval process. Financial incentives are offered through the Development Charge Refund Program for eligible and verified Tier 2 or higher performance, low emissions projects. The TGS includes mandatory and voluntary energy and emissions targets that have been instrumental in reducing GHG emissions from new construction by an estimated 972,000 tonnes CO₂e since 2010. Success of the TGS lies in its mandatory and voluntary stretch targets that create market readiness and ensure buildings are designed to use less energy and use low carbon fuel sources such ground source and air source heat pumps.

Lead by example by moving City of Toronto buildings toward net zero: Reducing emissions from the City's own facilities, vehicles and operations is important because it is an area where the City has authority and control. While City of Toronto corporate emissions are six percent of community-wide emissions, addressing these sources is the City's responsibility, and it is an opportunity for the City to lead by example. More than 40 City-owned new buildings including community recreation centres, libraries and childcare centres have been designed or built to net zero emissions. Housing Now and Toronto Community Housing Corporation (TCHC) projects are also built to high performance, low emissions standards following the TGS.

Technical modelling, described in section 3.6 of this report, indicates that addressing GHG emissions from the City's own buildings is one of the highest-impact actions the City is planning to take to reduce the City's corporate emissions. Actions identified in Corporate Real Estate Management's (CREM's) Net Zero Carbon Plan support reducing emissions from corporate buildings through a switch from fossil (natural) gas to renewable natural gas, major retrofits, additional renewable energy sources, training on building operations and demand reduction solutions. Similarly, TCHC is in the process of undertaking actions necessary to contribute to the City's net zero goal.

The Carbon Budget process, detailed in the Climate Change Goals and Governance By-law (Municipal Code Chapter 669), indicates that the City shall set an emissions

budget (targeted total amount of GHG emissions for a specified set of sources over a specified period of time) for the City's corporate emission sources from buildings and from transportation. The City has previously set emission budgets for corporate emission sources from buildings and from transportation for 2026-2030 (report [2024.IE18.8](#)). Chapter 669 also indicates that the City shall publish Advanced Plans that describe what GHG-reduction activities the City will take to meet those emission targets. As required by the bylaw, for the first time, the City has produced Advanced Plans describing what activities the City will take to meet the 2026-2030 emissions budget for corporate sources of emission from buildings.

As described in the Advanced Plans for corporate buildings, CREM, TCHC and the TTC have identified priority actions to reduce emissions while staying within the five-year emissions budget of 935,641 t CO₂e. Key initiatives include: constructing all new City-owned buildings to TGS requirements; initiating large-scale fuel-switching projects to upgrade existing City facilities with high-efficiency electric heat pumps or other low-carbon systems; integrating on-site renewable energy sources (e.g. solar photovoltaic, PV) where feasible; and investing in workforce development and operational improvements to drive ongoing efficiency gains across all corporate building portfolios. The Advanced Plan includes TCHC ramping up its building retrofit program, targeting more than ten per cent of the portfolio per year to meet City targets. This requires moving much faster than historical rates (currently one to two per cent per year) and undertaking comprehensive energy upgrades in multiple buildings simultaneously. TCHC plans on focusing on a long list of high-priority buildings for retrofit investment before 2027.

As directed by City Council ([2024.IE12.3](#), Decision Part 3), and to better meet Emissions Budgets for the City's corporate emission sources from buildings, a recommended new action (Action 13.1) is being brought forward to City Council with this Plan. The action clarifies the City's intent (articulated in a previous Council direction, [2021.IE26.16](#), Decision Part 1f) to gradually phase out the procurement (Phase 1) and operation (Phase 2) of fossil-fueled equipment in facilities by 2040.

Other considerations:

Achieving Toronto's climate goals will require coordination with, and prioritization of, strong climate action policy leadership alongside adequate and stable long-term funding, policy and program supports from other levels of government. A shifting policy and program landscape in recent months at other levels of governments is an ongoing source of uncertainty for those looking to take action to reduce emissions and the businesses and supply chains that enable those actions. Since the beginning of 2025, there have been a number of global, national and provincial actions that directly impact the City's ability to achieve its net zero target, including its ability to establish a successful Building Emission Performance Standards (BEPS) program. These include the removal of a consumer carbon price, the non-renewal of federal funding to support home and building energy retrofits in the recent federal budget, and imposition of tariffs and legislative changes that make more challenging the ability of municipalities to implement climate-positive programs. Given these challenges, along with the affordability and economic competitiveness questions raised by Toronto City Council this past July ([2025.EX25.6](#)), City staff have not brought forward a bylaw for consideration and will continue to review opportunities to address these challenges before seeking Council direction on a bylaw.

Action 1: Develop and implement support programs for voluntary emissions reductions actions in all buildings.

Lead: Environment, Climate & Forestry

Support: N/A

Description: The City will develop new and enhance existing support resources and programs to enable voluntary action to reduce emissions from all building types. The programs and resources will focus on increasing education and awareness among building owners and tenants and focus on the realization of retrofit benefits (e.g., improved indoor/outdoor air quality, improved thermal resilience, etc.), particularly for equity-deserving or vulnerable communities.

Any program enhancements or new offerings will be based on recent building performance data and input from various sectors and the public, while ensuring alignment with other relevant City initiatives and policies.

Equity Considerations: New support programs or enhancements to existing programs will focus on increasing accessibility to building retrofit information particularly for equity-deserving communities. The objective will be to encourage owners to plan for and implement retrofit measures to reduce energy consumption and emissions from their buildings. A key retrofit measure is fuel switching to an electric heat pump, a technology that provides both winter heating and summer cooling, which can play a critical role in increasing occupant comfort and resilience particularly during extreme heat days for vulnerable populations who do not currently have access to cooling in their homes.

Energy or emissions reductions in buildings can also support other benefits such as improved indoor air quality for occupants and local job creation city-wide.

Action 1.1: Develop and implement a carbon awareness and engagement tool to support decarbonization of residential buildings.

Lead: Environment, Climate & Forestry

Support: N/A

Description: A free virtual home energy tool is being developed to help homeowners and tenants assess the net-zero readiness of their homes. By modeling energy consumption and carbon emissions data, the tool generates a personalized retrofit roadmap for each property. Homeowners receive tailored insights with practical, real-world actions to improve energy efficiency, explore fuel-switching opportunities, and take meaningful steps toward decarbonization.

Equity Considerations: Although this tool has been designed for online participation, options for non-online access will be developed to ensure that all homeowners can learn about the energy savings opportunities for their home.

Action 1.2: Provide additional residential supports through BetterHomesTO, to assist homeowners' transition to decarbonize their homes.

Lead: Environment, Climate & Forestry
Support: Toronto Hydro

Description: BetterHomesTO provides support to homeowners in making their homes more energy-efficient and climate-resilient. Enhancements and additional programs will be designed to accelerate large-scale adoption of low-carbon technologies such as heat pumps and rooftop solar photovoltaic (PV) by simplifying the process, providing tailored guidance for homeowners and providing targeted incentives for low-to-moderate income households and access to preferred financing options.

This support includes complementary programming by Toronto Hydro to help homeowners electrify their homes and businesses including: [personalized energy coaching](#); help accessing loans and incentives; a new online peak demand tool to avoid unnecessary service upgrades (login required); advice on electrical panel sizing; a Power Efficient Electrification Calculator; electricity connection cost estimates and process support; the [Load Capacity Map](#); the [Generation and Storage Capacity Lookup Tool](#); the [Heat Pump Calculator](#); [Heat Pump Assistance Program](#) for income-qualified customers; and access to the [Cleantech Service Network and Directory](#) to help homeowners find reliable contractors.

Equity Considerations: These programs are intended to provide homeowners with relevant and accurate information about their homes and equipment options available. Targeted supports for low-moderate income households will enable more Torontonians to access improved home comfort and resilience.

Action 1.3: Expand the Home Energy Loan Program (HELP) to more effectively reach equity-deserving groups, with a focus on moderate-income households and fixed-income seniors, by offering preferential and more accessible financing

Lead: Environment, Climate & Forestry
Support: N/A

Description: The expansion of the HELP program is intended to reach households that have historically been underrepresented and face barriers to participation. It will focus on lowering costs for residents who may not qualify for conventional financing, while also broadening eligibility to include improvements that could support seniors to

age in place, and health and resilience upgrades that enhance quality of life and long-term housing sustainability.

Equity Considerations: Expanding HELP to better serve equity deserving groups can draw attention to immediate repair needs, reduced utility costs, improved overall home comfort and greater accessibility to home energy retrofits for those facing financial barriers.

Action 2: Uphold Toronto Green Standard performance measures to achieve more resilient, low GHG new construction.

Lead: City Planning

Support: Environment, Climate & Forestry

Description: The TGS Version 4, in effect since 2022, includes mandatory and voluntary energy and emissions requirements for new buildings. These requirements encourage design to higher performance, resulting in buildings that are well insulated, more resilient to temperature extremes and less reliant on fossil (natural) gas for heating and cooling. If TGS V4 is applied to all new multi-unit residential, commercial and institutional buildings, based on projections, it has the potential to achieve a cumulative emissions reduction over 2023-2040 of 5.5 MtCO₂e. Advancing higher performance could unlock an additional 1 MtCO₂e reduction, contributing to the Transform TO goals.

Equity Considerations: TGS helps to ensure that buildings and homes are more affordable by lowering utility bills and requiring fewer retrofits in the future. The TGS has saved home and building owners an estimated \$407.6 million in utility cost savings since 2010.

Action 2.1: Enable more mid-rise building forms, including modular and mass timber mid-rise building construction.

Lead: City Planning

Support: Toronto Building, Engineering & Construction Services

Description: The Unlocking Mid-Rise Mechanics Study is currently being undertaken by City staff to determine how to enable more mid-rise housing forms, including traditional, modular and mass-timber construction methods. This review is being undertaken to better understand development feasibility and uptake of mid-rise residential building forms as well as to identify potential changes to City policies, standards and/or regulations that can reduce development costs, facilitate delivery of new housing, and enhance building efficiency and support active, grade-related retail activities to improve the overall viability of these forms of development. Based on

industry feedback and direction given to Staff, this Study particularly focuses on reviewing requirements for indoor and outdoor amenity space, bicycle parking and waste collection and how they may impact the feasibility of mid-rise housing forms. City staff are targeting a report to Council in Spring 2026.

Equity Considerations: N/A

Action 3: Lead by example by moving City of Toronto buildings toward net zero.

Lead: Environment, Climate & Forestry

Support: Corporate Real Estate Management, Toronto Community Housing Corporation

Description: The City will accelerate the transition of its own buildings to net zero by undertaking the activities outlined in the 2026-2030 Advanced Plans for buildings, as required by Municipal Code Chapter 669, Climate Change Goals and Governance.

Equity Considerations: The City is leading by example and demonstrating that the benefits of net zero buildings (energy efficiency, cost savings, improved living conditions) can be made accessible to everyone.

2.3 Critical Step: Energy

Energy

Critical Step: Increase local renewable energy to contribute to a resilient, carbon-free grid.

The climate actions in this section:



- N/A

Co-benefits:



- Move toward more reliable and adaptable clean energy power systems day-to-day, as well as during and after disruptions.
- Diversify forms of energy production and storage, making the system less vulnerable to disruptions.
- Promote energy storage (with solar electricity generation) that can help power critical systems in buildings and homes during blackouts to avoid situations where vulnerable communities such as seniors are left without power, water, cooling, etc.



- Enable larger emission reductions at a lower cost across a network of buildings rather than individual building systems.
- Produce long-term cost savings through lower energy bills, reduced reliance on fossil fuels, reduced maintenance costs.
- Introduce potential research and development opportunities.



- Can reduce energy-related air pollution and contribute to improved health by decarbonizing Toronto's energy supply.

Overview of high-impact GHG-reduction actions:

Moving cities to net zero GHG emissions means transitioning the energy we use in our daily lives from fossil fuels to clean electricity. Electrifying Toronto, including buildings and transportation, requires a sufficient supply of affordable, resilient, low-carbon electricity. Investments made by individuals, the municipal government, the local utility Toronto Hydro and the private sector to switch from fossil fuels to electricity will need to be complemented by provincial and federal government actions to support and maintain a clean and carbon-free provincial electricity grid.

The key energy actions planned over 2026-2030 focus on facilitating local development of renewable and zero-carbon energy sources, both big and small, as well as energy storage and innovative practices, to reduce the GHG emissions of energy used in Toronto.

Action 4: Facilitate installation of new renewable energy capacity and storage and promote innovative practices.

Lead: Environment, Climate & Forestry

Support: Toronto Hydro, Corporate Real Estate Management, CreateTO, Parks and Recreation, Toronto Building, City Planning

Description: In alignment with previous directions ([2024.PH15.4](#)) and ([2023.IE9.7](#)), this action will advance the integration of solar PV, battery storage, and other distributed energy solutions to support Toronto's net-zero goals while enhancing grid reliability. Between 2026 and 2030, the City will accelerate renewable energy deployment on its own sites and will continue to work with Toronto Hydro to accelerate the deployment of solar PV. The City will identify opportunities, address obstacles and pilot innovative practices and projects that reduce peak demand, improve resilience, and lower emissions.

Toronto Hydro is working to add additional customer supports to accelerate the deployment of solar PV, energy storage and other distribution energy resources and already provides: personalized energy coaching for homeowners; help accessing loans and incentives; support for businesses with Save on Energy Applications; virtual decarbonization audits for businesses; electricity data analysis and solar incentive selection calculations for businesses; a new online peak demand tool to avoid unnecessary service upgrades (login required); the Generation and Storage Capacity Lookup Tool; and access to the Cleantech Service Network and Directory to help customers find reliable contractors.

Toronto Hydro is also procuring up to 30 megawatts of demand response, including customer-owned Distributed Energy Resources, from 2026-2029 to reduce strain on the electricity grid.

Equity Considerations: N/A

Action 4.1: Deliver a distributed energy resources (DER) plan including facilitating battery storage deployment on City owned lands to support Toronto's net zero goal while maintaining grid reliability and energy affordability.

Lead: Environment, Climate & Forestry

Support: Toronto Hydro, Corporate Real Estate Management, Parks and Recreation, CreateTO, City Planning (and more depending on City-owned properties)

Description: Partner with Toronto Hydro to identify and enable utility-scale DERs including solar PV and battery energy storage on City-owned sites to reduce peak demand, relieve grid constraints, improve resilience through DER integration. Elements of the Plan will include:

- The City will continue to assist Toronto Hydro in deploying utility-scale energy storage systems on City-owned sites to enable additional renewable energy connections, alleviate grid-constraints and improve resilience.
- The City will facilitate transmission scale battery storage on City-owned sites in key growth areas, to alleviate grid constraints and support electrification, aligned with infrastructure and land use planning to accelerate implementation.
- The City will develop a DER implementation guide by 2026 for City owned buildings to integrate solutions like solar PV and battery storage.

Equity Considerations: N/A

Action 5: Develop a plan that identifies the feasible scale of low carbon thermal energy networks (district energy systems) located in the city and engage in understanding how partnerships with the academic and business communities may facilitate their implementation.

Lead: Environment, Climate & Forestry

Support: City Planning, CreateTO, Enwave, Toronto Water, Waterfront Toronto

Description: District energy systems can offer significant low carbon benefits as they work at neighbourhood- to precinct-wide scale providing efficient, centralized heating, cooling, and power generation. When paired with renewable sources, such as geothermal, wastewater and industrial waste heat and more, district energy systems will achieve higher efficiencies than individual building systems switch outs and have the potential to reduce overall energy demand.

The City will develop and report back on a Low Carbon Thermal Energy Network plan in 2026 which will include: an updated feasibility study which can spatially identify the best locations for thermal energy networks, an understanding of how emerging technologies may be deployed under differing conditions and where City

assets are involved, how to enable private proponents to undertake proposed technology solutions.

Equity Considerations: N/A

Action 5.1: Identify partnerships and opportunities where co-development of low carbon thermal energy network (district energy systems) can occur at large development precincts.

Lead: Environment, Climate & Forestry

Support: CreateTO, City Planning, Toronto Water, Waterfront Secretariat

Description: Scalability is a key component in sustainable urban development, supporting long-term environmental and economic resilience; however the City cannot work at scale without many other public and private sector partners.

Equity Considerations: N/A

Action 5.2: Explore and evaluate new and emerging large scale renewable energy technologies which demonstrate significant reduction of fossil fuel reliance.

Lead: Environment, Climate & Forestry

Support: City Planning, CreateTO, Toronto Water, Enwave, Waterfront Toronto, University & college partnerships

Description: The City continues to explore and understand diverse technical options available to advance the decarbonization of energy infrastructure. Renewable resources can be used for direct heating and cooling in district energy systems to help reduce reliance on fossil fuels and lower carbon emissions.

The City is actively leading and/or supporting research into several emerging low-carbon technologies, including but not limited to:

- Deep geothermal – by tapping into high-temperature heat several kilometres underground, this technology can provide 24/7 energy with minimal land use making it a key component in the transition to a resilient, low-carbon energy and thermal grid.
- Thermal Energy Storage – captures excess energy and stores it as heat or cold for later use.
- Waste heat recovery - from data centres and industrial process.
- Effluent wastewater heat recovery - large quantity of waste heat could be recovered, with the added environmental benefit of reducing waste heat to Lake Ontario and thus offsetting the associated Lake temperature increase.
- Lake-water source heat pumps – uses a lake's steady temperature to provide efficient heating and cooling for buildings.

Equity Considerations: N/A

Action 5.3: Advance acceptable projects under the Wastewater Energy Program by providing limited access to the City sewer system to use as a renewable thermal energy source.

Lead: Environment, Climate & Forestry

Support: Toronto Water

Description: The City will move forward with reviewing applications for Exhibition Place, Glendon College, Providence Healthcare, and Toronto Western Hospital Phase 2. If approved and once constructed, these campuses will be largely decarbonized, avoiding thousands of tonnes of GHG emissions per year. Any new applications will also be reviewed in accordance with the City's six-stage internal review and approval process.

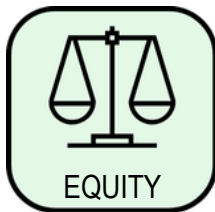
Equity Considerations: N/A

2.4 Critical Step: Transportation

Transportation

Critical Step: Increase access to low carbon transportation options, including walking, biking, public transit and electric vehicles.

The climate actions in this section:



- Support public transit that is convenient, reliable, accessible, affordable and safe.
- Ensure equity-deserving groups have access to public EV charging.
- Address the problem that people living close to roads are more likely to experience adverse health outcomes from traffic-related air pollution. Children, the elderly and people with certain pre-existing medical conditions are most vulnerable.

