## Attachment 2.

# Advanced Plan for actions to achieve the 2026-2030 greenhouse gas emissions budget for corporate emission sources – buildings, 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. 1234 This chapter sets "emissions budgets" that is the forecasted total amount of greenhouse gas (GHG) emissions from both community and corporate sources over a set period that are consistent with Council-adopted GHG reduction targets.

The corporate emissions budget can be further divided into sector-specific emissions budgets for the corporate buildings and transportation 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"; 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),	935,641 t CO <sub>2</sub> e
	Toronto Community Housing Corporation (TCHC)	933,041 t CO2e
Corporate Transportation	Fleet Services, Toronto Transit Commission (TTC)	829,719 t CO <sub>2</sub> e
Other (Waste, etc.) <sup>5</sup>	Various	251,111 t CO₂e
Total Corporate Emissions Budget		2,016,471 t CO <sub>2</sub> e

<sup>&</sup>lt;sup>1</sup> 2023.IE3.4 - Carbon Accountability: Institutionalizing Governance, a Carbon Budget and an Offset Credits Policy.

<sup>&</sup>lt;sup>2</sup> Includes City-owned buildings, facilities, and certain yards plus Toronto Community Housing-owned buildings.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> Climate Change Goals and Governance, Municipal Code Ch. 669, at § 669-2.3(A)(6).

<sup>5 &</sup>quot;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 subsectors within the Inventory fare 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 Buildings**

## **Scope and Share of Corporate Emissions Budget**

The corporate buildings emissions budget applies to City-owned buildings, facilities, and Toronto Community Housing Corporation's (TCHC) portfolio of buildings. The system of accounts for the corporate emissions budget is the Inventory, specifically the subsectors labelled as "Corporate – Social Housing" and "Corporate – City Facilities and Buildings" which together constitute the corporate buildings subsector.

Corporate buildings have a five-year emissions budget of 935,641 t CO<sub>2</sub>e for 2026–2030. This budget is sub-allocated across major portfolios of buildings in proportion to their emissions share, to guide accountability and action by each responsible division and agency.

Based on the City's most recent inventory covering the 2023 year, The Toronto Community Housing Corporation's (TCHC) portfolio is the largest component – about 54% of corporate building emissions – reflecting TCHC's 1,325+ residential buildings.

The remaining 46% of building emissions come from City-owned buildings and facilities under the capital control of various divisions and agencies. These include Corporate Real Estate Management (which manages many civic centers and administrative buildings), Parks & Recreation facilities (community centers, arenas, pools, etc.), Toronto Transit Commission facilities (transit stations, garages, offices), and other divisions such as Fire, Police, Long-Term Care, Libraries, and more.

Smaller City agencies like the Toronto Zoo, Economic Development & Culture sites (including museums and historic sites), Toronto Parking Authority garages, and Toronto Shelter & Support Services facilities (emergency shelters and residences) also fall within the 46% of building emissions, collectively accounting for the remainder of emissions outside of TCHC. Table 2 provides an overview of the building portfolios and budget share.

Table 2. Share of the Corporate Buildings Emissions Budget by major portfolio

Division/Agency	Share of Buildings Emissions	2026–2030 Emissions Budget (t CO <sub>2</sub> e)
Toronto Community Housing Corporation	54%	502,900
Toronto Transit Commission	13%	119,924

Total	100%	935,641	
Various (SWMS, TPA, EDC, etc.)	3%	37,279	
Toronto Shelter & Support Services	1%	10,075	
Toronto Zoo	1%	10,413	
Fire Services	1%	12,620	
Toronto Public Library	2%	15,874	
Police Services	2%	21,651	
Long-Term Care Homes	3%	23,492	
Exhibition Place	3%	23,916	
Corporate Real Estate Management	8%	76,927	
Parks and Recreation	9%	80,570	

TCHC's majority portion underscores that decarbonizing this is critical for meeting the overall emissions budget, while aggressive action in City facilities is also required. Each portfolio's budget share will serve as a benchmark: divisional leaders are accountable for keeping emissions "on budget" through 2030 with the actions outlined in this plan.

## **Emission Reduction Actions (2026–2030)**

Corporate buildings emissions must decline steeply through 2030 to achieve the required 65% reduction by 2030 (vs 2008) and stay within the 935,641 t CO<sub>2</sub>e budget.

