
2025 CAPITAL/OPERATING BUDGET BRIEFING NOTE

Carbon Budget

Introduction:

- This Carbon Budget briefing note focuses on the *impact* of City-led greenhouse gas (GHG) reduction actions (i.e. projects and programs) in the 2025 Staff Prepared Budget on Toronto's progress toward Council-adopted GHG reduction goals.
- The City's Carbon Budget Prioritization process is a new annual process, adopted by Toronto City Council as part of the codified Carbon Budget Accountability system (2023), implemented in 2024. The process is made up of a consistent set of steps and technical guidance used by City Divisions, Agencies and Corporations to identify and prioritize new or enhanced GHG reduction actions for inclusion in the City's 2025 Staff Prepared Budget.
- Following last year's Carbon Budget Baseline briefing note, this briefing note presents the outcomes of the first year of the new annual Carbon Budget Prioritization process. That process aims to identify new or enhanced GHG reduction actions that can bring *additional* GHG reductions in the upcoming budget year (or in future years), beyond those reductions already expected from continuing baseline actions.

Key Points:

GHG reduction impact of Budget 2025

- The 2025 Staff Prepared Capital and Operating Budget contains 31 new or enhanced GHG reduction actions identified via the Carbon Budget Prioritization process, with an estimated annual GHG reduction impact of 65,858 t CO₂e in 2025, growing to 244,615 t CO₂e annually once the actions are fully implemented. These emission reductions would be additional to the impact expected from baseline GHG reduction actions included in 2024 Budget and continued in 2025 Budget, which have an estimated annual GHG reduction impact of 94,867 t CO₂e in 2025, growing to 118,494 t CO₂e annually once fully implemented.¹ The **vast majority of 2025 emission reductions of 160,725 t CO₂e** would occur in the Corporate buildings and Corporate transportation emission subsectors.
 - i. Appendix A provides estimates for 2025 GHG reductions at the project and program level.

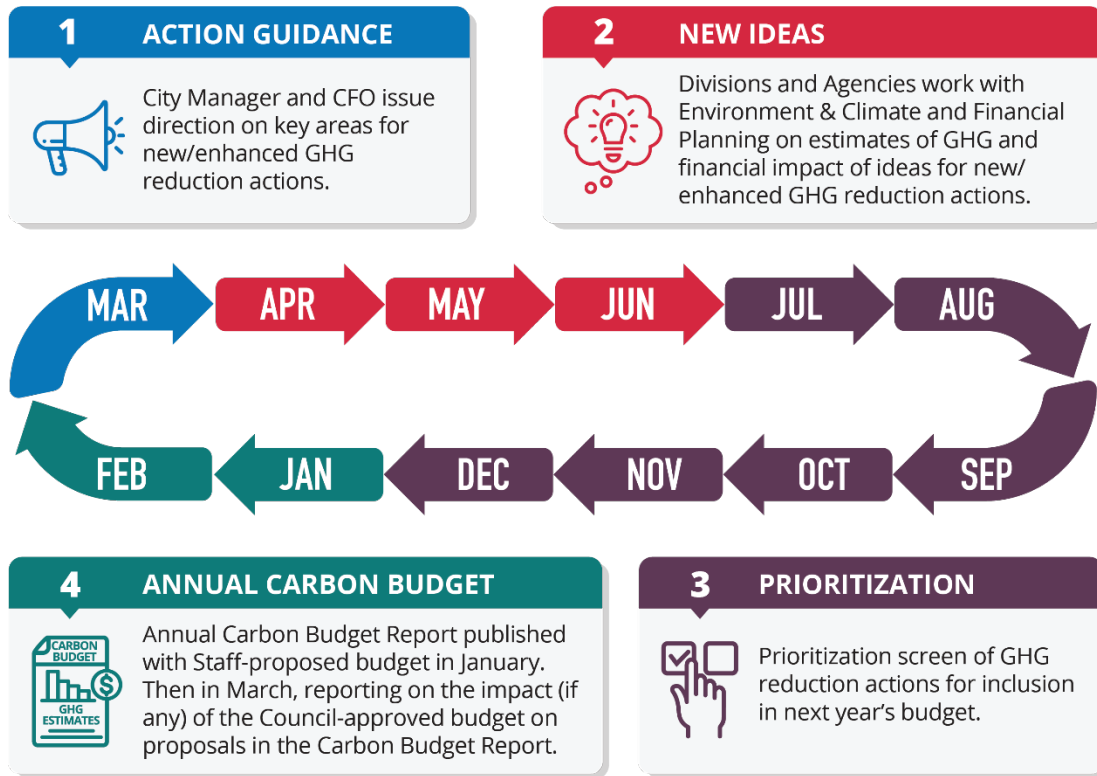
¹ Note that for some actions that are expected to reduce emissions, a specific quantified estimate is currently unavailable due to data limitations, project-level analysis limitations, or the nature of the action (e.g. educational programming).