Co-benefits:



- Provide more transportation options, allowing communities to adapt to changing conditions and disruptions and reduce traffic congestion.



- Lead to improved transit options for equity-deserving residents and increases access to employment, education and services for those that rely on public transit.
- Allow people to get where they need to go safely and affordably.
- Save money on household transportation costs.



- Minimizing the harmful impacts of transportation systems, including road safety concerns, noise and air pollution.
- Reduces air pollution by reducing use of fossil fuels (gasoline and diesel primarily). Traffic is the largest source of air pollution in Toronto. People living close to roads are more likely to experience health impacts of air pollution such as breathing problems, heart disease, cancer and premature death.
- Encourage active transportation, such as walking and cycling, which can improve cardiovascular health and reduce the likelihood of premature mortality, diabetes and some cancers.

Overview of high-impact GHG-reduction actions:

Transportation is the second largest source of GHG emissions in Toronto. Increasing access to low-carbon transportation options including walking, biking, transit and zero-emission vehicles is a critical step to achieving a net zero GHG city. Better access to safe, affordable, zero-carbon transportation increases access to employment, education and services and has a profound, positive impact on quality of life for people across the city.

The following pages outline the new and enhanced transportation climate actions planned for 2026-2030. Some of the key GHG-reduction policies and programs are:

Enhance the transit network by improving service levels, speed and reliability, and accessibility: This Plan includes actions to enhance the transit network by improving service levels, speed and reliability, and accessibility. Transit is vital for equitable access to services, employment and education, and for quality of life in the city. Actions in this Plan include surface transit priority measures to increase speed and reliability, opening Line 5 Eglinton and Line 6 Finch West, and increasing accessibility. Frequent, fast and reliable transit service is also essential for managing traffic congestion and maintaining a resilient transportation system.

Increase access to public electric vehicle (EV) charging while focusing on equitable access and support: The City of Toronto, through the Toronto Parking Authority, is the largest municipally owned operator of EV chargers in Canada. The City's approach is to identify areas with current and growing demand, based on a technical projection of future needs, while considering multiple transportation emission reduction initiatives already underway. Collaboration with diverse stakeholders is at the core of this type of infrastructure development, to save time, money, and avoid unnecessary duplication of effort and stranded assets. The City is also supporting the vehicle-for-hire (VFH) sector's transition to net zero emissions by 2030, as required by City Council direction ([2021.IE26.16](#), decision Part 27), taking into account this sector's particular charging needs.

Expand and maintain safe cycling and pedestrian infrastructure to enable affordable active transportation: Safe, comfortable, connected infrastructure for cycling and walking enables people to get where they need to go affordably while getting the physical and mental health benefits of physical activity. As indicated in the Plan, the City will continue to roll out cycling routes, bicycle parking and Bike Share locations at or near TTC stations to ensure multi-modal transportation options (e.g., combining cycling and transit to get from one location to another). Technical modelling, summarized in Section 3.6 of this report, indicates the importance of a group of actions related to public and active transportation for reducing GHG emissions community-wide.

Lead by example by moving City of Toronto transportation toward net zero: City of Toronto corporate emissions account for six percent of community-wide emissions. However, addressing City corporate emission sources is important because the City has control over these sources, and it is the City's responsibility to lead by example.

Technical modelling, summarized in Section 3.6 of this report, identified the TTC Green Bus Program as the single biggest GHG-reducing action the City is taking to address its

own emissions. It also identified this program as an important GHG-reducer community-wide. The TTC Green Bus Program, which is part of the Sustainable City Fleets Plan, replaces TTC diesel buses with e-buses, dramatically reducing GHG and air pollutant emissions.

The modelling also identified other elements of the Sustainable City Fleets Plan as important for reducing the City's corporate GHG emissions, and emissions community-wide. The Sustainable City Fleets Plan is transitioning City Fleets to sustainable, resilient, net-zero operations by 2040, including a 45 per cent emissions reduction by 2025, and 65 per cent by 2030. The City also aims to transition 20 per cent of its Fleet to Zero Emission Vehicles (ZEV) by 2025, and 50 per cent by 2030. The scope of the Plan includes more than 10,000 vehicles and equipment managed and operated by Fleet Services Division, TTC, Toronto Police Service, Toronto Fire Services, Toronto Paramedic Services, Toronto Community Housing, Exhibition Place, Toronto Zoo, Toronto Parking Authority, and Toronto Public Library.

As noted in the Buildings section of this report, for the first time the City has produced Advanced Plans which detail City activities to meet the 2026-2030 emissions budget for corporate sources of emissions from transportation. As described in the Advanced Plans for corporate transportation, the City has set a trajectory toward 100 per cent net-zero fleet operations by 2040 and identified measures to reduce emissions in line with the 2026-2030 emissions budget of 829,719 tCO₂e. All City Divisions and Agencies are accelerating the replacement of City-owned fleets, with over 1,200 passenger vehicles set to be replaced with EVs by 2028. Specialized fleets (e.g., Police, Fire, Paramedic) and TTC fleets (e.g., buses, Wheel-Trans, and work cars) are also transitioning toward electrification. Additional actions supporting this transition include enforcing anti-idling measures, installing EV charging infrastructure with energy management systems, coordinating with the electricity grid by reducing demand at peak times, optimizing fleet routes through telematics, and using advanced planning tools to integrate TTC electric buses into service.

Action 6: Enhance the transit network by improving service levels, speed and reliability, and accessibility.

Lead: TTC

Support: Transportation Services

Description: The TTC, in partnership with the City of Toronto, will aim to create an expansive, fast, frequent and reliable transit network that connects people to healthcare, shopping, employment, education and social activities.

Equity Considerations: Reliable and accessible transit allows people of all ages and abilities, including members of equity deserving communities, to participate fully in civic life and access essential services, education, and employment.

Action 6.1: Improve the speed and reliability of surface transit by implementing transit priority measures between 2024 and 2028 including:

- regulatory transit priority measures at up to 10 locations per year;
- transit signal priority at up to 50 locations per year;
- up 12 queue jump lanes;
- transit priority measures as part of the Surface Transit Network Plan (RapidTO) projects.

Lead: TTC

Support: Transportation Services

Description: Speed and reliability of service will be improved as part of TTC and City of Toronto projects by implementing transit priority measures, in alignment with the 2024-2028 5-Year Service and Customer Experience Action Plan.

As part of the Surface Transit Network Plan (RapidTO), transit priority measures will be implemented as part of the Jane Street, Finch Avenue East, Dufferin Street, Lawrence Avenue East, and Steeles Avenue West projects.

Equity Considerations: Supports more efficient and reliable transit service, benefitting all people who depend on affordable and timely transportation.

Action 6.2: Enhance the transit network between 2024 and 2028 by:

- increasing service to address demand;
- implementing new services to address changes in travel patterns;
- opening Line 5 Eglinton and Line 6 Finch West and making approved network changes; and restoring service levels on routes and corridors to meet policy and Service Standard requirements and expanding and enhancing service levels beyond Service Standard requirements.

Lead: TTC

Support: N/A

Description: The transit network will be enhanced in alignment with the 2024-2028 5-Year Service and Customer Experience Action Plan, and through the annual service planning process.

Enhancements to the transit network beyond 2028 will be considered in future 5-Year Service Plans.

Equity Considerations: Supports improved access to reliable, resilient, and safe transit for those who rely on transit to access employment, education, and other services.

Action 6.3: Continue to make transit service more accessible by:

- making up to 150 stops accessible per year by 2028; and
- finalizing construction of the Easier Access Program to make all subway stations accessible.

Lead: TTC

Support: Transportation Services

Description: To remove barriers to sustainable transportation, transit accessibility improvements continue, in alignment with the 2024-2028 5-Year Accessibility Plan.

Equity Considerations: Ensures those with accessibility challenges (people with disabilities, seniors, people with strollers or very young children, and others with mobility challenges) can travel independently and equitably across the city.

Action 6.4: Develop tools to assess transportation emissions of greenhouse gases and air pollutants at a city-wide plan level.

Lead: Transportation Services

Support: Environment, Climate & Forestry, City Planning

Description: The City will develop a framework to address and measure impacts to transportation-related greenhouse gases based on key program delivery. Plans to investigate will be the RapidTO: Surface Network Transit Plan and Major City-wide Cycling Network as part of the Cycling Network Plan. This will help to determine how rolling out of these measures contribute to achieving net zero targets.

Equity Considerations: N/A

Action 7: Increase access to public electric vehicle charging while focusing on equitable access and support.

Lead: Environment, Climate & Forestry

Support: Toronto Parking Authority, Toronto Hydro, Municipal Licensing & Standards, Corporate Real Estate Management, Transportation Services, TTC, The Atmospheric Fund, People & Equity, Fleet Services

Description: The three-year city-wide EV charging installation and funding strategy will be presented to City Council in Q1 of 2026, to support TransformTO's goal of 30 per cent EV ownership of registered personal vehicles by 2030.

Equity Considerations: Ensures all communities can participate in the low-carbon transition and benefit from cleaner air and less vehicle noise.

Action 7.1: Install electric vehicle chargers for public use at City-owned buildings and properties.

Lead: Environment, Climate & Forestry

Support: Toronto Parking Authority, TTC, Toronto Hydro, Transportation Services, Fleet Services, Corporate Real Estate Management, Toronto Public Library

Description: Continue to expand the number of EV chargers for public use at Green P parking lots, on-street parking spaces, libraries, parks, community centres, the Toronto Zoo, and other City of Toronto-owned buildings and properties.

Equity Considerations: Consideration will be given to charging availability in Neighbourhood Improvement Areas to improve the equitability of access to public charging.

Action 7.2: Support the vehicle-for-hire (VFH) sector in achieving net zero GHG emissions by 2030.

Lead: Environment, Climate & Forestry

Support: Toronto Parking Authority, Toronto Hydro, Municipal Licensing & Standards, Corporate Real Estate Management, Transportation Services, TTC, The Atmospheric Fund, People & Equity

Description: City Council has indicated that the vehicle-for-hire (VFH) sector will achieve net zero greenhouse gas emissions by 2030 (2021.IE26.16). To support this transition, the City and partners will:

By the end of 2026:

- Establish a support and education program for VFH drivers;

By the end of 2027:

- Identify EV charging needs and provide equitable solutions;
- Identify and prototype key pilot projects;
- Create a green rideshare accreditation program for corporate and government travel; and
- Secure key industry partnerships and agreements;

By the end of 2029:

- Research and implement expanded financial options for EV purchases.

Equity Considerations: This work will support lower-income individuals and members of equity-seeking groups who are part of the VFH industry in complying with net zero requirements.

The upfront cost premium of a zero emissions vehicle (ZEV) when compared to an internal combustion engine (ICE) equivalent may act as a barrier to lower income and equity-deserving groups in the VFH industry. The location and availability of charging infrastructure may also constitute a barrier, particularly for those who do not live in locations with available private vehicle chargers.

Action 8: Expand and maintain safe cycling and pedestrian infrastructure to enable affordable active transportation.

Lead: Transportation Services
Support: TTC, Bike Share Toronto

Description: The City's Cycling Network Plan continues to guide the progress of the building of new infrastructure to encourage active transportation.

Despite recent changes to the Highway Traffic Act, the City will continue to find opportunities to expand and upgrade an all-ages and abilities cycling network across the city to provide safe transportation options. The regulatory changes may result in fewer new facilities than were originally forecast.

Equity Considerations: Provides safe, accessible, and affordable transportation options for communities that rely on cycling and pedestrian infrastructure. It also promotes physical activity and healthier lifestyles.

Action 8.1: Expand cycling and pedestrian infrastructure, including the rollout of cycling routes, bicycle parking and Bike Share at or near TTC stations.

Lead: Transportation Services
Support: TTC, Bike Share Toronto

Description: The City will continue to expand active and multi-modal transportation infrastructure, including Bike Share Toronto expansion, and other initiatives.

As part of the development of the Cycling Network Plan, staff will continue to ensure that consideration is made for multi-modal trips by emphasizing connections between cycling infrastructure with transit.

Equity Considerations: Provides safe, accessible, and affordable transportation options for communities that rely on cycling, walking and transit, and increases access to employment, education and services.

Action 9: Lead by example by moving City of Toronto vehicles, fuels and transportation infrastructure toward net zero.

Lead: Environment, Climate & Forestry

Support: TTC, Fleet Services

Description: The City will transition its own vehicles, fuels and transportation infrastructure toward net zero by undertaking the activities outlined in the 2026-2030 Advanced Plans for transportation, as required by Municipal Code Chapter 669, Climate Change Goals and Governance.

Equity Considerations: The City is leading by example to make the benefits of net zero transportation, such as improved air quality and reduced vehicle noise, available to everyone who lives, works and plays in Toronto.

Action 9.1: Implement the TTC Green Bus Program.

Lead: TTC

Support: N/A

Description: The TTC will continue to replace diesel buses with zero-emissions, battery electric buses. This is the key part of TTC's transition of all city buses, Wheel-Trans buses and other vehicles to 100 per cent zero-emissions by 2040.

Equity Considerations: Reliable transit provides access to services, employment and education for people across Toronto and across many socioeconomic circumstances. Replacing diesel vehicles with e-vehicles reduces or eliminates emissions of air pollutants that impact health, particularly in populations near busy roadways.

2.5 Critical Step: Waste and Wastewater

Waste and Wastewater

Critical Step: Address emissions from waste and wastewater.

The climate actions in this section:



- Promote inclusive participation in waste reduction efforts by making circular economy programs more accessible.
- Work toward minimizing avoidable food waste through food rescue and redistribution as part of the circular economy.

Co-benefits:



- Focus on making fewer and better products that last longer and create value.
- Reduce reliance on finite resources, improve resource efficiency, and foster a local, adaptable system.
- Reduce dependence on external energy sources at wastewater facilities by capturing heat from incineration and using biogas produced onsite.
- Strengthen the resilience of City services and infrastructure.



- Boost economic performance and create new job opportunities, reduce waste and consumption costs, while fostering community resilience.
- Reduce long-term operating costs by modernizing equipment at wastewater facilities to cut fossil fuel use, improve energy efficiency and lessen exposure to energy price volatility.



- Create less waste, good for the health of residents and the natural environment.
- Ensure communities near treatment plants benefit from cleaner air and reduced environmental burdens by lowering water and wastewater emissions.

Overview of high-impact GHG-reduction actions:

Addressing GHG emissions from waste and wastewater is being introduced in this Plan as a new critical step for success in meeting net zero. Community-wide, waste continues to be the third largest source of emissions, according to the City's 2023 Sector-Based Emissions Inventory. In terms of corporate emissions, the Inventory identified that water and wastewater treatment, and waste, together accounted for 31

per cent of GHG emissions from the City's corporate operations—mostly coming from wastewater treatment activities. In the Inventory, the category of emissions from water and wastewater processing activities accounted for 27 per cent of the City's corporate emissions.

Waste:

The City is working towards an aspirational goal of zero waste, and this Plan includes activities to move Toronto toward a circular economy. The circular economy refers to a society-wide approach to production and consumption that aims to eliminate landfill waste and maximize resources by recovering as much as possible from used products. It is a system where materials never become waste; instead, they remain in circulation through processes like redesign, reduction, reuse, repair, refurbishment, remanufacturing, repurposing, recycling, and recovery.

While Toronto works toward a circular economy, there will be a continued need for landfills, and the City will continue to work toward reducing emissions from waste. With respect to methane that is produced from City landfills, technical modelling shows that producing and utilizing renewable natural gas (RNG) from biogas is the most effective action for reducing GHG emissions within the solid-waste sector². This Plan includes actions to expand and improve City facilities that produce usable renewable natural gas from the organic “green bin” waste.

Wastewater:

The majority of GHG emissions from wastewater treatment are released during biological treatment of wastewater (including sewage) rather than by fossil fuel combustion. These “process emissions”, methane (CH₄) and nitrous oxide (N₂O), have global warming potentials 28 and 265 times greater than carbon dioxide (CO₂), respectively, highlighting the importance of reducing these emissions to the extent possible.

High-impact planned actions the City can take to reduce corporate emissions from its own facilities and operations include controlling process and fugitive emissions (unintended emissions) of nitrous oxide and methane from wastewater treatment facilities, retrofitting the biosolids pelletizer at Ashbridges Bay Treatment Plant so it can use biogas as fuel instead of natural gas, and replacing the biosolids incinerator at Highland Creek Treatment Plant with newer lower emissions technology.

² Biogas from waste can be upgraded to produce renewable natural gas (RNG), which is primarily made up of methane.

Action 10: Move Toronto toward a circular economy.

Lead: Environment, Climate & Forestry, Solid Waste Management Services

Support: Multiple

Description: Begin implementation of the 10-year Circular Economy Road Map focused on increasing circularity community-wide, in target sectors, and in municipal operations.

Equity Considerations: Can create new job opportunities (especially for equity-deserving groups), and reduce waste and consumption costs.

Action 10.1: Build a zero/low waste culture in Toronto, including amongst businesses, organizations and residents, by forming collaborations and exploring innovative approaches.

Lead: Environment, Climate & Forestry, Solid Waste Management Services

Support: Multiple

Description: The City will encourage sustainable production and consumption behaviours through enhanced consumer education campaigns, increasing opportunities for residents to participate in the circular economy, introducing supportive measures for circular businesses, and building collaborations with non-profits and community organizations.

Equity Considerations: Can promote inclusive participation in waste reduction efforts by supporting accessible programs for businesses and residents.

Action 10.2: Introduce new, and expand existing, incentive programs to enable circular business models and sustainable consumption practices.

Lead: Environment, Climate & Forestry

Support: Economic Development & Culture, Solid Waste Management Services

Description: An initial focus will be the continuation of funding to enable businesses to adopt reuse models through the Circular Food Innovators Fund. Staff will continue to evaluate the potential for additional and/or new incentives and supports in target sectors and community-wide. Staff will also seek opportunities to lead by example and de-risk the circular transition for other economic actors by demonstrating circular opportunities in City operations and projects.

Equity Considerations: The design of new circular programs offers the opportunity to embed equity into Toronto's economic growth, recognizing that Toronto's business community includes owners and operators from Indigenous and equity-deserving groups, and in alignment with the Inclusive Economic Development Framework.

Action 11: Increase the City's local Green Bin organic waste processing capacity and the amount of renewable natural gas (RNG) that can be generated.