Significant emissions reductions will be achieved through a comprehensive work of building retrofits and operational improvements across all portfolios. In developing this plan, corporate building sector leaders, CREM and TCHC – in consultation with other divisional leaders that exercise some control over a portfolio of buildings – identified priority actions expected to deliver emission reductions for the period 2026–2030.

#	GHG-reduction action	Description of action	Responsible Division: Lead	Responsible Divisions: Support	Key Dependencies for Division/Agency	Plan for addressing the Dependencies for Division/Agency
	Corporate Real Estate Management's Net Zero Carbon Plan <sup>6</sup>	Completed in 2021, the plan identifies initiatives that, if fully implemented for all City buildings (including those not directly managed by CREM), could cut annual emissions by 131,000 tonnes by 2040. Corporate Real Estate Management has adopted a phased approach—integrating these measures into the capital-planning process to ensure targeted investments and achieve City Council's reduction targets.				
1	Fuel Switching and Efficiency Retrofits	CREM will begin large-scale retrofits of existing City facilities to eliminate fossil fuel heating. This involves replacing gas-fired heating systems with high-efficiency electric heat pumps or other low-carbon systems, especially at end-of-life replacements.  By 2030, most major retrofit initiatives by CREM will be underway, guided by detailed building transition plans, to cut emissions at the largest-emitting sites. Other Divisions, Agencies and Corporations (DAC) supported by CREM that represent a share of corporate emissions are embarking on detailed net zero transition plans and energy audits, which are at varying stages of development. Two agencies, Toronto	CREM	Various	Capital Funding & Financing CREM has secured funding through capital budget submissions to initiate decarbonizing the 165 priority sites which represents 83% of CREM's GHG emissions, with additional study needed on the remaining 300 sites to determine the estimated funding needed to hit TransformTO targets by 2040. The net-zero plan is contingent on adjusting City financial strategies – dedicating new capital funding streams and obtaining external co-funding – to provide the required investment.  Outside of Toronto Zoo and TO Live, the other major portfolios that exercise some control over their building assets, will require finalized net zero transition plans and energy audits to inform what future resources and funding will be required to enable the decarbonization of their	Secure Funding CREM are in the process of a three-phase rolling capital execution strategy that will deliver (45) feasibility studies, detailed designs, and integrated construction execution annually, which will require additional updates to the 10-year capital budget and plan as detailed information about priority sites becomes available. TO Live, whose capital program is now being delivered by CREM, has reprioritized \$50 million in support of planned decarbonization initiatives and are in the process of determining what additional funding may be required for CREM to deliver on the phased implementation of their net zero transition plan.

<sup>&</sup>lt;sup>6</sup> 2021.IE23.2 - Building Net Zero Emissions City Buildings - Corporate Real Estate Management's Net Zero Carbon Plan.

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		Zoo and TO Live, have completed their plans in 2022 and 2024, respectively. The Toronto Zoo aims to have their plan, which is fully funded, implemented over a five-year period, concluding in 2030.  There are around 165 key CREM-managed buildings that are targeted first for deep energy retrofits to maximize early emission reductions, as they represent more than half of the 465-building portfolio's reported emissions.			respective portfolios. As part of bylaw Chapter 669 (By-law 600-2023), these plans are required to be completed by the end of 2027.  Internal Capacity CREM will analyze the need for additional resources on an ongoing basis to successfully complete feasibility studies and design work for existing buildings, to ensure the team are able to complete upwards of 45 sites a year. Significant coordination and planning will be required to efficiently deploy the available capacity funding in conjunction with other capital programs for which internal capacity building may be required.  CREM will continue to leverage existing capacity to manage and deliver feasibility studies, detailed design, and capital implementation. Further capacity analysis will be conducted yearly to ensure projects remain on-track.	Increased Internal Capacity CREM is receiving support from ECF to complete net zero feasibility studies until the end of 2027 and will analyze the need for additional resources on an ongoing basis to successfully enable the three-phase capital execution strategy. Construction project management by the PMO) will be tracked and reported at a program level. Other DACs are conducting gap analysis on any additional staff that may be required, based on the results of their individual transition plans.
2	Net-Zero Standards for New Builds	Ensure all new City-owned buildings are constructed to meet the City's net zero emissions (TGS v4).  Starting now and through 2026–2030, any new development in the portfolio should be designed for net-zero emissions performance, avoiding the addition of future retrofit burden.	CREM	Various	Stakeholder Coordination As part of CREM's asset management program, emissions reduction will need to be increasingly integrated into the capital planning process.	Stakeholder Coordination The creation of a Corporate Transformation office within Environment, Climate and Forestry will ensure cross-divisional and cross- agency coordination in partnership with CREM, CreateTO, Toronto Hydro, and other major portfolios implementing net zero transition plans.
3	Strategic Asset Renewal/Divestment	Replace or dispose of the low-value carbon-intensive assets. The Net Zero Carbon Plan calls for divesting older, inefficient buildings and either retrofitting or replacing them with modern, low-carbon facilities. By focusing capital on fewer, better buildings, CREM and DACs can reduce emissions faster.	CREM	Various		