- To achieve the desired outcomes as noted above, the GHG reduction actions involve a planned capital investment of \$1.95 billion and an operating expense budget of \$78.47 million in 2025.
- A further 23 new/enhanced GHG reduction actions were identified via the Carbon Budget Prioritization process but ultimately not included in the 2025 Staff Prepared Capital and Operating Budget. Some of the proposed actions need to be further reviewed, scoped, and assessed in terms of their financial and environmental impacts. These actions, if determined viable, may be considered for inclusion in future budget submissions and would have an estimated annual GHG reduction impact of 1,703 t CO_{2e} annually once fully implemented. A full list of such actions is provided in Appendix B.
- While not directly reflected in the 2025 Budget, the City's ongoing support of Toronto Hydro investments is critical for achieving net zero:
 - Toronto Hydro must make unprecedented infrastructure investments to ready the local electricity distribution grid for increasing electrification in the building and transport sectors.
 - The City will facilitate these investments through a one-time special equity injection of \$50 million, annual investments of \$25 million from 2025-2034, and a targeted and phased down fixed dividend payment schedule by Toronto Hydro ([2024.EX15.7](#)).

Carbon Budget Prioritization

- The Carbon Budget Prioritization is a new process, part of the codified Carbon Budget Accountability system (2023), that provides a consistent set of steps and guidance for City Divisions, Agencies and Corporations to identify and prioritize GHG reduction actions (project, programs, policies) for submission to the City's annual Budget Process.
- The Carbon Budget recognizes that accelerated action – from the City, other levels of government, residents and businesses – is required to achieve Council's ambitious GHG reduction goals. The City's 2022 Sector-Based Emissions Inventory shows that community-wide emissions increased slightly in 2022 from 14.5 megatonnes (MT) in 2021 to 15.5 MT. Though there is an overall downward trend in emissions over time by sector (buildings, transportation and waste) since 1990, the pace of emissions reduction is unlikely to meet the 2025 or 2030 community-wide targets.
- Each annual Carbon Budget cycle begins with the City Manager and Chief Financial Officer & Treasurer issuing "Action Guidance" to Divisions, Agencies and Corporations, providing direction on key areas for new or enhanced GHG reduction actions that could be included in the next year's budget. This is followed by an ideation phase, an evaluation and quantification phase, a prioritization exercise and ultimately Carbon Budget reporting in through the annual budget process. The goal of the annual prioritization process is to create a virtuous cycle where Divisions, Agencies and Corporations come forward with ideas for accelerating emission reductions.

- The figure below depicts the annual Carbon Budget cycle:



- For 2025 Budget, 16 Divisions, Agencies, and Corporations collectively proposed 112 new or enhanced actions to reduce GHGs, of which 54 were screened in for assessment of GHG reduction potential and financials.²
- Of the 54 proposals that were advanced for assessment of GHG reduction potential, Environment, Climate and Forestry (ECF), formerly Environment & Climate, and Financial Planning divisions jointly assessed 36 proposals as “high priority” based on their importance to the TransformTO Net Zero Strategy, as measured through the presence of a “high” score on at least one of three criteria:
 - direct GHG reduction potential (high: 100-1000s t CO₂e annually);
 - indirect (enabling) GHG reduction potential (high: qualitative assessment); or
 - contribution to an inclusive and equitable net zero transition (high: qualitative assessment using framework similar to high/medium/low impact in 2024-25 Equity Responsive Budgeting manual, adapted to net zero context).
- All 54 screened-in proposals were allowed to be advanced as part of the City’s [Capital Prioritization Framework](#) based on a set of weighted criteria according to project categories, capacity to deliver, risk assessment, environmental, social and governance contributions, and strategic alignment with the City’s priorities. The “high priority”