Lead: Solid Waste Management Services
Support: N/A

Description: The City is working to expand the existing Disco Road Organics Processing Facility and is planning improvements to the Dufferin Organics Processing Facility that will increase the City's local Green Bin organic waste processing capacity and the amount of renewable natural gas (RNG) that can be generated. The work at both facilities is expected to be complete in 2029.

Equity Considerations: N/A

Action 12: Lead by example by moving the City's water and wastewater services toward net zero.

Lead: Toronto Water
Support: N/A

Description: Toronto Water is working to address GHG emissions from its facilities and operations in the short and long term.

Equity Considerations: N/A

Action 12.1: By 2028, develop a GHG mitigation strategy to reduce emissions from the City's water and wastewater services.

Lead: Toronto Water
Support: N/A

Description: Toronto Water's GHG Mitigation Strategy will guide work to reduce GHG emissions, aligning with global best practices and the City of Toronto's broader GHG reduction goals. Toronto Water anticipates that development of the Strategy will be completed by 2028. The Strategy will analyze alternatives and develop an actionable plan to reduce emissions.

Equity Considerations: N/A

Action 12.2: Investigate, quantify and begin mitigating Toronto Water's largest GHG source, wastewater treatment process emissions, through new and emerging technologies.

Lead: Toronto Water
Support: N/A

Description: Toronto Water's Operational GHG Inventory has highlighted "process emissions" as the Division's largest GHG emission source. Process emissions are released from the wastewater treatment process itself, and they are complex to quantify and to address. The chemical compounds and mitigation strategies differ from those of GHGs released from the burning of fossil fuels.

Toronto Water is completing several small projects, using different combinations of monitoring and modelling, to assess each approach before launching larger scale projects. Projects investigating process emissions have been completed at Humber Treatment Plant and Ashbridges Bay Treatment Plant, and further work is planned to better understand, quantify and mitigate process emissions. Work completed to date at the Humber Treatment plant has enabled operational changes to reduce the process GHG emissions.

Equity Considerations: N/A

Action 12.3: Replace the Highland Creek Wastewater Treatment Plant incinerator to reduce consumption of fossil (natural) gas.

Lead: Toronto Water
Support: N/A

Description: The Highland Creek Wastewater Treatment Plant (HCTP) has an incinerator in which all biosolids produced at the plant (about 20 per cent of the City's total biosolids) are incinerated. This project will replace the ageing multiple hearth incinerator with a new, more efficient fluidized bed incinerator. Starting in 2031, the fluidized bed incinerator will reduce annual GHG emissions by 6,000 tonnes of carbon dioxide equivalent (tCO₂e)/year at HCTP.

Equity Considerations: N/A

Action 12.4: Implement maintenance and reliability upgrades at Humber Wastewater Treatment Plant.

Lead: Toronto Water
Support: N/A

Description: Boilers and building automated system upgrades at Humber Wastewater Treatment Plant will result in annual estimated GHG reduction of 3,100 tCO₂e/year, starting in 2028.

Equity Considerations: N/A
Action 12.5: Upgrade pelletizer facility at Ashbridges Bay Wastewater Treatment Plant.
Lead: Toronto Water Support: N/A
Description: A new pelletizer facility, replacing the existing pelletizer facility, will be capable of running on digester gas (biogas). Once commissioned, the new pelletizer will use about 50 per cent less fossil (natural) gas than the current pelletizer, reducing annual GHG emissions by 4,700 tCO ₂ e/year starting in 2033. Equity Considerations: N/A
Action 12.6: Upgrade fluidized bed incinerator at Highland Creek Wastewater Treatment Plant to include additional heat recovery.
Lead: Toronto Water Support: N/A
Description: A 4 MW thermal oil economizer system will recover heat from the fluidized bed incinerator and provide approximately 50 per cent of annual non-process heating requirements. This project will reduce annual GHG emissions by an estimated 4,200 tCO ₂ e/year starting in 2033. Equity Considerations: N/A

2.6 Critical Step: Carbon Budget

Carbon Budget

Critical Step: Demonstrate carbon accountability locally and globally by establishing a carbon budget.

The climate actions in this section:



- Explore the impact of investments in GHG reductions to encompass climate resilience and climate risk vulnerability.
- Enhance and further develop GHG reduction actions using the Carbon Budget Prioritization process.
- Considers a project's contribution to an inclusive and equitable net zero transition.

Co-benefits:



- Identify new and enhanced actions that could reduce GHGs, providing impact on baseline actions that continue year-over-year.
- Guide City Divisions, Agencies and Corporations to identify and prioritize GHG reduction actions for submission to the City's annual Budget Process.



- Quantify and track fossil fuel dependencies in the City's operating and capital budget proposals.
- Better understand the overall costs of climate change to the City and to prioritize climate-related risks for action.



- N/A

Overview of high-impact GHG-reduction actions:

The City of Toronto is among leading cities worldwide in establishing and implementing a Carbon Budget and related processes, as enshrined in Municipal Code Chapter 669, Climate Change Goals and Governance. Each year new steps are being undertaken to roll out and report on the next steps of the City's carbon accountability process.

As outlined in the Plan, the City continues to implement the Carbon Budget process to prioritize new and enhanced climate actions through the annual Budget process. Previously, the City set separate Emissions Budgets for corporate emission sources from buildings and transportation over 2026-2030 ([2024.IE18.8](#)). For the first time, as

per Municipal Code Chapter 669, the City has developed Advanced Plans that detail the activities the City will undertake to keep corporate emissions within these emission budgets. The Advanced Plans include Accountability Plans that confirm accountability for the Advanced Plans.

To maintain momentum toward net zero, in 2024 City Council directed staff, "to include in the TransformTO Net Zero Implementation Strategy for 2026-2030 a timeline, the resources for, and process for, phasing out the use of fossil gas in all new and existing City-owned facilities by 2040" ([2024.IE12.3](#), Decision Part 3). In response to this City Council direction, and to better meet the emissions budgets for the City's corporate emission sources from buildings and transportation, a recommendation and a new action (Action 13.1) are being brought forward to City Council. The action clarifies and builds on the City's intent (articulated in a previous Council direction, [2021.IE26.16](#), Decision Part 1f) to gradually phase out the procurement (Phase 1) and operation (Phase 2) of fossil-fueled equipment in City facilities by 2040. The recommendation notes the need to report back with a policy (including a list of exceptions), developed in consultation with specified Divisions and Agencies, to guide this transition. This approach will also connect with the City's Environmentally Responsible Procurement Policy ([2024.GG12.18](#)) to cohesively update procurement processes, understand market challenges and support Divisions, Agencies and Corporations.

Further detail on the Municipal Code Chapter 669 accountability processes for climate action, specifically the Emissions Budget process, Advanced Plans and Accountability Plans, can be found below Action 13 and elsewhere in this report.

Action 13: Implement annual Carbon Budget and Emissions Budget processes.

Lead: Environment, Climate & Forestry

Support: Financial Planning, Corporate Real Estate Management, Toronto Community Housing Corporation, Fleet Services, TTC

Description: The City will continue to be a leader in carbon accountability by prioritizing GHG-reduction actions through the Carbon Budget as part of the City's annual budget process. The City will break new ground by implementing Advanced Plans to meet Emissions Budgets. These requirements and others are set out in Municipal Code Chapter 669, Climate Change Goals and Governance.

Equity Considerations: N/A

Action 13.1: Phase out City of Toronto procurement and use of fossil-fuel powered equipment in facilities.

Lead: Environment, Climate & Forestry

Support: Purchasing & Materials Management, Corporate Real Estate Management, Toronto Community Housing Corporation, TTC

Description: This action clarifies previous City Council direction ([2021.IE26.16](#) Decision Part 1f) to transition City of Toronto corporate equipment in facilities away from fossil fuels. This recommended action is being brought forward to City Council at its meeting December 16, 2025, as per City Council direction ([2024.IE12.3](#), Decision Part 3).

If the recommendation is adopted by City Council, the Executive Director, Environment, Climate and Forestry; in consultation with specified City Divisions, Agencies and Corporations, will report to Infrastructure and Environment Committee in 2028 with a policy to guide the transition of all City of Toronto Divisions and Agencies away from the procurement and operation of equipment that combusts fossil fuel in City-owned facilities by 2040, informed by Zero Carbon Transition Plans required by December 31, 2027 in accordance with By-law 669, Appendix A, Section 4.

The policy is to include the timeline, resources for, and process for the phase-out of procurement and operation of equipment that combusts fossil fuel, subject to a list of exceptions, determined based on the Zero Carbon Transition Plans for buildings that must be developed by December 31, 2027, as required by Municipal Code Chapter (MCC) 669, Appendix A section 4A(7)(c).

The policy will also include a report-back mechanism for adherence to the policy through MCC 669, and other elements deemed necessary to operationalize the policy and enable the City's transition away from equipment that combusts fossil fuels in City-owned facilities by 2040.

Equity Considerations: The City is leading by example to demonstrate to private sector and other public sector organizations that a phase-out of fossil fuel equipment, with critical exceptions, is feasible.

Action 13.2: Undertake and continuously improve annual carbon accountability reporting.

Lead: Environment, Climate & Forestry

Support: N/A

Description: The City will continually improve the process of prioritizing new climate action through the City's Carbon Budget process, and complete annual accountability reporting including the publication of Toronto's Sector Based Emissions Inventory (SBEI).

Equity Considerations: N/A

Action 14: Identify and implement opportunities for further alignment between the City's procurement policies and the TransformTO Net Zero Strategy, including updating the Environmentally Responsible Procurement Policy and enhancing specifications, evaluation criteria and disposal of surplus goods.

Lead: Purchasing & Materials Management

Support: Environment, Climate & Forestry, Multiple

Description: This action aligns with City Council direction in 2024.GG12.18, which directs the Chief Procurement Officer to align the City's procurement policies with TransformTO.

Purchasing and Materials Management Division (PMMD) will continue to review procurement policies through a climate lens and enhance environmentally responsible procurement initiatives. Staff will continue to report back on the progress of environmentally responsible procurement initiatives through the TransformTO Net Zero Strategy reporting mechanism.

As part of this work, PMMD will engage with Divisions to identify opportunities in the supply chain to lower GHG emissions and develop resources for staff to promote use of environmentally responsible specifications in solicitations, where appropriate. PMMD will work with client Divisions to review their purchases for supply chain GHG emissions and actively look for alternative lower emissions solutions.

Equity Considerations: A key equity consideration is ensuring that expanded environmentally responsible procurement does not create barriers for Indigenous, Black, and Diverse Suppliers and Social Enterprises. In addition, efforts will be made to explore pathways where environmentally responsible procurement could increase spend with Indigenous, Black, and Diverse Suppliers and Social Enterprises.

2.6.1 Emission Budgets

The Climate Change Goals and Governance by-law (Ch. 669, Toronto Municipal Code), requires the City to set an "emissions budget" for both community-wide and corporate total emissions and defines the amount of GHG that can be emitted over a set period, that is consistent with Council-adopted GHG reduction goals which in turn reflect Toronto's global commitments to stay at or below a 1.5°C increase in temperature.

Emissions budgets help achieve climate goals by taking milestone emission reduction targets and identifying the total emissions that can be "spent" between each milestone. They are allocated based on an upper limit of absolute GHG emissions for Toronto between now and 2040. The current and expected pace of emission reductions can

track progress and provide a more concrete understanding of remaining emissions. For example, if annual corporate emissions continue at their historical rate (e.g., the rate from 2021), the corporate emission budget for 2026-2030 would be “spent” by early 2029, over a year and a half before the end of the five-year period.

Emission Budget 2026-2030

City Council has set a total emissions budget for the five-year period of 2026-2030:

- Corporate emission sources (i.e. emissions from the City government’s own operations): 2,016,471 tCO₂e or 2.0 MtCO₂e
- Community emission sources (i.e. all sources in Toronto excluding corporate sources): 53,060,555 tCO₂e or 53.1 MtCO₂e

While corporate emissions only account for six per cent of Toronto’s overall emissions, it is the area where the City has the most control and authority to make change. Division/Agency heads in charge of corporate buildings and/or corporate fleet vehicles are responsible for proactively planning how to remain within their emission budget allocations (i.e. providing services within a limited emissions budget, just as they already plan for how to provide services within a limited financial budget), while City Council is responsible for granting the funds and authority necessary to remain within allocations.

Having pledged to “lead by example” the City aims to reduce corporate emissions faster than community emissions. As per the by-law (Municipal Code Chapter 669), the corporate emissions budget is set at 2,016,471 tCO₂e for the period 2026-2030, aligned with the 2030 TransformTO Net Zero Strategy target of 65 per cent emissions reductions from 2008 levels.

Robust Advanced Plans that transparently communicate the needs (including financial budget) and dependencies for achieving corporate emissions budgets will inform City Council’s key decision-making and enhance accountability for the Council-adopted GHG reduction goals.

Approach to corporate waste and wastewater emissions

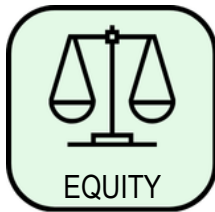
Emission budgets for the waste and wastewater sectors have been excluded at this time. The 2023 Sector-Based Emissions Inventory indicates that water and wastewater treatment, and waste, together account for 31 per cent of the total City corporate emissions—mostly coming from wastewater treatment activities. In the Inventory, the category of emissions from water and wastewater treatment accounted for 27 per cent of the City’s corporate emissions. However, the waste and wastewater emissions are not primarily driven by fossil fuel energy consumption, as with buildings and transportation. Both Divisions leading the sector, SWMS and Toronto Water, are identifying actions to reduce emissions from their operations. However, these actions will not be reflected as part of the emissions budgets. Instead these actions will support overall corporate emissions reductions.

2.7 Cross-cutting: Equity, Reconciliation and Economic Development

Equity, Reconciliation and Economic Development

Cross-cutting: Focus on equity, advance reconciliation and encourage economic development.

The climate actions in this section:



- Ensure climate programs and communications are more accessible, culturally relevant, and representative of lived experiences of Black, Indigenous and equity-deserving communities.
- Address gender and racial disparities in the climate and entrepreneurial space by empowering women leaders.
- Empower diverse youth voices in advancing climate action.
- Directly invest in Black-led climate leadership and support community-driven solutions that are reflective of the lived experiences of Black residents.
- Improve engagement with Indigenous communities to advance connections to nature and climate action.

Co-benefits:



- Elevate voices from Black, Indigenous and equity-deserving communities and foster inclusive leadership to strengthen community resilience.
- Empower communities to lead locally driven climate solutions.



- Invest in community-led initiatives that reflect local priorities.
- Create opportunities for green jobs for equity-deserving groups, provide training and foster an inclusive network.
- Improve City-community relationships in underserved areas, increase City staff understanding of neighbourhood climate priorities and increase community awareness of climate programs and resources.



- Increase access to green space and biodiversity in underserved areas.
- Develop and support initiatives that address environmental hazards such as air pollution, promote access to healthy food, and encourage physical activity and community health outcomes.

Overview of cross-cutting activities:

The City is working toward the TransformTO vision of an equitable, healthy, prosperous and resilient net-zero Toronto. Achieving this vision will require everyone to play a role, and for many people and organizations to lead efforts that take action on climate change. Engaging residents, other levels of government, the private sector and non-governmental organizations is an enabling activity that helps to bring everyone together on a common goal, and it cuts across all parts of this Plan.

The City aims to expand upon previous engagement with Indigenous communities while continuing to build relationships with Indigenous communities and enable/support Indigenous-led climate action. The City has shown a clear desire to strengthen its relationships with Indigenous communities; however, meaningful collaboration is restricted within the constraints of colonial municipal structures. The City's climate strategies, though advancing towards net-zero emissions, often do not directly relate to perspectives on lands, waters and the surrounding world. To move forward, City staff must continue to build internal capacity and learning so that engagements with Indigenous partners are informed, respectful and reciprocal. At this stage, relationship building remains the central and necessary focus.

Equity aspects of the City's climate actions are highlighted throughout this Plan as a cross-cutting issue. This includes, where possible, planning climate actions in such a way that they address existing inequities, mitigating unintended equity implications of the planned climate actions, and clarifying how actions can help create a more equitable city. Climate engagement activities have been re-oriented to focus on equity considerations and the needs and priorities of Black, Indigenous and equity-deserving groups. This includes focusing more engagement activities on Neighbourhood Improvement Areas and Emerging Neighbourhoods, and listening to communities so that engagement and climate action are rooted in community interests, priorities or concerns.

Climate action and engagement can include and be led by the private sector. While mitigating and avoiding the costs and impacts of climate change on Torontonians, an opportunity also exists to create new jobs and grow green industries, which account for 60,700 jobs and more than \$6.55 billion of Toronto's GDP. These efforts are being pursued as part of the "Action Plan for Toronto's Economy", which was recently approved by City Council, and is being led by the Economic Development and Culture Division.

Action 15: Support Indigenous climate action and advance the Reconciliation Action Plan.

Lead: Environment, Climate & Forestry

Support: Indigenous Affairs Office

Description: Relationship building remains a central and necessary focus of City staff. To do this, internal staff understanding must be improved so that engagements with Indigenous partners are informed, respectful and reciprocal.

Equity Considerations: Ensures continuous and purposeful learning and engagement with Indigenous communities to advance climate action.

Action 15.1: Increase staff knowledge of Indigenous worldviews and priorities related to climate in Toronto, to better inform engagement with Indigenous communities.

Lead: Environment, Climate & Forestry (ECF)

Support: Indigenous Affairs Office

Description: ECF staff will become more informed and prepared to engage with Indigenous communities through:

1. A monthly practice where ECF staff participate in Indigenous learning opportunities—both internally organized by ECF or community-led. The purpose of this practice is to be present at places and spaces where we can better relate “net zero” to work already underway on lands and waters throughout the city.
2. To address concerns about the repetitive and extractive nature of interactions between the City and Indigenous individuals and groups, ECF will explore and develop policies/procedures which more appropriately honour the time and advice being imparted to City staff from previous and ongoing engagements with Indigenous groups and individuals.

Equity Considerations: While Indigenous communities are not an equity-deserving group, these activities will enable City staff to build relationships.

Action 16: Focus climate outreach and engagement on community priorities and equity.

Lead: Environment, Climate & Forestry

Support: Social Development

Description: Direct engagement and education efforts to already existing community hubs and organizations within areas identified for investment using a community-centred approach.

Equity Considerations: Ensures climate communications are easily accessible, culturally relevant and representative of lived experiences of equity-deserving communities.

Action 16.1: Utilize a community-centred approach to climate action programming in existing community gathering spaces and hubs within areas identified for investment.

