Attachment 3.

Advanced Plan: Action to achieve the 2026-2030 greenhouse gas emissions budget for corporate emission sources – transportation, and Accountability Plan

Advanced Plan

In May 2023, City Council adopted a new <u>Climate Change Goals and Governance</u> chapter for the Municipal Code.¹ This chapter sets emission budgets outlining the total amount of greenhouse gas (GHG) emissions from both Community and Corporate sources over a set period that is consistent with Council-adopted GHG reduction targets.

The corporate emissions budget can be further divided into sector-specific emissions budgets for the corporate buildings² and transportation³ sectors. This enables the City to track performance by comparing actual emissions against the remaining allowance, not unlike a financial budget.

The City Manager has delegated authority to the Executive Director, Environment, Climate and Forestry Division, under the *Climate Change Goals and Governance* chapter of the Municipal Code, to recommend the City's emissions budgets. Table 1 below outlines the proposed 2026-2030 corporate emissions budget by sector. The budgets were developed in consultation with "Corporate Sector Leaders"⁴; including Corporate Real Estate Management (CREM) and Toronto Community Housing Corporation (TCHC) in the corporate buildings sector, and Fleet Services and the Toronto Transit Commission (TTC) in the transportation sector.

This proposal establishes emissions budgets for the buildings and transportation sectors in a 1.1 to 1 ratio. This aligns with the trend seen in the City's Sector-Based Emissions Inventory ("Inventory") from 2018 to 2023.

Table 1. Corporate Emissions Budget 2026–2030

Sector	"Corporate Sector Leaders"	2026–2030 Emissions Budget
Corporate Buildings	Corporate Real Estate Management (CREM), Toronto Community Housing	935,641 t CO ₂ e
	Toronto Community Housing Corporate (TCHC)	
Corporate Transportation	Fleet Services, Toronto Transit Commission (TTC)	829,719 t CO ₂ e
Other (Waste, etc.) ⁵	Various	251,111 t CO₂e
Total Corporate Emissions Budget		2,016,471 t CO ₂ e

¹ 2023.IE3.4 - Carbon Accountability: Institutionalizing Governance, a Carbon Budget and an Offset Credits Policy.

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² Includes City-owned buildings, facilities, and certain yards plus Toronto Community Housing-owned buildings.

³ Includes fleet vehicles operated by Fleet Services Division, Toronto Transit Commission (including revenue and non-revenue), Toronto Police Services, Toronto Paramedic Services, Toronto Community Housing, Exhibition Place, Toronto Zoo, Toronto Parking Authority, and Toronto Public Library.

⁴ Climate Change Goals and Governance, Municipal Code Ch. 669, at § 669-2.3(A)(6).

⁵ Other" sources are not explicitly allocated in this plan; they are managed via separate waste and water programs. By-law 600-2023 limits the Buildings and Transportation budgets to ≤85% of the total Corporate budget, leaving a margin for these other sources.)

The following corporate sectors within the Inventory are currently out of scope for this report:

- "Waste"
- "Wastewater Treatment"
- "Water Supply"
- "Streetlights"

These subsectors are considered out of scope either because (i) their emissions arise primarily from waste-treatment processes (methane and nitrous oxide), which are not readily mitigated through the same interventions used to address carbon dioxide emissions from fossil gas consumption in corporate buildings and transportation; or (ii) their emissions are trivial.

This Advanced Plan outlines how the City will meet the corporate emissions budgets for 2026-2030 in the corporate buildings and transportation sectors. In addition to the key actions needed to reduce emissions in each sector, the Advanced Plan will also address the needs, risks, and dependencies for those actions.

Corporate Transportation

Scope and Share of Corporate Emissions Budget

The corporate transportation emissions budget applies to City fleets, including all City Divisions, Agencies or Corporations managing City vehicles. The system of accounts is the Inventory, specifically the subsectors labelled as "Corporate - Transportation" which includes corporate fleet vehicles, including TTC buses.

Corporate transportation has a five-year emissions budget of 829,719 t CO₂e for 2026–2030. This budget is sub-allocated across divisions and agencies in proportion to their emissions share, to guide accountability and action.

Based on the City's most recent inventory covering the 2023 year, 69% of emissions came from TTC buses, 7% from TTC subways and streetcars, and the remainder from fleet vehicles under capital control of divisions and agencies including Fleet Services and Toronto Police Service among others. Table 3 provides an overview of the source of corporate transportation emissions and budget share.