² Proposed actions were screened out if they: (i) are already accounted for in a baseline GHG reduction action; or (ii) have no or trivial potential impact on emission reductions and the TransformTO Net Zero Strategy.

designations for new or enhanced actions in the Carbon Budget process carried through to the climate aspect of the Capital Prioritization Framework, as applicable.³

Fossil Fuel Dependencies in Budget 2025

- The 2025 Staff Prepared Operating Budget contains \$50.31 million for the purchase of fossil fuels (i.e. fossil natural gas, gasoline, and diesel) for use in City operations.
- Estimated emissions from the projected consumption of fossil fuels in 2025 is 332,006 t CO₂e.
- For comparison, the 2024 Budget contained \$48.17 million for the purchase of fossil fuels with estimated annual emissions of 338,650 t CO₂e.
- The 2025 Staff Prepared Capital Budget also contains \$1.37 billion in capital for projects tagged as containing at least one “fossil fuel reliant” element (e.g. a building project including procurement of a natural gas boiler, or fleet procurements including internal combustion engine vehicles). Because the approach to tagging fossil fuel reliant projects has been refined from the first attempt in 2024, the 2025 budget year will be used as a baseline against which to compare future budget years going forward.
- The City’s [Corporate Offset Credits Policy](#) clarifies the “net” of net zero by defining whether and how the Corporation will purchase and/or sell carbon offsets in a science-based, fiscally responsible way as the City works toward the net zero goal.
- The only credits that can validly offset CO₂ emissions from Corporate fossil fuel assets to achieve “net zero” are those that remove CO₂ from the atmosphere and store it permanently (e.g. deep underground as basalt rock via mineralization or in a deep saline aquifer).
- The projected price of such offset credits in 2040 is \$321 per tonne of CO₂e based on research conducted for ECF in 2024. This high cost reinforces the financial prudence of the primary objective stated in the Corporate Offset Credits Policy, which is to reduce emissions from Corporate emission sources as close to absolute zero emissions as feasible by 2040 rather than rely on paying for offsets. For example, if the current annual Corporate emissions of 0.83 MT remained in 2040, the expected cost of offsets to achieve net zero Corporate emissions would be \$266.4 million annually.⁴ Actions that eliminate sources of Corporate emissions reduce this future cost.

Increasing Climate Resilience

- The 2025 Staff Prepared Capital Budget contains projects that have been identified by program areas as having one or more components that contribute to increasing climate resilience in Toronto with a planned capital investment of \$17.55 billion over the next 10-year (2025 – 2034) planning horizon.⁴

³ The 58 proposed actions that were screened out could be entered for Capital Prioritization under other merits than GHG reduction.

⁴ This reflects total investments in tagged projects including spending on components of projects that do not increase climate resilience but are nevertheless necessary to realizing climate positive outcomes of an initiative. Note that capital projects may be tagged as both reducing GHGs and increasing climate resilience, leading to the total capital investment in these projects being less than the sum of each category when combined.

- As part of a renewed focus on coordinated climate resilience planning in 2025, the City is gathering information to better understand the overall costs of climate change to the City and to prioritize climate-related risks for action.

Intergovernmental Dependencies

- The City faces considerable fiscal constraints that will require coordination with, and prioritization of, strong climate action policy leadership alongside adequate and stable long term funding support from other levels of government. However, the intergovernmental climate policy landscape is evolving, with growing uncertainty. The evolving landscape includes uncertainties such as:
 - i. Federal and provincial governments facing their own significant fiscal constraints.
 - ii. Public priorities focused on housing, affordability, and safety concerns.⁵
 - iii. Elections that will or could occur at both federal and provincial levels, within the next 12 months.
 - iv. Potential for change at the federal government which may affect the continuation of key decarbonization policy levers such as the Clean Electricity Regulations, Clean Fuel Regulations, Electric Vehicle Availability Standard, the consumer carbon price on fuels, the Canada Green Building Strategy, and climate funding generally.
 - v. The Independent Electricity System Operator (IESO) development of an Integrated Regional Resource Plan for Toronto that will impact the use and greenhouse gas intensity of electricity across the city.
 - vi. Ontario's forthcoming first Integrated Energy Resource Plan (IERP) that will consider the long-term view of energy use across the economy and across all sources of energy. The IERP is expected to, among other things, set direction for the electricity grid with implications for its future carbon intensity as well as set out a policy statement for fossil natural gas with implications for its future use in the buildings sector in the context of electrification.
- Meeting the City's climate goals in the three largest emissions categories will require, or at least be assisted by, the following supports from other City corporation and orders of government:
 - i. Buildings:
 - Pathways and standards to achieve net zero emissions from new and existing buildings.
 - Financing and incentives to support building energy retrofits, with a particular focus on low- and modest-income households and small business.
 - ii. Electricity:
 - Establishment of an implementation plan, with identified major transmission, distribution and generation infrastructure needed to achieve a net-zero, decarbonized grid.