Lead: Environment, Climate & Forestry

Support: Social Development, Parks and Recreation, Toronto Public Library

Description: Outreach and engagement efforts will be directed to areas identified for investment inclusive of Neighbourhood Improvement Areas, Emerging Neighbourhoods and other neighbourhoods experiencing higher equity needs. Based on input from the community and the Climate Advisory Group, engagement initiatives will be redesigned to better align with local priorities and will be based out of existing community gathering spaces such as libraries, community centres and community hubs.

This is reflective of input from the Climate Advisory Group in developing and leveraging existing community hubs, as well as providing spaces for information sharing on climate action and the resources available to all residents.

Equity Considerations: Improves City-community relationships in underserved areas and enhances City staff understanding of community priorities and how best to centre these priorities in climate work.

Action 16.2: Enhance and expand youth climate engagement initiatives.

Lead: Environment, Climate & Forestry

Support: Social Development

Description: Over 2023-2024, an extensive consultation process with youth-led organizations and over 800 youth aged 10-25 years was completed in partnership with the University of Toronto. This consultation resulted in the co-development of a number of recommendations, including developing climate hubs, grants and resources, skills training, mentorship and partnerships. Key recommendations to be implemented in 2026-2030:

- Increase job and skills training for youth in climate-related fields, including supporting existing climate job fairs, skills development initiatives and building on the Youth Climate Ambassadors pilot (2025).
- Provide safe, welcoming, non-commercial, centralized spaces for youth to convene and hold climate events and support existing hub pilots.
- Provide opportunities for youth to participate in hands-on environmental stewardship, as well as activities that help youth connect with their ancestral lands and traditional practices.

Equity Considerations: Centres diverse youth voices in advancing climate action. It focuses on youth engagement, accessibility and empowerment.

Action 16.3: Establish a climate action incubator pilot, that provides post-program convening and supports to participants from all of ECF's existing capacity building and grant programs, and welcomes new participants to facilitate the creation of a self-supporting climate action community.

Lead: Environment, Climate & Forestry
Support: N/A

Description: Establish a climate action incubator pilot that will leverage the existing knowledge and skills of participants across ECF's capacity building and grant programs and attract new participants to existing and new capacity building programs. Climate Advisory Group input reflects the need for increased capacity building opportunities such as an incubator.

The incubator would endeavor to grow and amplify the impact of early-stage climate action projects or business ventures, through mentorship, strategic guidance, training, skills matching, and networking. The exploration of the incubator will include input from participants that have engaged in the following programs: Women4ClimateTO, Neighbourhood Climate Action Champions, Live Green Toronto Volunteers, PollinateTO Grants, Neighbourhood Climate Action Grants, Indigenous Climate Action Grants and Black-led Climate Action Grants, as well as connections to already existing organizations and individuals in community hubs. The City will aim to pilot the incubator over the period of 2026-2030, based on priorities identified by participants. This is reflective of input from the Climate Advisory Group in connecting people to capacity building opportunities.

Equity Considerations: Aims to address inequity in the climate and entrepreneurial space by empowering residents to continue to develop and implement innovative solutions and community building to address the climate emergency in Toronto.

Action 16.4: Develop and implement a Black-led climate action grants program.

Lead: Environment, Climate & Forestry
Support: Social Development

Description: Aligned with recommendations in the Toronto Black Food Sovereignty Action Plan (2021-2026), this program, co-developed with community, will annually deliver financial and in-kind navigation support to 10-15 local, Black-led climate action initiatives starting in 2026.

Equity Considerations: Directly invests in Black-led climate leadership and supports community-driven solutions that are reflective of the lived experiences of Black residents and centering Black leadership in socializing culturally grounded solutions.

Action 16.5: Expand the Youth Climate Action Grants to all publicly funded schools in Toronto.

Lead: Environment, Climate & Forestry
Support: N/A

Description: The student-led initiatives from the Youth Climate Action Grants benefit youth, families, school communities and community members through equitable climate action. Over the period 2026-2030, the City will explore further expansion of the current grant program to be available to students at all publicly funded schools in Toronto.

Equity Considerations: Aims to foster climate leadership among diverse populations, including youth from equity deserving communities.

Action 17: Continue to grow Toronto's green industries and train the workforce required to develop, deploy and maintain net-zero technologies.

Lead: Economic Development & Culture
Support: Environment, Climate & Forestry

Description: Consistent with the [Action Plan for Toronto's Economy \(2025-2035\)](#), the City will continue to grow Toronto's green industries and train the workforce required to develop, deploy, and maintain net-zero technologies critical to meeting Toronto's climate targets (e.g., heat pumps, high-efficiency windows, solar panels, energy advisors, bicycle repair, EV chargers, and tree planting and maintenance).

The City's work will include:

- Mobilizing a Green Industry Cluster Alliance;
- Continuing the development and implementation of key green sector roadmaps;
- Partnering with colleges and universities to identify and address green workforce needs.

Equity Considerations: Creates opportunities for green jobs for equity-deserving groups; provides training, fosters an inclusive network.

3. Background & Context

The development of the Plan was informed by many perspectives reflected through Toronto's current environmental, social and economic contexts. The data inputs, contextual factors, and participant voices are detailed below.

3.1 Toronto's Changing Climate

Climate change is putting people's health, safety, and livelihoods at increasing risk, and the economic costs of climate change are rising across Canada, as described by Berry and Schnitter, 2022, and the Canadian Climate Institute, 2020-2022. These impacts are often unequally distributed, affecting some people more than others particularly those who face multiple, overlapping stressors due to systemic and long-standing inequities.

Global surface temperature has warmed by more than 1°C since the pre-industrial period (1850-1900), and this warming has already caused devastating impacts around the world, including in Canada, according to the Intergovernmental Panel on Climate Change (IPCC), 2022, 2021. According to the Insurance Bureau of Canada (2024a, 2024b), insured damages from catastrophic weather events exceeded \$3 billion in 2023 for the second year in a row, and in 2024 this previous record was more than tripled with losses exceeding \$9 billion. Some of Canada's costliest severe weather events based on insured losses have occurred in Toronto and surrounding areas.

Toronto's climate has changed, and will continue to get hotter and wetter

In December 2024, the report [Toronto's Current and Future Climate](#) concluded that Toronto is hotter than it used to be, with the ten warmest years on record occurring since 1998 (record-keeping in Toronto started in 1850). The number of days reaching 30°C or hotter have also increased to approximately 14 days per year now, compared to 10 days per year in the 1980s. Toronto is also getting wetter overall, and a larger share of annual precipitation is now falling as rain rather than snow.

The study's look at future climate projections underscores the urgency of global action to reduce GHG emissions and how Toronto's future climate depends on the choices we make now. This study looked at two possible climate futures: a medium emissions scenario representing a "middle of the road" socio-economic development pathway similar to historical development patterns, and a very high emissions scenario, which is a fossil-fueled development pathway. Both scenarios would exceed the Paris Agreement goal of limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts to limit global warming to 1.5°C.

Based on current global emissions and countries' emissions reduction targets, worldwide emissions are tracking between these two scenarios, as identified by the UNEP, 2024, IPCC, 2023, and IEA, 2023. Both scenarios will lead to a warmer, wetter Toronto, with more hot weather, more precipitation overall, more extreme storms, and a longer frost-free season. The expected changes under the very high emissions scenario are more intense, as illustrated in Table 3.1.1. For example, the average temperature could increase by +4°C under the medium emissions scenario or +6°C under the very high emissions scenario by the end of the century. The number of very hot days per

year with temperatures above 30°C is expected to increase from 10 days between 1971 and 2000 to 36-44 days by the 2050s and 46-78 days by the 2080s, depending on the emissions scenario.

Precipitation in Toronto is also expected to increase, with annual precipitation increasing by 11 to 16 per cent by the end of the century, depending on the emissions scenario. The frequency of extreme storms will also increase, with the maximum amount of precipitation that would typically fall in a day increasing by 18 per cent by the 2080s compared to the 1980s, and by 27 per cent under the very high emissions scenario.

Table 3.1.1. Historical and projected climate for selected indicators³

	Average annual temperature (°C)	Number of days above 30°C	Cooling demand (cooling degree days)⁴	Annual precipitation (mm)
Historical (1971-2000)	8	10	270	795
Medium Emissions Scenario				
Projected for 2030s	10	24	441	833
Projected for 2050s	11	36	616	872
Projected for 2080s	12	46	729	885
Very High Emissions Scenario				
Projected for 2030s	10	24	447	840
Projected for 2050s	12	44	730	875
Projected for 2080s	15	78	1155	921

³ The full report and data tables include detailed information for 54 climate variables and are available at toronto.ca/ClimateReady

⁴ Cooling Degree Days is a quantitative index used to estimate the energy demand needed to cool a home or business in a given time (typically one year).

These changes in weather will impact all City services and operations in addition to resident health, wellbeing, and property. Regardless of the emissions scenario, these expected climate impacts require planning and preparation.

Impacts on City assets, services and residents

The City recently completed a climate change risk and vulnerability assessment that identifies priority climate risk facing the City's assets, services, and residents. While the City has many initiatives in place and underway that enhance resilience, more work is needed to continue to adapt and build resilience now and for these expected future conditions. The study highlights the need for an all-of-City approach to address the risks, which impact multiple systems and sectors.

With coordinated planning, the City can prepare now and adapt to a future that is different from the present. Tackling climate change means planning for climate changes that are already underway while continuing to reduce GHG emissions to minimize future risks as much as possible.

3.2 Progress to Date

Toronto has one of the most ambitious GHG reduction targets in the world. Despite the considerable challenges associated with achieving significant and effective climate action at local, provincial and national levels, Toronto continues to strive to be a leader in climate action.

While it is critical to acknowledge how much work still has to be done, it is also important to celebrate how far Toronto has come. In an era of unprecedented climate-anxiety, particularly among youth, messages of progress and hope for the future are much needed. Toronto has been making steady progress on addressing the complex issues related to climate change for decades. A summary of these key milestones is provided below (Figure 3.2.1).

2023: Carbon Budget
City Council adopted the carbon budget supporting GHG reductions in the community and from City operations ([2023.IE3.4](#)).

2021: TransformTO NZS
City Council adopted NZS with the target of net zero GHGs community-wide by 2040 ([2021.IE26.16](#)).

2021: NZ Existing Building Strategy
City Council adopted the NZ Existing Buildings Strategy a path to decarbonized building sector ([2021.IE23.1](#)).

2019: Toronto Declares a Climate Emergency
City Council declares a climate emergency deepening Toronto's commitment to protecting our economy, ecosystems and our community from climate change ([2019.MM10.3](#)).

2016: TransformTO
First TransformTO climate plan to move toward 2050 GHG target (2016.PE15.1).

2014: Green Fleets Plan
City Council adopted the City Green Fleets Plan aimed to reduce GHGs from City-owned vehicles and equipment ([2014.GM30.12](#)).

2006: Toronto Green Standard
City Council adopted the Toronto Green Standard, which sets mandatory sustainable design requirements for new developments.

2022: The Net Zero Strategy (NZS) Accountability & Management Framework
City Council adopted a NZS Accountability & Management Framework, creating the CAG, JTIC and TCLT ([2022.IE29.10](#)).

2021: Net Zero (NZ) Carbon Plan in City Buildings
City Council adopted a road map to achieve net zero GHGs in City buildings ([2021.IE23.2](#)).

2017: The Electric Vehicle (EV) Strategy
City Council adopted the Pathway to City Fleets in 2019 and the EV Strategy ([2020.IE11.17](#)).

2017: TTC's Green Bus Program
TTC Board approves the Green Bus Technology Plan ([2017](#)). The TTC has one of the largest eBus Fleet in North America.

2014: Coal Phase Out
The Province phased out coal-fired electricity generating.

2007: Climate Change & Clean Air Action Plan
City's first climate plan that introduces GHG target of 80 per cent by 2050 (2007.EX10.3).

2004: First GHG Emissions Inventory
Tracking Toronto's progress towards climate goals.

Figure 3.2.1. Summary of key climate action milestones 2004 to present.

More recently, Toronto has made progress in implementing the TransformTO Net Zero Strategy. Some of these accomplishments include:

- Implementation of the first City-wide Carbon Budget that ensures each City division is accountable and empowered to achieve corporate climate goals.
- Greening the corporate vehicle fleet, with emissions on pace for a 45 per cent reduction by 2025, from 1990 levels.
- A plan to transition to a zero-emissions bus fleet by 2040 with ongoing procurement by the Toronto Transit Commission.
- Progress on district energy, systems that distribute thermal energy to multiple buildings, including:
 - Enwave's commissioning of the fourth Deep Lake Water Cooling system intake pipe, which will expand current system capacity by over 50 per cent.
 - Installation of a geothermal system to provide zero carbon heating to the three million square foot Etobicoke Civic Centre Precinct via Enwave's district energy plant.
- Innovative use of wastewater energy transfer technology to harvest wasted heat energy from the sewer system for heating or cooling purposes in nearby buildings:
 - Toronto Western Hospital by Noventa Energy Partners which is now the world's largest raw wastewater energy project, and first in Toronto.
 - York University, Glendon Campus by a Noventa partnership.
 - Early-stage planning for a new project at Exhibition Place.
- The design and creation of a new climate-positive community on the waterfront at Ookwemin Minising (Villiers) Island.

A more detailed look at the City's progress on implementing the Net Zero Strategy can be found in the 2024 Annual Report on progress ([2025.IE22.9](#)).

3.2.1 Sector-Based Emissions Inventory

The City's [Sector-Based Emissions Inventory \(SBEI\)](#) tracks Toronto's progress towards its GHG reduction targets. It is Toronto's main tool for measuring community-wide and City corporate-wide progress towards net zero. Community-wide, the SBEI identifies direct and indirect GHG emissions from three key sectors: buildings, transportation and waste. In 2022, the sectors reported for corporate emissions were expanded to include wastewater emissions, as new methods indicate this is an area of corporate emissions.

In 2023, the largest percentage of community-wide emissions in Toronto are fossil (natural) gas heating in residential buildings (26 per cent of Toronto's community-wide emissions) and gasoline combustion in passenger vehicles (22 per cent of emissions) (Figure 3.2.2). Toronto's community-wide GHG emissions showed a one per cent increase over 2022.

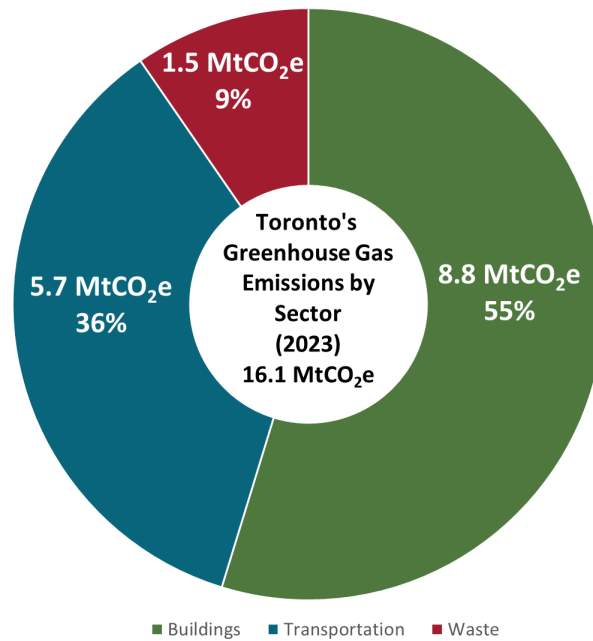


Figure 3.2.2. Toronto's percentage breakdown of community-wide GHG emissions by sector (2023).

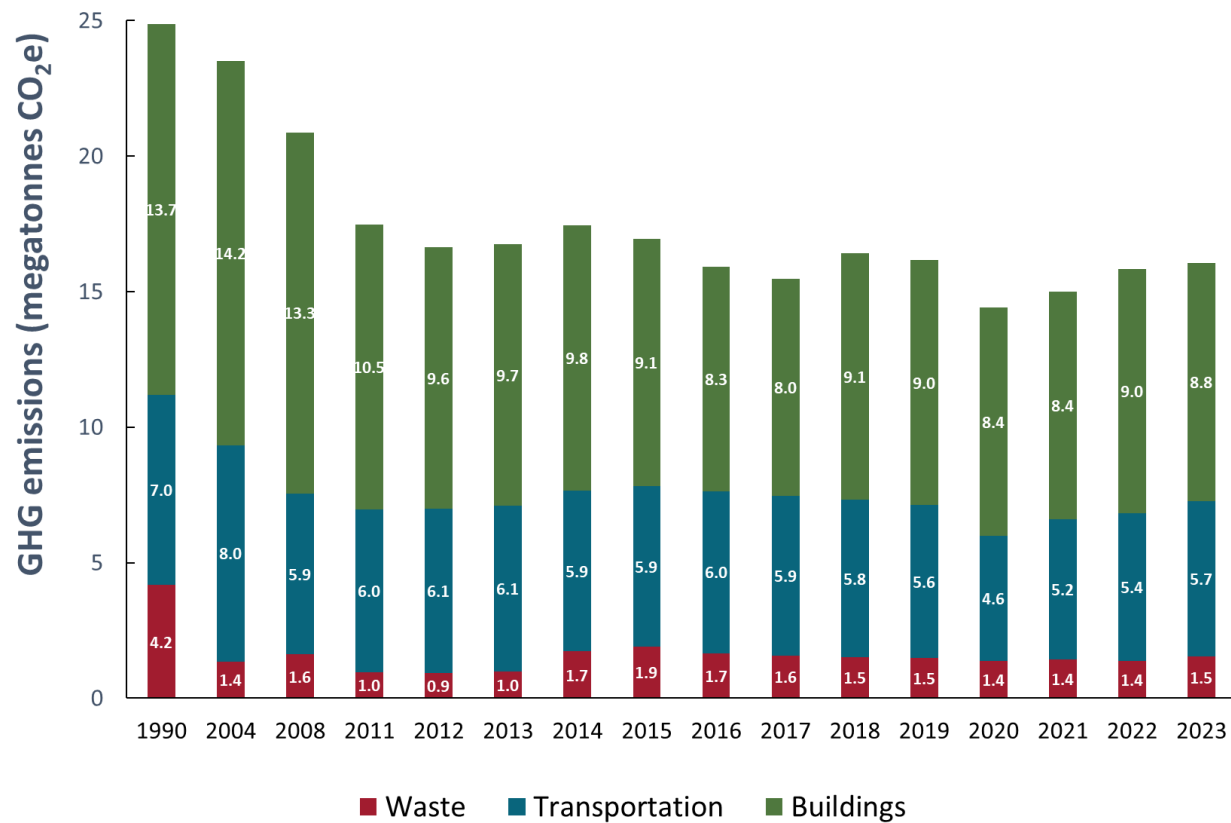


Figure 3.2.3. Toronto's year-over-year community-wide GHG emissions by sector.