Table 3. Share of the Corporate Transportation Emissions Budget by Source

Source	Share of Transportation Emissions	2026–2030 Emissions Budget (t CO ₂ e)
Toronto Transit Commission - buses	69%	572,506
Toronto Transit Commission - subways/streetcars	7%	58,080
City Fleet (Fleet Services, Police, Fire, Paramedic, Zoo, Parking, etc.)	24%	199,133
Total	100%	829,719

Fleet Decarbonization Actions (2026–2030)

The Advanced Plan identifies a suite of fleet decarbonization measures across all divisions to drive down emissions in line with the 2026–2030 budget. These actions focus on electrification of vehicles, improved efficiency, and interim steps to reduce fuel use. These actions are driven by the Sustainable City of Toronto Fleets Plan, which sets a clear trajectory to 100% net-zero fleet operations by 2040.⁶

be tak	reduction action to ken over the 2026- 2030 period	Description of action	Responsible Division: Lead	Responsible Divisions: Support	Key Dependencies for Division/Agency	Plan for addressing the Dependencies for Division/Agency
	nent Sustainable Toronto Fleets	The Plan identifies the goal and objectives in addressing climate mitigation and adaptation with strategies for transitioning City Fleets to sustainable, climate resilient, net-zero operations.				
1 Zero-E Duty F	mission Light- leets	All City divisions and agencies are accelerating the replacement of cars, SUVs, and vans to zero-emissions vehicles (ZEVs) or hybrids. Over 1200 City-owned passenger vehicles in the Fleet Services managed fleet are slated for replacement with ZEVs by 2028. Other divisions (e.g. Public Health, Parks) are similarly replacing administrative and light-duty vehicles with ZEVs as models become available, supported by Fleet Services' bulk procurement programs.	Fleet Services	Various	Vehicle supply ("Industry Readiness") The availability of suitable zero-emission vehicles (ZEVs) (especially medium/heavy vehicles) hinges on automakers' production plans. Fleet goals rely on the auto industry delivering viable electric models in sufficient numbers. Shortages or slow rollout of EV models could delay emission cuts. Funding (internal and external) Electrification requires major capital outlay. For example, Fleet Services estimates ~\$213 M in 10-year capital (beyond existing replacement budgets) is needed. Without stable budgets or external grants, the transition may stall.	Secure and allocate funding The 2026-2030 plan tasks each fleet division (Fleet Services, Police, etc.) to continue building electrification costs into future budgets. In parallel, the City is actively pursuing external funding cover costs. These measures help close the funding gap in the City fleet. A detailed financial analysis will evaluate upfront investment, long-term savings, and available government incentives, and they plan on working closely with vehicle manufacturers, energy providers, and other stakeholders to share emerging best practices and troubleshoot implementation challenges.
2 Specia	lized Fleets	Police, Fire, and Paramedics are also moving toward inclusion of ZEVs. Toronto Police Service is utilizing hybrid police cruisers (notably, the Ford Hybrid Police Interceptors are being integrated for patrol to reduce idling emissions). Over 80% of the Police fleet could be electric or hybrid by 2030 under current plans. The Toronto Fire Services and Paramedic Services are beginning to explore viable technology emerge for their needs. As more electric fire apparatus become	Fleet Services	Toronto Police Service, Fire Services, Toronto Paramedic Services	Charging infrastructure and energy Sufficient electrical capacity and chargers must be in place. This depends on Toronto Hydro's ability to upgrade grids and on securing funding for chargers. Any lag in grid upgrades or charger roll-out could constrain EV deployment.	Build charging and energy capacity Fleet Services are committed to reducing its environmental impact and supporting the City's sustainability goals by transitioning from fossil- gas vehicles to hybrid and electric vehicles (EVs) within their fleet. To ensure this shift is both operationally and financially feasible—and that high standards of service delivery are maintained—they will deploy charging infrastructure at strategically located sites and garages to minimize vehicle downtime; conduct thorough assessments of new vehicle compatibility with our diverse routes, shift

⁶ <u>2023.IE3.5</u> - The Sustainable City of Toronto Fleets Plan.