⁵ See "Listening to Toronto" Survey: <https://www.toronto.ca/legdocs/mmis/2024/ex/bgrd/backgroundfile-251235.pdf>

- Ambitious and achievable federal Clean Electricity Standards

iii. Transportation:

- Accelerated implementation of the Canada Public Transit Fund
 - Accelerated Electric Vehicle (EV) uptake with increased purchasing incentives or mandates from either federal or provincial governments.
 - Accelerated EV uptake through increased incentives to build out EV charging infrastructure guided by the City's approach and strategy of the Public Electric Vehicle Charging.
- The Federation of Canadian Municipalities (FCM) continues to administer a series of programs that would support the City's corporate climate targets. These programs will continue beyond any potential change in government as the federal government has signed longer-term agreements with FCM that extend beyond 2025, or they are part of FCM's general endowment. These programs include a Sustainable Municipal Buildings Program and a Fleet Electrification Program, among others. Staff will continue to pursue these programs to optimize every opportunity to relieve pressure on the City's own budget as it pursues its net zero goals.

Market Dependencies

- Economic forces, such as lower inflation and interest rates, reliable supply chains and a deepening pool of skilled labour in critical sectors (e.g. building retrofits) are vital for facilitating the significant capital investments necessary for net zero developments and rapid retrofitting of Toronto's building stock.

Carbon Budget Tables

2025 Budget for GHG Reduction Actions:

Table 1 below presents the aggregate budget amounts, estimated GHG reduction, and alignment with emissions scenarios for City-led GHG reduction actions. These high priority and impactful actions encompass projects and programs that reduce GHGs within the buildings, transportation, and waste sectors, covering both the community and corporation. For reference, corporate emissions from City of Toronto operations comprise approximately 5% of community emissions.

Table 1: 2025 Budget for GHG Reduction Actions

	Sector	Capital ⁶ (\$ millions)		Operating (\$ millions)	2025 GHG Reduction (est.) (t CO _{2e})
		2025 Capital Budget	Capital Plan 2025 – 2034	2025 Operating Budget	
COMMUNITY	Buildings	79.57	597.59	1.55	32,176
	Transportation	436.48	2,794.56	1.49	1,706
CORPORATE	Buildings	652.96	6,301.49	0.12	13,266
	Transportation	709.45	2,906.61	1.77	74,052
COMMUNITY / CORPORATE	Buildings	14.25	131.02	0.14	309
	Waste	54.08	1,141.18	59.61	39,216
CROSS- SECTOR	-	0.50	2.25	13.79	-
TOTAL		1,947.29	13,874.70	78.47	160,725

See “Appendix A – GHG Reduction Actions” for the budget amounts, estimated GHG reduction, and emissions scenario alignment for individual City-led GHG reduction actions (projects and programs).

⁶ Note that capital projects may be tagged as both reducing GHGs and increasing climate resilience, meaning total capital investment in projects tagged as reducing GHGs and increasing climate resilience adds up to less than the sum of each category added together.

Fossil Fuel Dependencies:

Table 2 below sets out the 2025 budgeted utility dollar amounts, estimated consumption by volume (based on previous year consumption) and resulting GHG emissions for all City divisions (excluding leased sites).