The 2023 inventory shows that although increasing slightly in emissions community-wide, Toronto's emissions remain generally consistent with an overall downward trend in emissions over time (Figure 3.2.3). Toronto reached the lowest level of GHG emissions per capita since records began in 1990 (excluding 2020, an irregular year due to the COVID-19 pandemic). However, it is clear that the current pace of emissions reductions will not meet the City's 2025 emissions target. A 2.4 MtCO₂e reduction in annual emissions would be required to meet the 2025 target and Toronto is not moving at this pace. This 2.4 MtCO₂e reduction would be equivalent to removing 730,000 gas-powered cars from the road.⁵

More than ever, alignment in actions to reach Toronto's future emissions targets must be made across all levels of government, the private sector and individuals in order to achieve significant emissions reduction progress. Whether action is taken in the near-term will determine how quickly Toronto can achieve its net zero target.

The SBEI Report (2023) is available on the [City's website](#).

3.3 Intergovernmental Collaboration

Evolving Local and Intergovernmental Climate Policy Landscape

The intergovernmental climate policy landscape has evolved significantly in recent years, with uncertainty remaining.

Since 2015, at both the provincial and federal levels, significant new climate legislation, regulations, program funding, and other supports have been put in place, and some critical policies have been removed. Recent shifts include:

- Public priorities increasingly focused on housing, affordability, and safety concerns.
- Federal uncertainty about the implementation of the Clean Electricity Regulations and Clean Electricity Investment Tax Credit, the review of the Clean Fuel Regulations, the review of the Electric Vehicle Availability Standard and non-renewal of EV financial incentives, the review of the industrial carbon price, and the non-renewal of supports for home and building energy retrofits.
- Federal and provincial governments facing significant fiscal constraints.
- The Independent Electricity System Operator (IESO) and the Government of Ontario have publicly stated a commitment to a net-zero grid by 2050, and recently published an Integrated Regional Resource Plan that will have a significant impact on the City's net-zero trajectory and the greenhouse gas intensity of electricity across the city.

In addition to federal and provincial uncertainty, the City also faces considerable fiscal constraints, with significant ongoing capital and operating gaps that require coordination with, and prioritization of, climate action funding.

Taken together, these developments – a shift from a period of action and investment to one increasingly marked by uncertainty, austerity and the reversal of critical policies –

⁵ See 2023 SBEI Report Appendix C.4 Community-wide transportation sector for detailed calculations.

will make it more difficult for the City to achieve its climate goals in the coming years. Without continued and increased support from other levels of government, it will be challenging to create the conditions for climate success in Toronto, putting 2040 climate goals at risk.

Principles for Future Municipal Climate Support

While provincial and federal support has been both welcome and essential to making progress on Toronto's climate goals, it has also at times been challenging, with programs being developed without adequate municipal input, and inconsistent, one-time funding that does not meet the scale of the challenge. Provincial and federal efforts aligned with the following principles would help guide the City's future climate policy:

- **Process:** Policies and programs co-developed transparently with municipalities at the outset.
- **Certainty:** Long-term, predictable, consistent policy and programs required to achieve climate goals (e.g., like dedicated federal gas tax support to municipalities), and where appropriate, funding to support municipal implementation where cities are accountable for achieving goals within their boundaries.
- **Magnitude:** Policy and programs that are sufficient to meet the scaling and acceleration required to achieve climate goals.
- **Fairness/Equity:** Policy and programs that support or ensure municipalities receive an equitable, fair share of program funding and policy supports, and policy implementation on a region- or province-wide basis in order to provide certainty for residents and businesses.

Modelling results – Intergovernmental contribution

Supportive federal and provincial policies are critical for Toronto to meet its net zero ambitions. Technical modelling, summarized in Section 3.6 of this report, explored the GHG-reduction potential of supportive federal and provincial climate policies and programs as well as actions the City is taking. The federal light-duty zero-emission vehicle (ZEV) mandate (now under review), and the federal carbon price (now repealed) were the highest-impact GHG-reduction policies modelled for Toronto community-wide. The loss of the carbon price significantly limits how quickly Toronto and other cities can reach a net zero target, unless it is replaced by another effective price signal. The modelling also highlights the importance of a strong, federal ZEV mandate.

With respect to the impact of provincial level policies, modelling indicates that if TGS V4 continues to be applied to all new multi-unit residential, commercial and institutional buildings, based on projections, it has the potential to achieve a cumulative emissions reduction over 2023-2040 of 5.5 MtCO₂e, a 62 per cent reduction compared to the emissions from the new buildings in a Business-As-Usual (BAU) scenario. Advancing higher performance could unlock an additional 1 MtCO₂e reduction towards the TransformTO goals. Following changes proposed by the Province through Bill 17, City staff understand the Province is looking at potential legislative or other changes that could impact mandatory TGS requirements. However, there are no changes to the TGS at this time.

3.4 Indigenous Relationships

In 2020, to support climate action broadly, the City's Environment, Climate and Forestry Division (ECF) offered a funding opportunity targeting frontline organizations and groups working in communities citywide. Having not received interest or applications from members of Indigenous communities in 2020, ECF staff partnered with the Indigenous Affairs Office and community organizations to co-host gatherings and visioning sessions to better understand the barriers and opportunities for ECF-led Indigenous engagement and funding programs. These events were attended by members of Indigenous community actively engaged in land stewardship, climate justice and place-making. As a result, the granting opportunity was re-designed to be more culturally appropriate and better aligned with Indigenous community. The program then provided funding to five Indigenous-led projects in 2021. This grew to supporting 15 Indigenous-led projects in 2022, and resulted in the development of the Indigenous Climate Action Grants program.

This program, established in 2023, is led by Indigenous staff in ECF, and supports projects that share knowledge and learnings, and take meaningful action to reduce emissions and realize the co-benefits of a healthy, thriving and equitable city. The program provides funding to 15-20 projects annually that directly support and benefit Toronto's Urban Indigenous community, and advance the principles, priorities and actions of the TransformTO Net Zero Strategy and the Reconciliation Action Plan.

In 2022, ECF invited members of the Toronto Indigenous community to join the newly established Climate Advisory Committee (CAG) however, the recruitment process proved to be challenging. As a result, ECF decided to better understand the root causes of these challenges. Over 2024-2025, ECF completed a jurisdictional scan of what relationships with Indigenous communities look like in other Canadian cities with specific focus on climate action work. At the same time, ECF moved forward with a series of conversations with Indigenous community members called "listening sessions" which addressed concepts related to climate change. What follows is a summary of learnings from the jurisdictional scan and recommended actions for the City to take.

Key learnings:

Toronto's groundwork in relating to its Indigenous communities demonstrates a clear "want" to do better, but the City continues to struggle in meaningful collaboration due to the colonized structure of municipalities.

The jurisdictional scan identified that the City of Toronto demonstrated an overall well-rounded approach to reconciliation, with the development and implementation of various initiatives aimed to improve both Indigenous well-being and awareness within the City. This includes a strong, formal land acknowledgement that recognizes the Indigenous peoples of the region and the City's status as Treaty 13 territory, along with a short discussion of the importance of land acknowledgements.

The City also recognizes that as a geographic point of high migration, newcomer populations may not be exposed to the rich history and culture of Indigenous populations in Toronto. Therefore, the City released *Indigenous Peoples in Toronto: An Introduction for Newcomers*, a document aimed to educate incoming Torontonians

about the City's Indigenous history and provide them with a basic understanding of traditional territories and treaties. This communicates to newcomers that the City considers this history and culture an important part of Toronto and provides a foundation for mutual respect and understanding between Indigenous and non-Indigenous residents.

Throughout other reconciliation documents and frameworks such as the Reconciliation Action Plan (RAP), this assertion is furthered as the City aims to ground its work in values and principles related to accountability, power sharing, inclusivity, respect, and truth. However, this introduces a common problem that limits much of Toronto's efforts to include Indigenous perspectives in City work. Despite the clear *want* to do better and improve communication and collaboration between the municipality and Indigenous communities, the City struggles to put it into practice.

Due to the colonial structure of municipal government, implementing strong policies that encourage these values and allow Indigenous voices to share space in City environments has contributed a strained relationship between the municipality and Indigenous communities. While Toronto's approach to addressing climate change places a strong emphasis on the importance of the inclusion of Indigenous peoples, their knowledge, and leadership, current consultations with Indigenous peoples have been insufficient, and there is a widespread call for deeper, ongoing collaboration, beyond one-time events or advisory committees. In addition, community consultation revealed that the experience of Indigenous communities is one where detailed answers to many common questions posed to communities related to climate change are not tangibly implemented but instead, re-routed back into a cycle of high-level re-engagement that request the same information seemingly in hopes that future answers will align with the current municipal structure.

Additionally, while the City recognizes shortcomings in previous engagements and expresses a future commitment to create pathways for Indigenous leadership in the climate conversation.

Thus, in order to improve Indigenous relations at the City of Toronto, encouraging both effective communication between City departments to understand the extent of the information that has been gifted as well as demonstrating active listening and willingness to act is crucial to advancing beyond a good intention.

The City's climate strategies, though advancing towards net-zero emissions, often do not align with broader Indigenous perspectives, which see the environment as inseparable from cultural and spiritual practices. Additionally, while the City's climate strategies advance, important goals like achieving net zero emissions, centering Indigenous worldviews necessitates an expansion to land- and water-based relationality.

The disconnect between conventional environmental policies and Indigenous knowledge is seen as a significant gap that needs addressing. The ways in which societies understand and respond to the climate crisis are shaped by deeply rooted worldviews. In Western traditions, climate action has largely been informed by a framework of control, prediction, and intervention. This approach tends to prioritize technological solutions, data-driven policy, and market-based mechanisms to manage

environmental harm. Western climate strategies often treat the environment as an external system that can be measured, regulated, and exploited for human benefit.

In contrast, Indigenous approaches to climate change are grounded in relationality, responsibility, and reciprocity. For many Indigenous nations, the land is not a resource but a relative, and climate is not a problem to be fixed but a reflection of imbalance within a broader web of relationships. Indigenous knowledge systems are holistic and place-based, gifted through generations of observation, storytelling, and spiritual connection to the land. These systems emphasize stewardship, seasonal cycles, and the interconnectedness of all living and non-living beings. Climate change, in this context, is not only an environmental disruption but a sign of deep social and spiritual disconnection—calling for a restoration of respectful relationships between people and the natural world. These two worldviews are not merely different ways of understanding the same problem; they represent fundamentally distinct orientations toward the Earth and responsibilities within it.

Indigenous knowledge offers not only alternative strategies for sustainability but a different foundation for imagining climate justice—one that is rooted in care, kinship, and the long-term well-being of all life. Understanding these differences is critical to any attempt to move beyond the limitations of current climate responses and toward more transformative and equitable solutions.

While municipal governments may recognize and seek solutions other than Western approaches to environmental management and specifically aim to incorporate Indigenous knowledges into modern climate action planning, historical injustices have made collaboration challenging. This is furthered by traditional governmental approaches to collaboration and engagement, with many attempts to “incorporate” or “embed” Indigenous knowledge which signal a removal of traditional knowledge from its cultural context and significance, treating Indigenous knowledge as a compliment to Western science, rather than as an independent and parallel discipline.

Learning is required to come ready to build relationships.

While the City has held multiple engagement sessions over the years aimed to include Indigenous voices in climate action planning, more often than not, the engagement becomes a repetitive cycle of discussion niches that explore the same questions and topics with little deviation. It is common for the resulting summary documentation to be difficult to access or unknown to other Divisions, limiting the potential for future engagement efforts to effectively address new issues and simultaneously overwhelming Indigenous communities with different variations of the same question.

Thus, in order to improve the productivity and effectiveness of Indigenous engagement events, understanding what available information can be used to inform future engagement efforts may move conversations forward in a more effective way that respects and values the time of participants. For ECF specifically, it could mean that a component of internal meetings allows Divisions an opportunity to share their approved engagement results and documentation with one another, thus reducing additional workload for individual employees and limiting unnecessary stress on Indigenous communities. Another possible solution to this problem would involve the creation of an interdivisional resource hub related to Indigenous engagement that would provide easy

access to engagement summaries, once again removing a common barrier to effective engagement within the City. Further, due to the nature of high-level engagement, it can be difficult for Indigenous engagement efforts to be effective in guiding City planning, as broad topic discussions limit the ability for Indigenous peoples to share and discuss their knowledge in an efficient and productive manner.

Cities such as Vancouver and Edmonton have been successful in modifying their approach to Indigenous inclusion by conducting focused engagement efforts that target specific problems and projects. This provides communities with a tangible problem that needs solving and allows for more in-depth conversations related to the necessary steps forward. Since individual engagement sessions are often relatively short, there is limited time for meaningful discussion, meaning that it is crucial for conducted discussions to carry purpose and intent.

In order to maximize engagement potential and applicability, it is vital for the City to conduct focused engagement efforts. This extends beyond policy document consultation, and should instead target specific actions, goals, and projects within overarching strategies and frameworks. While high-level engagement concerning the formation of these documents has its respective place, and should not be abandoned completely, a more focused approach to long-term engagement will allow guidance to be more tailored to specific City work and allow for a more holistic approach to Indigenous inclusion that extends beyond the duty to consult.

Relationship building remains the central and necessary focus.

It was emphasized that Indigenous engagement must be prioritized in the development of the Net Zero Strategy Action Plan (2026-2030). While it was observed that the ECF team has demonstrated a clear willingness to learn from and engage with Indigenous perspectives, it is also evident that a lack of established relationships and trust has led to hesitancy among Indigenous community members which can be traced back to the absence of long-standing, trust-based relationships.

To move forward meaningfully, it is essential to acknowledge that trust must be built from the ground up. The City cannot expect knowledge-sharing or collaboration without first demonstrating a sustained commitment to relationship-building that centres mutual respect, reciprocity, and cultural humility. The following recommendations offer a clear and actionable starting point for staff who are committed to building relationships with Indigenous communities.

Some of the recommendations which will demonstrate ECF's commitment to the relationship are:

- Regular participation in Indigenous Affairs Office (IAO) events, such as community ceremonies and feasts, to demonstrate respect and cultural awareness outside of formal project goals.
- A monthly commitment by net zero team members to participate in Indigenous learning opportunities—both internally facilitated and community-led.
- Reframing engagement efforts to centre and reflect community preferences and priorities.

- Explore and develop policies/procedures which more appropriately honour the time and advice being imparted to City staff from previous and ongoing engagements to address concerns about the repetitive and extractive nature of interactions between the City and Indigenous individuals and groups.

The City has shown a clear desire to strengthen its relationships with Indigenous communities; however, meaningful collaboration is restricted within the constraints of colonial municipal structures. The City's climate strategies, though advancing towards net-zero emissions, often do not directly relate to perspectives on lands, waters and the surrounding world. To move forward, City staff must continue to build internal capacity and learning so that engagements with Indigenous partners are informed, respectful and reciprocal. At this stage, relationship building remains the central and necessary focus.

3.5 What we heard: Engagement Summary

The Net Zero Strategy Action Plan (2026-2030) was informed by extensive engagement with internal stakeholders (City Divisions, Agencies and Corporations), external stakeholders (Climate Advisory Group) and the general public.

Internal Engagement

Throughout 2024 and 2025, staff from Divisions, Agencies and Corporations participated in sessions with ECF staff and the Climate Advisory Group, submitting actions for discussion and consideration. Additional discussions were organized, as necessary, to finalize the draft actions and seek review and approval from management. In addition, the Plan development process was presented to the Net Zero Climate Leadership Table, which is comprised of senior management at the City. Over 20 Divisions, Agencies and Corporations at the City of Toronto have responsibility over the actions in the Plan.

Engagement with Climate Advisory Group

The Climate Advisory Group (CAG) is an external body created and managed by the City to advise on the policies, programs and initiatives under development for implementing the TransformTO Net Zero Strategy. As part of the Plan development process, over 2024-2025 staff organized three workshops and seven sector-based sessions to consult the CAG on the draft actions under consideration for the plan.

The CAG is an external body convened and managed by the ECF. The CAG was established as part of the Accountability and Management Framework for the TransformTO Net Zero Strategy ([2022.IE29.10](#)) to advise the Executive Director, ECF on the policies, programs and initiatives under development for implementing the TransformTO Net Zero Strategy. The CAG has 25 members, made up of individuals and representatives from organizations, who are selected for a three-year term to act as advisors, champions and reviewers. A major part of the CAG's role to date has been to provide advice and input on the development of the Net Zero Strategy Action Plan (2026-2030).

Over the course of the workshops and sector-based working sessions, the CAG provided a considerable amount of input to staff, much of which has been included in the final Action Plan. For example:

CAG feedback: Include Community Engagement, Equity and Waste as critical steps in the Net Zero Strategy Action Plan.

City response: Waste has been added as a critical step. Community Engagement and Equity are included as “cross-cutting themes” that apply throughout the Plan.

CAG feedback: “Do less, better”. Focus on fewer, more effective policies rather than spreading efforts too thin. The plan should narrow down and concentrate on a smaller number of impactful policies rather than trying to do too much at once.

City response: City staff have worked to reduce the number of actions in the Plan to increase focus on the most impactful, net-new or enhanced initiatives.

CAG feedback: Use existing engagement infrastructure (such as community hubs) and people on the ground to communicate with communities that may not have trust in the City.

City response: The Plan includes a community-centred approach to climate action programming in existing community gathering spaces and hubs within areas of the city identified for investment.

The CAG workshop reports are available on the [City's website](#).

Public Consultation

From November 1, 2024, to January 31, 2025, over 2,838 people participated in the public consultation to inform the Net Zero Strategy Action Plan 2026-2030. Diverse engagement techniques were employed, including an online survey, two webinars, three group discussion sessions, 32 community-led group discussions, and 20 in-person events.

A total of 1,858 participants completed an online survey, 474 people attended one of the 32 group discussions held, 460 people attended the in-person events, 30 participants attended the two webinars, and 16 participants attended an orientation on hosting a group discussion. In-person events were held in community recreation centres, at community events, and at malls to engage residents who may not regularly attend a general session on the topic of climate change.