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#	GHG-reduction action to be taken over the 2026- 2030 period	Description of action	Responsible Division: Lead	Responsible Divisions: Support	Key Dependencies for Division/Agency	Plan for addressing the Dependencies for Division/Agency
		available, the City plans to electrify a significant portion of Fire's heavy vehicles by the mid-2030s. For Paramedics, electric ambulances are in early development globally; Toronto is monitoring these and aims to pilot EV ambulances before 2030 once certified models are on the market. Smaller support vehicles in Fire/Paramedic fleets are already being transitioned to EVs in the interim.				patterns and operational requirements; and establish a dedicated team to monitor battery health, software updates and energy consumption while adapting maintenance schedules to the specific needs of hybrid and electric drivetrains.
3	Efficiency Improvements	"Right-size" the fleet by decommissioning underused or old vehicles, enforcing anti- idling policies, and deploying telematics/data analytics for route and fuel efficiency. This reduces fuel use and emissions beyond what electrification alone can achieve.	Fleet Services	Various	Staff adoption and workforce Adoption of new technologies requires training and culture change. The plan flags the need to educate drivers and staff on EV use and notes that an aging workforce or skills gap could slow the progress.	Training and human resources Fleet Services is committed to building internal capacity. Training programs and new staff roles will be funded to ensure crews can handle EV maintenance and operations. This addresses workforce and staff adoption barriers by ensuring knowledgeable personnel are in place. As Fleet transitions, affected staff will transition in step, with operational supports and training provided to maintain service levels.
4	Expand EV charging infrastructure	Along with vehicle electrification, is the rollout of EV charging infrastructure at City facilities. The City is installing charging stations at fleet yards, garages, and key facilities to support the growing electric fleet. Fleet Services is also starting to phase out fuel stations with increasing numbers of ZEVs in the City's corporate fleet.	Fleet Services	Various		
	Toronto Transit Commission (TTC) actions to reduce GHG emissions					
1	Fleet electrification	Transition TTC's revenue and support fleets to zero-emission vehicles (ZEVs) – e.g. all buses, Wheel-Trans vehicles, workcars, etc. – and retire older diesel/gas vehicles. This aligns with the	TTC		Capital funding gap Based on the current unapproved fleet plan for revenue vehicles, the projected GHG emissions from 2026-2030 will be 887,814 t CO2e, which is over the allotted budget by	Risk management and scenario planning TTC is building a comprehensive risk register and using scenario analysis of different electric fleet compositions. This helps test operational

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7	# GHG-reduction action to be taken over the 2026- 2030 period Description of action	Responsible Division: Lead	Responsible Divisions: Support	Key Dependencies for Division/Agency	Plan for addressing the Dependencies for Division/Agency
	City's Sustainable Fleet Plan and is intended to help close the current gap, a Bus, Wheel-Trans, and Non-Revenue Vehicles (NRVs) are not on track to achieve 50% electrification by 2030.	6		273,822 t CO2e, or 36%. Closing this requires substantial new funding (around \$2.7 billion for buses, Wheel-Trans, \$37 million, and Non-Revenue Vehicles (NRVs), \$49 million, over 5 years) and City/Board budget approval. Both internal budgets and external grants are essential.	readiness (block schedules, crewing) and anticipate issues.
2	Charging infrastructure deployment Plan, design, and install EV charging systems (with energy-management software) for both revenue and non-revenue vehicles. Charging stations must be in place ahead of each e-bus rollout tenable full operations.			External grants and partnerships TTC depends on federal, provincial, and municipal funding to offset costs of ZEVs and chargers. The Intergovernmental Relations department is pursuing multi-level government grants for zero-emission fleets and infrastructure.	Technology innovation The TTC will explore and pilot new technologies (e.g. improved batteries, smart chargers, energy-management systems, and automation) to extend vehicle range and increase charging efficiency. This mitigates cold-weather and performance risks.
	Implement route and schedule optimization tools to re-block routes and adjust schedules for EV range limits and charging requirements. Advanced planning software will help efficiently integrate electric buses into service.	TTC		Grid and regulatory constraints Upgrading traction power requires coordination with utilities and the Province for capacity. The grid's emissions intensity is determined by the provincial supply mix and may rise with greater natural-gas generation; this is outside TTC and City control. TTC also needs City support on GHG accounting (e.g., how to count avoided emissions) and updated targets if service expands. Technology and supply-chain risks Electric buses and chargers face performance and reliability challenges (especially in extreme cold), and global supply-chain delays can slow deliveries. These technical limits must be managed.	Workforce training and planning TTC will assess workforce needs and expand training (for operators, mechanics, and planners) on EV systems, high-voltage safety, and energy management. Training staff ensures the organization can maintain and operate the electric fleet effectively. Staged investment Phased capital deployment (e.g. prioritizing high-use routes or garages) is being considered to align funding timelines and charging build- outs. Early mitigation measures (like pilot projects) help refine the full implementation plan.
4	Work with utilities and the Province to provide the electrical capacity needed for electrification. Within the Ontario grid context, maximize GHG reductions through timely infrastructure delivery, charging optimization, and operational efficiencies.	TTC		Operational/Physical constraints Converting to an all-electric fleet requires expanded garage and maintenance capacity. EVs take longer to service and need new equipment and staff training; TTC must address space limits and longer preparation times for eBuses.	