Table 2: 2025 Budget for Fossil Fuels

Emissions Sector	Fossil fuel	2025 Operating Budget (\$ millions)	Consumption estimate	2025 GHG emissions estimate (t CO₂e)
Buildings	Fossil natural gas	24.03	43,728,000 m ³	84,513
	Fossil natural gas via steam for district heat	4.99	3,147,000 m ³	6,082
Transportation	Diesel	11.53	80,100,000 l	202,657
	Gasoline	8.24	15,000,000 l	33,378
	Fossil natural gas	1.52	2,782,000 m ³	5,377

Note: the federal Carbon Tax fuel charge applies at the following rates in 2025. One rate applies for the first 3 months of the calendar year and an increased rate applies for the final 9 months of the calendar year:

- For fossil natural gas this would amount to \$0.1525/m³ from January 1 to March 31 and \$0.811 from April 1 to December 31.
- For diesel this would amount to \$0.2139/L from January 1 to March 31 and \$0.2541 from April 1 to December 31.
- For gasoline this would amount to \$0.1761/L from January 1 to March 31 and \$0.2091 from April 1 to December 31.

Table 3 below sets out the budgeted amounts for all fossil fuel reliant projects tagged by Divisions, Agencies and Corporations in their 2025-2034 Capital Budget and Plan.

Table 3: Capital Investment in Fossil Fuel Reliant Projects

<i>Division/Agency</i>	<i>Capital (\$ millions)</i>	
	2025	10-yr Capital Plan 2025 – 2034
Children's Services	3.08	73.95
Corporate Initiatives	0.81	0.81
Corporate Real Estate Management	5.13	32.89
Economic Development & Culture	2.71	3.91
Environment & Climate	35.65	301.27
Exhibition Place	0.55	2.55
Fire Services	5.18	16.58
Fleet Services	94.70	1,832.76
Housing Secretariat	5.81	16.38
Parks, Forestry and Recreation	80.08	560.73
Solid Waste Management Services	0.58	2.52
Toronto & Region Conservation Authority	1.01	10.12
Toronto Housing Corporation	265.59	1,661.91
Toronto Paramedic Services	20.78	156.48
Toronto Police Service	21.10	164.43
Toronto Public Library	25.04	344.74
Toronto Shelter and Support Services	37.34	692.09
Toronto Transit Commission	642.83	1,074.45
Wastewater Program	99.79	2,810.18
Water Program	19.34	307.41
Total	1,367.10	10,066.16

Capital Investment in Climate Resilience

Table 4 below shows the capital investments for increasing climate resilience as tagged by Divisions, Agencies and Corporations in their 2025-2034 Staff Prepared Capital Budget and Plan.

Table 4: Capital Investment in Climate Resilience

<i>Division/Agency</i>	<i>Capital</i> <i>(\$ millions)</i>	
	2025	10-yr Capital Plan 2025 – 2034
Children's Services	3.30	54.58
Corporate Real Estate Management	123.43	730.83
Economic Development & Culture	0.83	5.13
Environment & Climate	35.65	301.27
Fire Services	4.85	16.25
Fleet Services	95.28	1,808.11
Housing Secretariat	20.06	53.76
Parks, Forestry and Recreation	92.49	1,938.76
Solid Waste Management Services	6.14	56.33
TO Live	2.96	5.71
Toronto & Region Conservation Authority	21.27	276.17
Toronto Housing Corporation	304.17	1,716.54
Toronto Paramedic Services	19.43	153.93
Toronto Parking Authority	12.44	32.76
Toronto Police Service	36.66	534.21
Toronto Public Library	22.66	397.24
Toronto Shelter and Support Services	114.53	945.74
Toronto Transit Commission	642.83	1,074.45
Toronto Zoo	38.09	132.43
Transportation Services	158.23	1,867.14
Wastewater Program	280.65	4,858.88
Water Program	12.30	392.52
Waterfront Revitalization Initiative	34.92	192.68
Total	2,083.17	17,545.42

Key City-led Climate resilience actions continue to include:

- Waterfront Revitalization's investment in the Port Lands Flood Protection project,
- Transportation Services' investments in green streets that integrate natural and human-made green infrastructure to capture and filter rainwater, reducing contaminants in waterways,
- Toronto and Region Conservation Authority's investments in management and control of erosion, watershed improvements and waterfront development work, and
- Parks, Forestry and Recreation's investments in park development, providing new and improved green space for recreational and natural purposes.

Next Steps

Following Council approval of the 2025 Budget, ECF will review the analysis in this Briefing Note and report to Infrastructure and Environment Committee later in 2025 about any changes in the expected GHG impact based on the approved budget.

Attachment

Appendix A – GHG Reduction Actions in the 2025 Staff Prepared Budget

Appendix B – Carbon Budget Prioritization Process

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