City staff are aware that respondents to climate-related surveys tend to be an over-representation of those who are climate-conscious and informed. In addition, the majority of respondents to the survey were homeowners (60 per cent, 1,100 people), who tend to have more control over their property to make changes, such as installing EV chargers and electric heat pumps.

Survey results:

The survey was divided into two sections. The first section focused on the impacts of the changing weather on Toronto residents and their families.

Predominant respondent themes related to the impacts of climate change include:

- The negative health impacts of climate change.
- The financial strain associated with adaptation and response to climate change.

With the changing weather, people are taking measures to adapt to climate change, with 73 per cent of respondents (1,329 people) saying that they are taking measures to adapt to the changing climate always, often, or sometimes, which included:

- Choosing not to go outside during summer heatwaves or plan their errands and other trips in cooler periods, such as the early morning or evening.
- Spending more money to adapt and prepare for extreme weather.

People are interested in doing more to act on climate change, though there are barriers to action. Respondents identified a range of barriers to greater climate action, ranging from lack of time to act, lack of supports, cost, motivation, and government distrust. Respondent feedback included:

- Some felt frustrated that climate action is not a priority for many politicians, while others felt that government resources should not be channeled to climate action.
- Some expressed a concern about emphasis on individual action, instead of other more impactful actors or systemic changes.
- Many respondents were renters or living in condominiums and indicated that they had little control over building operations.
- While some respondents consider cars to be essential for travel, many respondents desired more frequent and more reliable public transit service.
- Many participants identified financial strain or costs that are inaccessible to retrofit their home or to invest in an electric vehicle.
- Some respondents expressed concern due to the lack of adequate EV charging infrastructure.
- Many respondents identified concern about proposals to remove bike lanes and mentioned their cycling would decrease with decreased cycling infrastructure.
- Some respondents do not believe in climate change, are not concerned about climate change, or do not think it should be made a priority.

The second section of the survey focused on how residents are reducing greenhouse gas emissions in their day-to-day lives.

- Many participants responded that they already do low-cost actions in efforts to reduce their GHG emissions.
- A majority of respondents identified that they have no plans to convert their home/building to an electric heat pump, while a smaller amount have not considered it. A total of 19 per cent of survey respondents have already converted to an electric heat pump and 23 per cent have plans to convert to an electric heat pump within the next five years.
- Many respondents noted that they have already reduced personal vehicle use in favour of a sustainable mode of transportation (cycling, transportation, or walking), while a majority of respondents identified that they have no plans to invest in an EV at this time.

3.6 LENZ Modelling

Summary of LENZ modelling approach

To identify and quantify the most impactful strategies to meet net zero targets, the City uses a tool called the Local Emissions for Net Zero (LENZ) model.

The LENZ model works like an advanced calculator that uses energy consumption and projected future energy demand data from Toronto's buildings, transportation, and waste, and calculates how different climate actions would reduce emissions over time. It then selects the least-cost mix of technologies and sources of energy (e.g., fuels) that meet the energy demand under given policy constraints to the year 2050.

To do this, the LENZ model quantifies the emissions reductions potential of each action, compares them side by side, and prioritizes the most effective ones. In practical terms, modelling turns a long list of strategies into a more precise and ranked list so that City resources are focused on the most effective actions. If the existing actions fall short of reaching the net-zero goal, the model will quantify the “residual” or remaining emissions and prioritize the sectors that would be crucial to tackle these residual emissions.

The LENZ model plays a key role in informing the TransformTO Net Zero Strategy Action Plan (2026-2030). The model tested dozens of city, provincial, and federal-level climate actions, including building retrofits, Toronto Green Standards (TGS), public transit upgrades, greener vehicles, low-carbon fuels, carbon pricing, and a mandate for zero emission vehicles. It analyzed how each of these actions would affect the city's total emissions—both community-wide emissions and City corporate emissions—and how these actions might complement each other.

Based on the modelling results, climate actions found in the NZS Action Plan Package (2026-2030) have been ranked and prioritized, focusing on the greatest GHG reductions (actions related to buildings and transportation). Modelled impacts of policies by other levels of government are also included for comparison.

The modelled climate actions have been grouped into scenarios. The first scenario is the baseline, Business-as-Usual (BAU), which represents what would happen if the current trajectory continued and no further climate actions were taken. The package of City-led actions currently being implemented is called Business-as-Planned (BAP) scenario, which is a list of GHG reduction actions spanning from building retrofits, public transit improvements, greener vehicle fleets, active transportation measures, to renewable natural gas production and energy efficiency improvements in waste treatment.

Note that only actions that are quantifiable have been modelled. Actions that are programmatic or exploratory (e.g., “develop plans for low-carbon energy networks”, “promote community engagement”, “grow green industries”) cannot be assessed in LENZ without specific, numerical targets or implementation assumptions. Therefore, emission reductions from implementing the NZS Action Plan Package are expected to be greater than those modelled.

Most quantifiable actions in the NZS Action Plan Package (2026-2030) are a continuation of Business-as-Planned with the addition of two quantifiable actions—vehicle-for-hire and future versions of the Toronto Green Standard.

To understand how policies from other levels of government might impact Toronto, results from modelling a package of Federal and Provincial actions (including consumer carbon price, light-duty zero emission vehicle mandate, and Clean Electricity Regulation) are also presented and labelled Federal and Provincial (FAP) scenario in the graphs below. Details on the LENZ modelling methodology, the modelled actions, and results for the Net Zero Strategy (NZS) Action Plan Package (2026-2030) are available in the LENZ Modelling Report on the [City's website](#).

LENZ modelling results

Community-wide emissions

The results in Figure 3.6.1 (a) show that if no climate action is taken, the City's emissions would be 13.4 MtCO₂e (million tonnes of carbon dioxide equivalents) by 2040, around 16 per cent lower than they were in 2016. In this scenario, the residual emissions between the City's 2040 emissions and the net-zero goal would be 12.4 MtCO₂e.

BAP actions reduce emissions by an additional 1.0 MtCO₂e (about 8%) over BAU by 2040. The BAP scenario includes the following key policies: Toronto Green Standard Version 4 (TGS V4), TTC Green Bus Program, Renewable Natural Gas (RNG) from Dufferin and Disco organic waste processing facilities, public and active transportation policies, and Sustainable City Fleets Plan.

The NZS Action Plan Package reduces the emissions by an additional 0.1 MtCO₂e over BAP by adding two additional quantifiable actions to the BAP, thus the resulting emissions reduction from the NZS Action Plan Package is 1.1 MtCO₂e over BAU by 2040⁶.

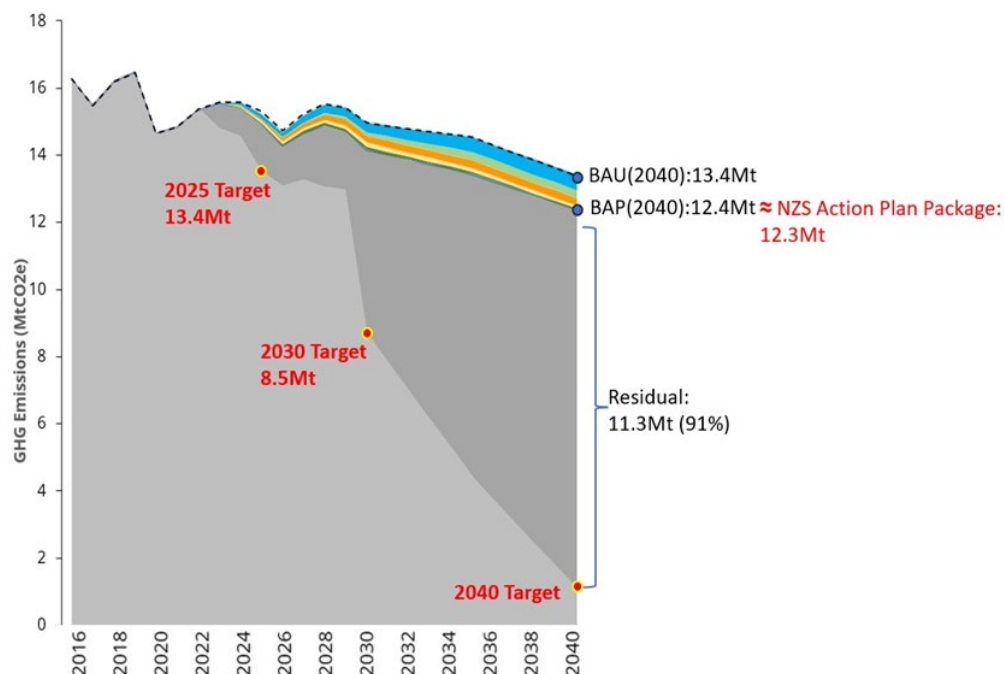
One of the biggest contributors to emissions reduction in the BAP scenario is TGS V4 policy. Modelling indicates that if TGS V4 continues to be applied to all new multi-unit residential, commercial and institutional buildings, based on projections, it has the potential to achieve a cumulative emissions reduction over 2023-2040 of 5.5 MtCO₂e, a 62 per cent reduction compared to the emissions from the new buildings in the BAU scenario. Future versions of TGS could unlock an additional 1 MtCO₂e reduction towards the TransformTO goals. Following changes proposed by the Province through Bill 17, City staff understand the Province is looking at potential legislative or other changes that could impact mandatory TGS requirements. However, there are no changes to the TGS at this time.

Figures 3.6.1 (a) and (b) show the impact of layering federal and provincial policies on top of City-led actions. The resulting difference is an additional reduction of 3.5 MtCO₂e

⁶ These projected emission reductions include reductions anticipated from the Toronto Green Standard version 4 and future versions. As noted in this report, City staff understand the province is looking at potential legislative or other changes that could impact mandatory TGS requirements. However, there are no changes to the TGS at this time.

emissions from federal and provincial policies. When federal and provincial policies are implemented, residual emissions decline from 11.3 MtCO₂e to 7.8 MTCO₂e in 2040.

(a)



(b)

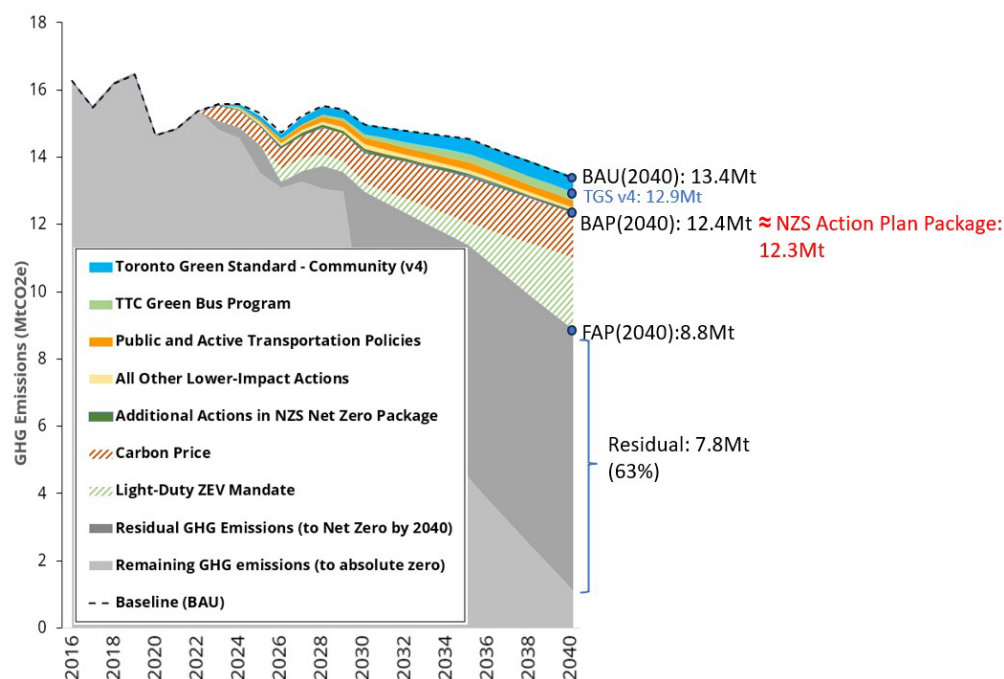


Figure 3.6.1. Community-wide wedge diagram illustrates the incremental GHG emissions reductions of modelled actions and the residual emissions from 2016 to 2040

for two cases. (a): BAP and the NZS Action Plan Package (2026-2030) without FAP policies (carbon price and ZEV mandate). (b): BAP and the NZS Action Plan Package (2026-2030) with FAP policies.

Below are explanations for each legend item found in Figure 3.6.1 (b):

- BAU: The dashed reference path showing what the current trajectory of community emissions would be without any additional actions or policies.
- Toronto Green Standards - Community (TGS V4): Raises energy performance criteria for new buildings: imposes greenhouse gas emissions intensity (GHGI) limits, total thermal energy demand intensity (TEDI), and total energy use intensity (TEUI). Each performance criterion has different performance tiers and is defined for different building archetypes.
- TTC Green Bus Program: Initiative aimed at significantly reducing GHG emissions and improving air quality in Toronto by electrifying the bus fleet. The program sets an ambitious goal of achieving 100 per cent zero-emission buses by 2037-2040.
- Public and Active Transportation Policies: Expands and improves transit service while accelerating walking and cycling infrastructure and programs. This package includes hybrid work for City employees, RapidTO, transit expansion, TTC 5-year service plan, densification of land-use, Bike Share and complete streets programs.
- All Other Lower-Impact Actions: A bundle of smaller corporate measures (e.g., additional efficiency upgrades for buildings and waste treatment plants) that when totaled achieve modest reductions.
- NZS Action Plan Package: BAP plus two quantifiable actions: Vehicles-for-hire⁷ (which is modelled as 100 per cent EV adoption for vehicles-for-hire by 2030) and future versions of TGS. Note that the NZS Plan Package includes many actions that reduce GHG emissions or enable reductions, but only quantifiable actions have been modelled. Emission reductions from implementing the Plan are expected to be greater than those modelled.
- Light-Duty ZEV Mandate: Federal initiative aimed at achieving 100 per cent light-duty ZEV sales target by 2035 for all new light-duty vehicles in Canada.
- Carbon Price: Applied the federal consumer carbon price to fuel use, encouraging fuel switching and efficiency.
- Residual GHG emissions (to net zero by 2040): The residual community emissions after all modeled actions, which represent the gap to reach the 2040 target.
- Remaining GHG emissions (to absolute zero): Emissions remaining to reach absolute zero: the remaining emissions between net zero targets and absolute zero in each year, shown for context beyond the net zero 2040.

⁷ Vehicles-for-hire include taxis, limousines and private transportation companies.

Corporate Emissions

For the City of Toronto's corporate emissions, the residual emissions are significantly smaller than at the community-level (Figure 3.6.2). Because the City directly controls its fleets and facilities, City-led policies have a greater proportional effect than at the community scale. The residual emissions wedge shows that, to close this gap, City corporate emissions would need to be lowered by an additional 25% from its 2040 BAU emissions in addition to all BAP and FAP actions.

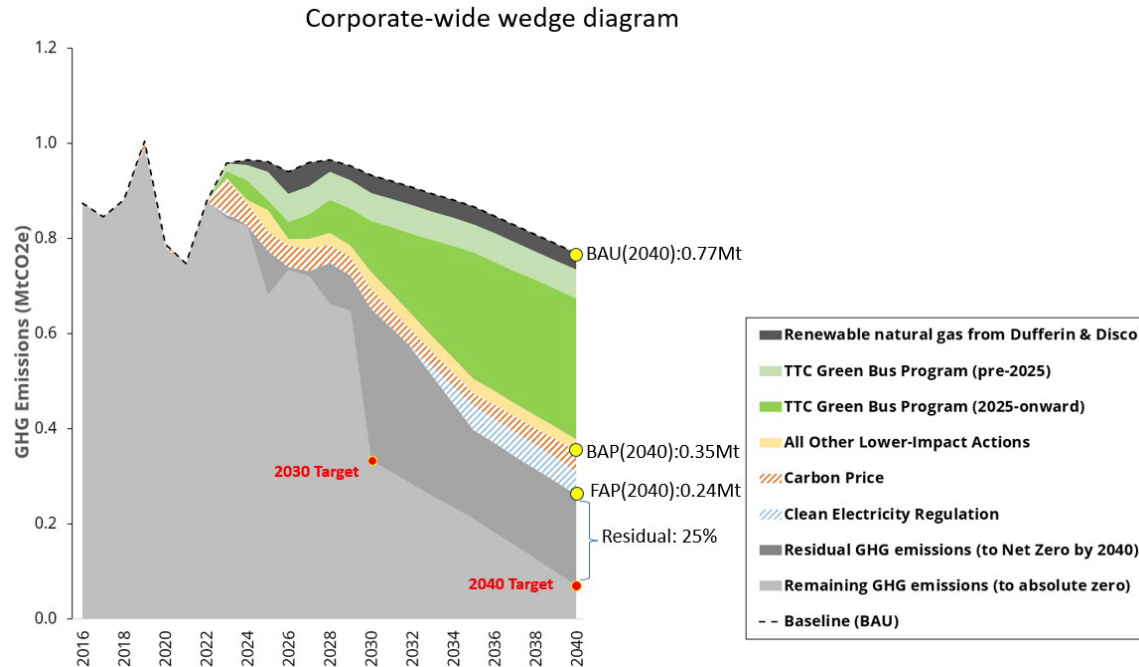


Figure 3.6.2. Corporate-wide wedge diagram illustrates the incremental impacts of modelled policies on City corporate GHG emissions.

Below are explanations for each legend item in the corporate-wide wedge diagram:

- BAU: The dashed reference path showing what the current trajectory of corporate emissions would be without any additional actions or policies.
- Renewable natural gas from Dufferin & Disco: Captures biogas from the Dufferin and Disco organics processing facilities, upgrades it to RNG, and uses it in City facilities/fleets, cutting methane and displacing fossil (natural) gas. Note that to avoid double-counting and confusion between RNG generation and RNG use, this wedge also includes the contribution from Net Zero Carbon Plan – RNG, which substitutes RNG for a portion of the City's fossil natural gas consumption across corporate buildings to lower direct combustion emissions.
- TTC Green Bus Program: Initiative aimed at significantly reducing GHG emissions and improving air quality in Toronto by electrifying the bus fleet. The program sets an ambitious goal of achieving 100 per cent zero-emission buses by 2037-2040.