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	G-reduction action to taken over the 2026-2030 period	Description of action	Responsible Division: Lead	Responsible Divisions: Support	Key Dependencies for Division/Agency	Plan for addressing the Dependencies for Division/Agency
					Employee Adoption and Cultural Change Successful adoption of new technologies requires both training and cultural change. Educating drivers and staff on electric vehicles is essential to build understanding, encourage acceptance, and promote advocacy across the commission.	

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Accountability Plan Statement for Corporate Transportation

We, the undersigned — representing Fleet Services, Toronto Transit Commission (TTC), Toronto Police Service (TPS), Toronto Fire Services (TFS), Toronto Paramedic Services, Exhibition Place, Toronto Zoo, and the Toronto Parking Authority — confirm our shared accountability and commitment to supporting the City of Toronto's TransformTO Net Zero Strategy through the procurement and deployment of zero-emission vehicles (ZEVs) and supporting infrastructure. In accordance with the requirements of Chapter 669 (By-law 600-2023) of the Toronto Municipal Code, this Accountability Plan Statement, supported further by detailed Accountability Plans specific to our respective portfolio of assets where we exercise operational control, outlines our collective roles and responsibilities in securing funding, providing training, and reporting on GHG emission reductions resulting from fleet decarbonization initiatives.

Roles and Responsibilities for Securing Funding

Fleet Services provides a centre led charging infrastructure program that plans, installs, maintains and sustains EV charging infrastructure for applicable divisions, agencies, and Corporations. TTC plans, installs, maintains and sustains EV charging infrastructure for TTC's revenue generating fleet.

The head of "Corporate Sector Leaders", Fleet Services, and the Toronto Transit Commission (TTC) will provide technical guidance and coordinate citywide vehicle specifications and procurement processes, where applicable.

Staff Training

Staff involved in the procurement, deployment, operation, and maintenance of zero emission vehicles and infrastructure will receive appropriate training to ensure safe, efficient, and effective implementation. This may include technical training on the specifications and operation of electric vehicles; charging infrastructure installation, maintenance, and troubleshooting; procurement training focused on lifecycle cost analysis and carbon impact assessment.

Training programs may be delivered within City Divisions, Agencies or Corporations managing City vehicles, or through manufacturers and vendors.

Reporting on GHG Emission Reductions

Each Division/Agency will assign staff to monitor and report on the outcomes of all GHG reduction outcomes associated with the procurement of zero emission vehicles and related infrastructure.

Responsibilities include:

- Monitoring fuel consumption and vehicle utilization data to estimate GHG reductions relative to baseline vehicles;
- Reporting results to the City's Environment, Climate and Forestry Division as part of annual emissions reporting;
- Supporting the aggregation of fleet emissions data to assess progress toward the 2026–2030 Corporate Emissions Budget.

By signing this document, we confirm our divisions and agencies commitment to plan for and resource zero emission vehicle transitions, ensure that the workforce is equipped to support these changes; and maintain transparent reporting on GHG reduction outcomes in alignment with the City's net zero goals.

This Accountability Plan forms part of our collective effort to decarbonize municipal operations and achieve a zero-emissions fleet by 2040.

Signature:	
Ü	(Original signed by)
	Àbi Thomas
	General Manager, Fleet Services
Signature:	
Ü	(Original signed by)
	Mandeep Lali
	Chief Executive Officer, Toronto Transit Commission

Signature:	(Original signed by) Myron Demkiw Chief of Police, Toronto Police Service
Signature:	(Original signed by) Jim Jessop Fire Chief, Toronto Fire Services
Signature:	(Original signed by) Bikram Chawla Chief, Toronto Paramedic Services
Signature:	(Original signed by) Mark Goss Chief Executive Officer, Exhibition Place
Signature:	(Original signed by) Dolf Dejong Chief Executive Officer, Toronto Zoo

Signature:	
J	(Original signed by)
	Scott Collier
	President, Toronto Parking Authority