- **All Other Lower-Impact Actions:** A bundle of smaller corporate measures (e.g., efficiency upgrades for corporate buildings and waste treatment plants, active transportation promotion) that together amount to modest reductions.
- **Carbon Price:** Applied the federal carbon price to corporate fuel and electricity use, encouraging fuel switching and efficiency.
- **Clean Electricity Regulation:** Federal and Provincial policy pathways that lower the grid emission factor by driving cleaner Ontario electricity (e.g., nuclear, hydro, and other low-carbon generation), reducing emissions from corporate electricity use.
- **Residual GHG emissions (to net zero by 2040):** The residual corporate emissions after all modeled actions, which represent the gap to reach the 2040 target.
- **Remaining GHG emissions (to absolute zero):** Emissions remaining to reach absolute zero: the remaining emissions between net zero targets and absolute zero in each year, shown for context beyond the net zero 2040

Analysis of Residual Emissions

The sectors contributing most to the residual emissions are represented in Figure 3.6.3.

Primary sources of residual emissions are residential buildings, commercial buildings, and passenger transportation. Although no specific actions are being proposed in this report to address these residual emissions, they outline where new or enhanced actions must be taken by stakeholders such as City Divisions, TTC, utilities, the provincial and federal government, private sector, and residents to reach the 2040 target.

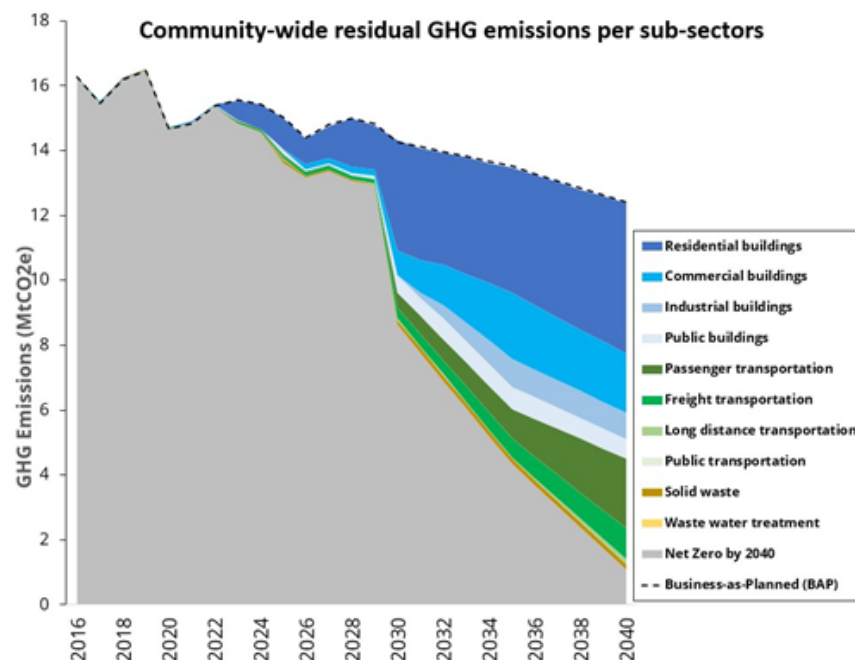


Figure 3.6.3. Community-wide wedge diagram for residual GHG emissions. This diagram provides details on the darker grey wedge found in Figure 3.6.1 (a), divided into sub-sectors. Primary sources of residual emissions are residential buildings, commercial buildings, and passenger transportation.

Summary of modelling – Top 10 most effective climate actions

The wedge diagrams show projected annual emission reductions of climate actions if community- and the corporate-wide implementation proceeds. However, the most effective climate actions are the ones that reduce the most cumulative emissions from 2023 to 2040. Table 3.6.1 shows the top 10 most impactful modelled climate actions that reduce GHG emissions. The amount of cumulative emissions each action reduces is shown in parentheses.

Table 3.6.1. List of top GHG reduction drivers ranked based on modelling results.

Top 10 Most Effective	Community Wide (Cumulative GHG reduction 2023-2040, MtCO₂e)	Corporate Wide (Cumulative GHG reduction 2023-2040, MtCO₂e)
#1	LD ZEV Mandate (18.1)	TTC Green Bus Program (3.9)
#2	Carbon Price* (11.7)	Carbon Price* (0.71)
#3	Toronto Green Standard – v4 (5.5)	Renewable natural gas from Dufferin & Disco (0.5)
#4	TTC Green Bus Program (3.9)	Sustainable City Fleets Plan (0.25)
#5	Public and Active Transportation Policies*** (3.0)	Clean Electricity Regulation* (0.24)
#6	Future versions of Toronto Green Standard (1.0)**	Heat recovery from fluidized bed incinerator and other upgrades (0.16)
#7	Renewable natural gas from Dufferin & Disco (0.5)	Wastewater Treatment - Pelletizer facility (0.10)
#8	Zero emission vehicle-for-hire (0.3)	Net Zero Carbon Plan - Efficiency retrofits (0.05)
#9	Sustainable City Fleets Plan (0.3)	Wastewater Treatment - Service rehab and upgrades (0.04)
#10	Net Zero Carbon Plan - Efficiency retrofits (0.1)	Public and Active Transportation Policies*** (0.04)

* Policies that are no longer available or which are shifting in certainty.

** Future versions of TGS savings are in addition to the savings of TGS V4.

*** Public and Active Transportation Policies include hybrid work for City employees, RapidTO, Transit expansion, TTC 5-year Service Plan, densification of land-use, Bike Share, Complete Streets.

Key insights from modelling

Community-wide:

- With only City-led actions in place, the modelled Toronto's community-wide annual emissions fall by about eight per cent by 2040 relative to BAU. That is meaningful progress, but leaves an 11.3 MT gap to the net zero 2040 target (Figure 3.6.1 (a)).
- The main sources of community-wide residual emissions, ranked in order, are: residential buildings, passenger transportation, commercial buildings, and freight transportation (Figure 3.6.3).
- Buildings dominate the shortfall (71 per cent of the residual emissions in 2040), mainly due to natural gas use for space and water heating in residential and commercial buildings.
- Toronto Green Standard is important for reducing building emissions by tightening new-build performance while complementing deep retrofits of existing building stock.
- Transportation is the next largest contributor (27 per cent of the 2040 residual emissions), driven by gasoline and diesel use in passenger vehicles and freight.
- TTC Green Bus Program (fleet electrification) and active transportation and mode-shift measures are the most impactful City levers for reducing passenger-vehicle emissions.

Corporate-wide:

City corporate emissions were 0.88 MtCO₂e in 2023; under BAU, corporate emissions are projected to be 0.77 MtCO₂e by 2040. With the BAP scenario fully implemented they fall to 0.35 MtCO₂e, and with FAP policies layered on they drop further to 0.24 MtCO₂e by 2040, leaving about a 25 per cent residual gap to the net zero target (Figure 3.6.2).

- For City operations, the path to net zero by 2040 looks promising. City-led policies have a higher proportional impact than they do on the community scale because the City directly controls its vehicle fleets and facilities. The TTC Green Bus Program is the single largest contributor accounting for about 70 per cent of all corporate reductions.
- The largest source of residual emissions at the corporate level is in public buildings (operated by CREM and TCHC). That makes building-focused policies, especially TGS compliance for new buildings, crucial for closing the remaining corporate gap alongside the green fleet.

Role of FAP policies:

The modelling confirms that FAP policies are important for meeting Toronto's net zero by 2040 target, particularly through carbon prices, the ZEV mandates, and electricity grid decarbonization.

Figure 3.6.4 shows that without FAP policies, especially ZEV mandates, the 2040 residual gap would be 11.3 MtCO₂e even after all City-led actions under the Net Zero Strategy Action Plan Package (BAP and two additional actions) are implemented.

However, at the community level, the light-duty ZEV mandate is the single most impactful policy in terms of GHG reduction potential for transportation. The ZEV mandate could reduce residual emissions by an additional 2.3 MtCO₂e in 2040.

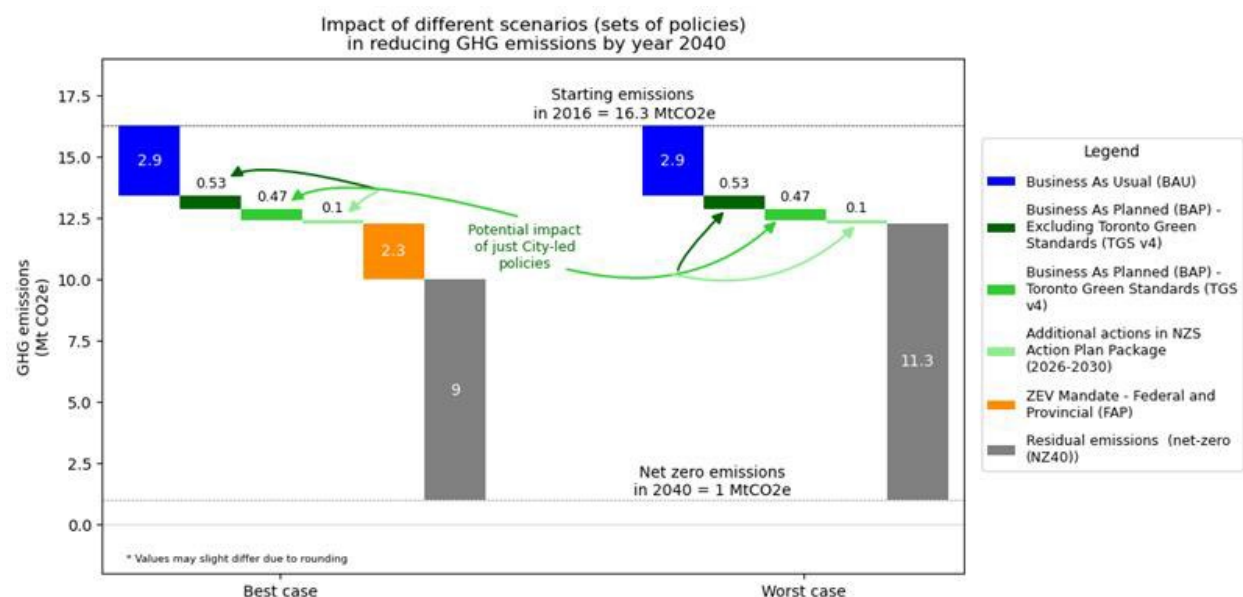


Figure 3.6.4. Waterfall diagram shows contribution of different scenarios/policies on community-wide GHG emissions in year 2040

Note: The bar values may differ from other graphs due to rounding errors and differences in the modelling assumptions.

At the corporate level, federal-provincial support still plays a meaningful role. When carbon pricing and Clean Electricity Regulation are added to the BAP corporate package, they could reduce the remaining 2040 emissions gap by about 14 per cent (Figure 3.6.2). This mainly comes from cleaner grid electricity for City facilities and carbon-price signals that encourage fuel switching and operational efficiency in CREM and TCHC buildings. While this incremental gain is smaller than the community-wide impact of FAP policies, it still accelerates progress in City operations and lessens the burden on City-led measures needed to close the residual gap.

In short, current City policies under the Net Zero Strategy Action Plan Package (2026-2030) are necessary but not sufficient. Meeting net zero by 2040 requires sustained, predictable City leadership in implementing more ambitious policies for buildings and transportation as well as federal and provincial leadership, especially through ZEV mandates.

Conclusions and recommendations from modelling

The LENZ modelling results provide critical insights into the progress and challenges of achieving Toronto's net zero by 2040 target. Under the Net Zero Strategy Action Plan

Package (2026-2030), which includes the BAP scenario and two additional quantifiable actions, Toronto's annual GHG emissions are projected to decline by approximately eight per cent (1.1 MtCO₂e) compared to the BAU scenario by 2040. However, a significant gap remains between the BAP emissions trajectory and the level required to reach the City's 2040 net zero target. This underscores the urgency for additional measures and systemic shifts, especially in the buildings and transportation sectors, which dominate both the city's emissions profile and the residual emissions in the net zero scenario.

FAP policies face significant implementation uncertainty, the modelling shows they are critical to reaching net zero 2040. As modelled, the FAP scenario could contribute roughly an additional reduction of 3.5 MtCO₂e by that year.

The emissions gap at the community level is concentrated primarily in the buildings sector, and the model affirms that buildings should be targeted for further reduction potential. On transportation, the analysis confirms a "both/and" strategy: electrify TTC buses rapidly, expand active transportation and transit use to cut vehicle use, and support passenger-vehicle electrification citywide in step with federal ZEV mandates. These are the actions that move the biggest wedges in the model and are therefore prioritized in the near-term NZS Action Plan Package (2026-2030).

From a City of Toronto corporate perspective, the path to net zero by 2040 is more positive. Policy, dedicated budget, and operational commitments made prior to and during the 2021 to 2025 period make corporate emissions targets more achievable. Key City policies like the TTC Green Bus program will play a material role in achieving net zero at corporate level.

The modelling also confirms that net zero by 2040 is not realistically achievable without coordinated support from higher levels of government, particularly through carbon pricing, ZEV mandate, and electricity grid decarbonization.

4. Accountability and Progress Tracking

The City undertakes a multi-pronged approach to foster ongoing accountability and progress tracking of climate goals, including continued implementation of the Net Zero Strategy Accountability and Management Framework, data collection and tracking, and reporting on Key Performance Indicators (KPIs).

4.1 Adaptive Management and Accountability

An Accountability and Management Framework to guide implementation of the NZS was adopted by City Council in 2022 (report [2022.IE29.10](#)). Within this framework three advisory and oversight bodies were established:

Climate Advisory Group (CAG): The CAG is composed of 25 community members, some of whom represent organizations and some who participate as individuals. This Group provides advice and peer review from Toronto's diverse community to inform implementation of the Net Zero Strategy and helps to mobilize sectors and communities. Annual reports on the City's website summarize CAG activities and advice.

Net Zero Climate Leadership Table (NZCLT): The NZCLT is an internal table made up of senior management from City of Toronto Divisions, Agencies and Corporations. This Table provides leadership and coordination on implementing climate action cross-corporately. Its mandate includes leadership on the Net Zero Strategy's emission-reduction targets community-wide and for City operations, as well as climate resilience and related issues.

Joint TransformTO Implementation Committee (JTIC): The JTIC is composed of City management staff and representatives of the labour and trade unions. This table provides advice and problem-solving to improve environmental performance and facilitate the energy transition within the City's operations, namely City buildings and facilities and City vehicles and fuels.

4.1.1 Annual Net Zero Progress Reporting

The City reviews, tracks and reports annually on progress made towards achieving net zero. In 2026, the City will assess and report on progress achieved, and lessons learned over the first NZS Short-term Implementation Plan (2022-25). In 2031 the City will assess and report on progress achieved over the course of this Net Zero Strategy Action Plan (2026-2030), with higher-level annual reporting leading up to that time. Annual reports for previous years are available on the City's TransformTO website (toronto.ca/TransformTO).

4.1.2 Climate Change Goals and Governance By-law Reporting

The Climate Change Goals and Governance by-law, Municipal Code Chapter 669, requires the submission of a "Progress Report" midway through the 2026-2030 emission budget period and a retrospective "Achievement Report" after the end of the

period. The same structure is repeated for the 2031-35 and 2036-40 emission budget periods (Figure 4.1.1).

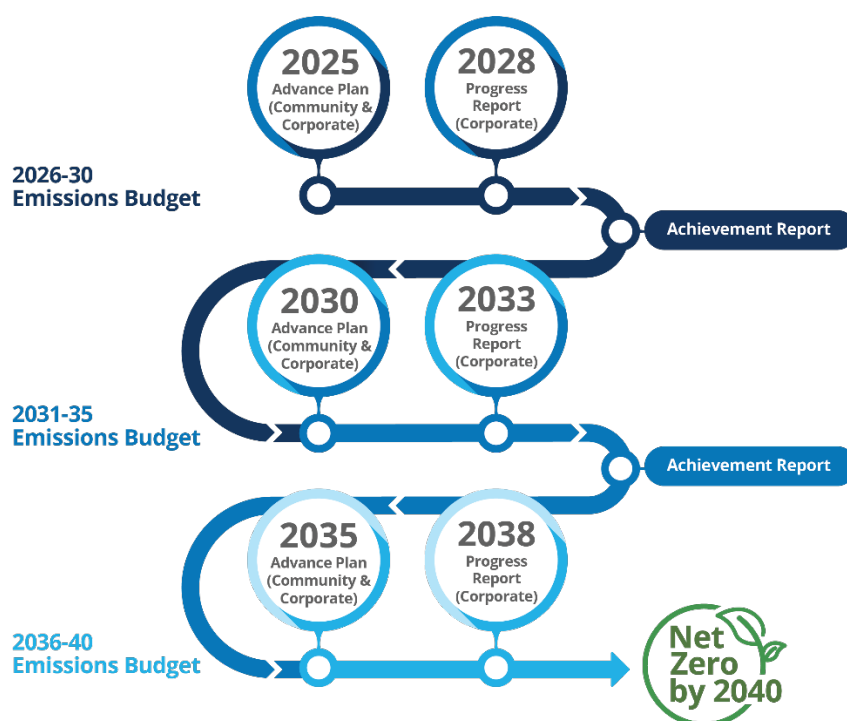


Figure 4.1.1. Summary of reporting requirements in Municipal Code Chapter 669, Climate Change Goals and Governance.

The Progress Report is meant to be a deep dive into progress on reducing emissions from Corporate Transportation and Corporate Buildings sources. Efforts proposed by the buildings and transportation sectors can be showcased and key dependencies noted. Importantly, the Progress Report must project whether Corporate Transportation and Corporate Buildings emissions will exceed their respective 2026-2030 emissions budgets and, if so, identify additional actions that could potentially close the gap. Based on City Council direction the City reports annually on progress in implementing the NZS Action Plan (also known as the community-wide Advanced Plans).

The Achievement Report is meant to be a retrospective appraisal of the actions taken during the preceding emission budget period, assessing what was achieved.

For information on other elements of Municipal Code Chapter 669, such as establishing and reporting on the Carbon Budget, Emissions Budget, Advanced Plans and Accountability Plans please see the Carbon Budget section of this report (Action 13), or the by-law itself ([Municipal Code Chapter 669](#)).

4.2 Key Performance Indicators: GHG reduction

Sector-Based Emissions Inventory (SBEI) Annual Accounting of GHGs

The annual accounting and reporting of Toronto's greenhouse gas emissions is achieved through the SBEI process. As a Global Covenant of Mayors signatory, the City of Toronto has been disclosing its GHG emissions inventory and its climate mitigation and adaptation actions annually to the Carbon Disclosure Project (CDP) in order to share Toronto's progress and benchmark against other cities facing similar challenges.

For the fifth year in a row, the City of Toronto was recognized on the 2023 Carbon Disclosure Project (CDP) Cities "A" List for its leadership and transparency on climate action. Toronto was one of 119 cities globally to receive an "A" rating. The City continues to dedicate resources to the accounting, tracking and reporting of emissions for the buildings, transportation and waste sectors, for both the City corporate and community-wide emissions. Given Toronto's long history of tracking progress in this manner, there is a legacy of data and trends against which to compare year-over-year GHG emissions results. The SBEI will be the main KPI that Toronto will use to track its progress related to GHG emissions for this Action Plan, which will include comparison against relevant targets.

Tracking adoption of GHG-reduction technologies

In the spring of 2024, Council directed staff to develop a plan to collect data for tracking the installation of clean technologies, such as heat pumps, renewable energy installations, and electric vehicle chargers within the City of Toronto, and to establish targets for the installation of clean technologies and create a tool to visualize progress towards these targets, as appropriate ([2024.IE12.3](#), Decision Part 6).

Below is a snapshot of clean technology adoption compiled in 2025 with currently available data (Table 4.2.1).

Table 4.2.1. Overview of clean technology adoption.

Clean Technology	2025 Value ¹
Heat Pumps - New Buildings (Number of City of Toronto corporate facilities with heat pumps installed)	14 ²
Heat Pumps - New Buildings (Number of buildings in the community with heat pumps installed)	145 ²
Heat Pumps - Existing Buildings (Number of City of Toronto corporate facilities with air source/ground source heat pumps)	189 ³
Heat Pumps - Existing Buildings (Number of buildings in the community with heat pumps installed)	N/A ⁴

Renewable Energy Installations (For City of Toronto Corporate use)	~100 (9 MW total capacity) ⁵
Renewable Energy Installations (For community use)	~2,700 (~120 MW total capacity) ⁵
EV Chargers (For City of Toronto Corporate use)	394
Publicly-Accessible EV Chargers (For community use)	3,111 total ports ⁶ (2,881 level 2 and 230 level 3 chargers)
EVs (City Fleet)	552 ⁷
EVs (Public)	41,649 ⁸

1. As of October 2025, unless otherwise noted.

2. Source: Toronto Green Standard Energy Model Database.

3. Source: Corporate Real Estate Management (CREM). This includes 13 ground-source heat pumps and 33 air-source heat pumps. It also includes 143 split systems that are used for air conditioning and may be used for heating.

4. Reliable data not available at this time.

5. Source: Toronto Hydro Climate Action 2024 Year End Status Report.

6. Source: NRCAN (October 2025).

7. The City's zero-emission vehicle (ZEV) fleet includes bikes (110), EVs (399) and plug-in hybrid electric vehicles (PHEVs) (43). Source: City of Toronto Fleet Services Division.

8. Source: Ministry of Transportation (October 2025).

City staff monitor trends in adoption of these clean technologies by compiling estimates repeatedly over time. However, as shown in the table above in the category “Heat Pumps – Existing Buildings”, reliable data on heat pump adoption in existing buildings in the community are not currently available, as members of the community can install heat pumps without informing the City. Staff will monitor data availability and begin to report on this important parameter if data become available.

Interim GHG-reduction targets from the TransformTO Net Zero Strategy (2021)

The TransformTO Net Zero Strategy set out a series of interim targets leading up to the target of net zero GHG emissions by 2040. The community-wide and corporate lead-by-example targets can be used as performance indicators across all sectors. The interim targets are listed, below.

Community-wide:

2030 overall target:

- 65 per cent reduction in community-wide greenhouse gas emissions by 2030 from 1990 levels.

2030 targets by sector:

- 100 per cent of new buildings are designed and built to be near zero greenhouse gas emissions.
- Greenhouse gas emissions from existing buildings are cut in half, from 2008 levels.
- 50 per cent of community-wide energy comes from renewable or low-carbon sources.
- 25 per cent of commercial and industrial floor area is connected to low carbon thermal energy sources.
- 75 per cent of school/work trips under 5km are walked, biked or by transit.
- 30 per cent of registered vehicles in Toronto are electric.
- Identify pathways to more sustainable consumption in City of Toronto operations and in Toronto's economy.
- 70 per cent residential waste diversion from the City of Toronto's Integrated Waste Management System.

Corporate City of Toronto lead-by-example:

2030 overall target:

- City of Toronto corporate greenhouse gas emissions are reduced by 65 per cent over 2008 base year.

2030 targets by sector:

- All City Agency, Corporation and Division-owned new developments are designed and constructed to applicable Toronto Green Standard Version 4 standard achieving zero carbon emissions, beginning in 2022.
- Greenhouse gas emissions from City-owned buildings are reduced by 60 per cent from 2008 levels; by 2040, City-owned buildings reach net zero greenhouse gas emissions.
- All City-owned facilities have achieved zero waste.
- Generate and utilize 1.5 Million Gigajoules of energy from biogas.
- Approximately 107,700 tonnes CO₂e per year are reduced through Organics Processing with Renewable Energy and Landfill Gas Utilization.
- 50 per cent of the City-owned fleet is transitioned to zero-emissions vehicles.
- 50 per cent of the TTC bus fleet is zero-emissions.
- Greenhouse gas emissions from food the City of Toronto procures are reduced by 25 per cent.

Community-wide 2025 target:

- 45 per cent reduction in community-wide greenhouse gas emissions by 2025 from 1990 levels.

4.3 Key Performance Indicators: Climate Equity

4.3.1 Climate Equity

Climate change disproportionately impacts certain groups of people and can act as a threat multiplier as it exacerbates existing social, political and economic inequalities. When approached with an equity lens, climate action can lead to more equitable outcomes. Climate equity focuses on the unique experiences and longstanding barriers facing equity-deserving groups, and climate policy and programs can close gaps with targeted levels of support, as per individuals' and communities' unique experiences. Everyone should benefit from a healthy environment and have access to the resources and opportunities they need to protect themselves from the impacts of climate change.

Centring Equity in the Plan

Net zero actions have the potential to drive benefits for the community, such as improved public health, community and environmental well-being and economic development, while working towards priorities such as social equity, improved housing quality and access, community safety, reduced traffic congestion and managing the rising costs of living.

Equity aspects of the City's climate actions are highlighted throughout this Plan as a cross-cutting issue. This includes, where possible, planning climate actions in such a way that they address existing inequities, mitigating unintended equity impacts of the planned climate actions, and clarifying how actions can help create a more equitable city.

This Plan has taken an approach that puts equity at the front of the conversation to maximize a shared benefit, or co-benefits, associated with climate action. For instance, the Plan takes an equitable approach to support residents to improve housing quality and resilience through energy efficient upgrades. Investing in energy efficient upgrades improves a building's ability to withstand climate events and power outages while also reducing energy consumption. Support to reduce barriers includes City programs, such as the Home Energy Loan Program (HELP) and BetterHomesTO, which improve access through improved information and personalized support, as well as efforts focused on engaging low to moderate income households.

Public transportation is essential for connecting people to work, school and services. Public transit improvements benefit people regardless of their socioeconomic background, physical abilities or location. The Plan includes transit service and infrastructure improvements and enhanced accessibility for people with disabilities, strollers and other accessibility barriers. These improvements will increase access to public transit and provide an improved experience to those that rely on public transit. The Plan also includes the continued upgrading and expansion of safe and comfortable cycling routes that are suitable for all ages and abilities.

As described in the Plan, climate engagement activities have been re-oriented to focus on equity considerations and the priorities of equity-deserving groups. This includes focusing more engagement activities on areas of the city identified for investment, and rooting engagement and climate action in the issues of community interest or concern.

A net zero future also includes continued growth of Toronto's green industries and workforce training and development, with a focus on creating local job opportunities for equity-deserving groups.

Equity is both a process and an outcome. The approach to equity in this plan is not without challenges. A continued commitment to infusing equity in climate action is a necessary measure to reaching net zero.

The Social Dimensions of Climate Change

Locally, the impacts of climate change will be felt by everyone, but some will feel the impacts more than others. Climate change is a threat multiplier as it exacerbates existing social, economic and health vulnerabilities.

Growing inequities are often rooted in historical and existing inequalities. This may include persons with low incomes, Indigenous peoples, immigrants and refugees, gender diverse communities, women, seniors, children, persons with disabilities and racialized groups. Those that experience the burdens of climate change most extensively tend to be those communities least responsible for climate change, while the highest contributors to climate change often possess the resources and capacity to protect themselves and adapt to extreme heat, flooding and other extreme weather.

This Plan seeks to integrate equity into decision-making processes to ensure the benefits of climate action are experienced by all Toronto residents. Through equity-focused actions, this Plan seeks to protect groups that are most susceptible to the changing climate and to build resilience through improved housing quality, improved travel options, equitable distribution of trees, the creation of local jobs and more equitable approaches to program development and administration.

Equity and Equality

Equality seeks to treat everyone the same, while equity recognizes the unique needs of people based on context of need, opportunity, circumstances and historical and systemic inequalities. When designing and implementing programs, policies, and services, measures must be taken to ensure that residents are able to access programs or services more equitably. This can include considering socio-economic and historical factors which may serve as barriers to access, as well as the highly localized nature of climate risks such as extreme heat, flooding and air pollution.

Jurisdictional Scan on Climate Equity

City staff completed a jurisdictional scan to inform the City's approach to equity in the Plan. Addressing climate equity begins by recognizing inequities and identifying opportunities for more equitable outcomes. Typically, these approaches include equity-focused reports, plans, advisory groups, data portals and mapping tools, frameworks and developing equity indicators.

Some approaches to understanding climate equity highlight neighbourhood-level disparities that consider social, economic, health and environmental factors. Mapping tools can help visualize how environmental hazards and risks intersect with health impacts on disadvantaged communities. Other cities, including Calgary, Chicago, New

York, Oakland and San Francisco have equity mapping tools that identify and seek to better understand the unique needs of equity-deserving neighbourhoods.

Similarly, Vancouver, Cincinnati and Oakland are developing, or have developed, equity indicators to measure and track progress on inclusivity and equity in climate actions. Indicators provide guidance on how to track, monitor and measure progress on actions. Included within this Net Zero Strategy Action Plan is an initial set of climate equity indicators that have been developed to inform inclusive and responsive planning and service delivery.

Developing Equitable Approaches

A set of climate equity indicators has been developed to evaluate whether equity priorities are being addressed through climate action over the long term. An initial large set of possible indicators was pared down to the current list based on a number of criteria. Indicators were prioritized for inclusion if they targeted housing and transportation, which are the largest sources of GHGs in Toronto. Those were intersected with the conflicts and challenges that people in vulnerable communities may encounter, such as housing affordability and reliable travel options to reach work, school and services. Another lens was applied to determine where the City has control and influence. The indicators in which the City's own policies and programs could act as levers to bring about more equitable outcomes were among those selected.

4.3.2 Climate Equity Indicators

For the first time, a set of climate equity indicators has been developed to more realistically evaluate whether equity priorities are being addressed through climate action to reduce GHG emissions (Table 4.3.1). As a result, the indicators that are included below are specific and articulated so that the City is able to effect change favourable to equity-deserving populations. The climate equity indicators focus on the nexus between the largest sources of emissions (buildings and transportation) and the populations who currently access City services related to these sectors.

The indicators will be tracked on an annual basis where possible. However, given the scale of the systems (e.g. transit) that are continually evolving to improve equity outcomes, and the planning timelines required to make changes to these systems, positive progress on some of the climate equity indicators is expected to be seen on a longer timescale, such as up to ten years.

This first set of climate equity indicators is intended to provide an initial picture in broad strokes, and the intent is to update the set of indicators over time and as data and resources allow. The initial climate equity indicators have limitations, in that they do not convey variations in experience across geographic locations, demographics and the diverse lived experience of Toronto residents. For example, the Home Energy Loan Program (HELP) indicator only includes those who own properties, not residents who rent their homes. The transit-related indicator provides generalized information but cannot convey the experiences of individual public transit riders, which can vary based on factors such as commute length, time of day of travel, proximity to higher-order transit, physical abilities, travel with dependents or necessities, or English language proficiency.

These climate equity indicators will be used to inform approaches to program and policy design to further enable emissions reduction. Through its climate resilience and adaptation work, the City also proposes to develop KPIs to monitor progress on resilience; these indicators would be different from those shown below, but complementary.

Table 4.3.1. Climate equity indicators.

	Indicator	Equity Considerations
Buildings		
1	Number of households with a member with a disability that utilized the Home Energy Loan Program (HELP).	Households including a person with a disability face unique accessibility challenges that may limit participation in existing energy retrofit programs. The enhanced HELP program will ensure program materials, application processes and retrofit services address barriers related to mobility, communication and affordability. The program will coordinate with health and social services to identify and support eligible households, engage with existing disability-serving organizations and networks and expand eligible measures beyond energy efficiency and decarbonization to include home health, accessibility and safety upgrades.
2	Number of low- to moderate-income households that utilized the Home Energy Loan Program (HELP).	Low- to moderate-income ¹ households are disproportionately impacted by high energy cost burdens, indicated by the percentage of household income spent on energy bills. These households face considerable cost barriers to undertaking energy efficiency improvements and home repairs. The enhanced HELP program will maximize energy savings and affordability and provide targeted support for low- to moderate-income households. The expansion of eligible measures to include non-energy retrofits and resiliency projects alongside energy efficiency and decarbonization retrofits will help meet immediate household needs, lower monthly energy costs and deliver lasting benefits for eligible households.
Transportation		

3	Number of kilometres of surface transit priority lanes (measured as total kilometres on a cumulative basis).	Public transportation provides access to jobs, education and essential services while reducing traffic congestion and pollution, and promotes social equity. Surface transit priority lanes are faster to install than subway and light rail lines. Surface transit priority lanes can improve service speed and reliability, reducing delays and making transit travel times shorter.
4	Percentage of the population living within 400 metres of surface transit priority lanes.	Improving resident proximity from their residence to surface transit priority lanes will improve the transit rider experience. Surface transit priority lanes improve the trip time of buses and streetcars, making it more practical to move efficiently in the city. This indicator takes a network approach, as the enjoyed benefits extend beyond the location of the priority lane.
5	Percentage of the population living within 800 metres of a higher order transit station (subway or light rail transit (LRT) station and/or GO Rail station).	Increasing access to rapid transit stations benefits people regardless of their socioeconomic background, physical abilities or location. This indicator takes a network approach, as the enjoyed benefits extend beyond the location of the station.
6	Percentage of the population living within 250 metres of a safe and comfortable bikeway that invites ridership from people of all ages and abilities.	Cycling infrastructure designed for all ages and abilities provides a safe, low-cost, zero emission travel option. Well-designed bikeways empower people of all ages and abilities to cycle for any reason or trip. An expanded network of safe cycling routes near people's homes helps to address inequitable access to transportation and its cost and helps to improve access to employment, education and services.
Urban Forestry		
7	Percentage of trees planted annually (by neighbourhood).	Not all neighbourhoods have the same tree coverage, and communities have different needs and priorities when it comes to trees. Trees provide benefits, such as shade and cooling, improved air quality, and stormwater management, and can lead to improved mental and physical health. The Tree Equity approach addresses the inequitable distribution of the urban forest. This indicator is based on the City's 158 social planning neighbourhoods.

¹ Low to moderate income is not specifically defined in Ontario. Low-income thresholds for energy programs in the province use the same criteria, before-tax household income as referenced on line 26000 of the most recent income tax return:

Number of people in the home	Before-tax household income
1	\$47,090
2	\$66,595
3	\$81,561
4	\$94,179
5	\$105,295
6	\$115,345
7+	\$124,586

OR, applicant receives assistance from one of these government programs:

- Ontario Works
- Ontario Disability Support Program
- Low Income Energy Assistance Program (LEAP)
- Guaranteed Income Supplement
- Allowance for Seniors
- Allowance for Survivors
- Healthy Smiles
- Ontario Electricity Support Program
- Energy Affordability Program (EAP), formerly known as the Home Assistance Program (HAP)

Source: Independent Electricity System Operator.

5. Conclusion and Call to Action

In some areas, the City continues to demonstrate leadership among global municipalities; in other areas the City faces significant policy and implementation challenges. Key emission sources community-wide, such as fossil (natural) gas in buildings, and gasoline and diesel fuel in vehicles, require an expansion of approaches.

The City has direct control over six per cent of GHG emissions community-wide in Toronto and has demonstrated strong leadership in its corporate investments and operations. Addressing the remaining 95 per cent of emissions, and achieving the TransformTO vision of an equitable, healthy, prosperous and resilient Toronto, will require collaborative approaches from the City, other orders of government, the private sector and individuals.

Financial impact

In 2021, when City Council endorsed the NZS, 2040 net zero GHG-reduction target and Short-term Implementation Plan (2022-2025), the report's Financial Impact Statement indicated, "significant future budget impacts are expected from affected divisions as the implementation of existing programs continue or are accelerated and as new actions are initiated" (2021.IE26.16).

The Carbon Budget Prioritization process, adopted by City Council in 2023 as part of the Carbon Budget Accountability framework, was implemented in 2024 for the 2025 budget cycle. This process focuses on the costs of new and enhanced climate actions and integrates their prioritization into the City's budget planning. For the 2025 Budget, staff prioritized 31 new or enhanced GHG reduction initiatives, projected to reduce emissions by 65,858 t CO₂e in 2025 and up to 244,615 t CO₂e annually upon full implementation. The City allocated \$1.95 billion in its 2025 Capital Budget and \$13.87 billion in the 10-year Capital Plan (2025–2034), along with \$78.47 million in the 2025 Operating Budget, achieving an estimated reduction of 160,725 t CO₂e.

Although funding is currently allocated to reducing the City's corporate emissions, existing capital plans across City's Divisions, Agencies and Corporations are insufficient to fully implement the current Plan and future Action Plans needed to achieve the 2040 net-zero target. Additional funding will be required, along with consideration of funding mechanisms and trade-offs. For example, prioritizing net-zero initiatives may necessitate reallocating funds from other purposes. Implementation costs for measures outlined in the Plan will be reflected in future budget requests from the responsible Divisions, Agencies, and Corporations.

Staff will report back in 2028 with a more comprehensive financial analysis of reaching Toronto's net zero goals by 2040. The financial analysis will include estimated funding needs to achieve the City's target of net zero greenhouse gas emissions from corporate building and transportation sources, including those activities that will need to be undertaken by Divisions, Agencies and Corporations. The report will include an estimate of the anticipated operational savings, a description of the financial trade-offs, and any additional funding approaches that will need to be considered to meet the target.