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4	On-site Renewables and Storage	In adhering to Toronto Green Standards (TGS version 4), CREM capital projects will consider the installation of on-site renewable energy generation (primarily solar photovoltaic panels) and possibly battery storage systems at all new facilities.  Existing buildings will be assessed for suitability of installing renewable energy generation.	CREM	Various		
5	Operational Improvements  – Training & Data	CREM will deliver operational training programs developed internally or by ECF for facility managers and building operators so that new low-carbon systems are run optimally.  Operational improvements will also be driven by centralizing building automation systems and leveraging the data collected, recommissioning existing building systems and continually monitoring energy consumption. Low-carbon pilot projects will be tracked and lessons shared across the organization to replicate successes.	CREM	Various		
	Toronto Community Housing Corporation (TCHC) actions to reduce GHG emissions					
1	Holistic Retrofit Program by Archetype	Since 2019, TCHC has completed over 36 holistic retrofits across all its residential building types (e.g. high-rise, mid-rise, low-rise/townhouse) which include deep energy retrofits that have resulted in GHG emissions reductions.  TCHC aims to establish net-zero transition plans by 2027 for each building archetype to inform the necessary work required at its 1,325+ building portfolio. This "learn-by-	TCHC		Funding and Financing Availability Achieving net-zero retrofits across TCHC is highly dependent on securing substantial funding from various sources. Internally, TCHC and the City of Toronto must allocate capital; but given the multi-billion-dollar scale (see below), external funding programs are crucial. This includes federal grants/loans, provincial/municipal programs, and financing from agencies like the Canada Infrastructure Bank (CIB), Canadian Mortgage and Housing Corporation (CMHC), and	Secure and Maximize Funding Streams Establish a clear, proactive funding and financing strategy for the holistic retrofit program. For large-scale needs beyond individual project grants, TCHC will work with the City on funding requests. This will allow TCHC to maximize capital inflows and ensure sustained financing through 2030 and beyond.

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		doing" approach is already underway, as these completed projects provide valuable technical and costing data, along with staff and tenant feedback, to inform future retrofits.			Canada Builds. Many of these programs have limited pools or competitive processes, so TCHC's plans hinge on access to sufficient grant/loan dollars in a timely manner. TCHC has also requested the City of Toronto to help backstop finding for future years in absence of secured Federal funds beyond 2027 to continue to roll out Holistic Building Retrofit Program work without losing momentum. This request is being considered in TCHC's 2026 Budget submission.	Ramp Up Internal Capacity TCHC will invest in its people and processes to meet the challenge. This means scaling up the Energy & Capital Projects teams by increasing staffing and training.
2	Accelerate Deep Retrofits	Ramp up the building retrofit program, targeting more than 10% of the portfolio per year to meet City targets. This requires moving much faster than historical rates (currently 1–2% 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.	TCHC		Organizational Capacity TCHC's ability to execute the strategy relies on significant organizational transformation. The Corporation needs to expand its human resources, expertise, and project delivery capacity to manage dozens of complex projects concurrently. If hiring and training do not keep pace, or if internal processes (procurement, project management) are not scaled up, implementation will lag.	Pilot Projects Pilot retrofits on various building archetypes have been completed or are underway to refine technical approaches. Lessons from these pilots (ideal heat pump configurations, enclosure techniques, etc.) will be incorporated into the net-zero transition plans.
3	Fuel-Switch to Electricity	Electrify heating and hot water systems in TCHC buildings to phase out natural gas. This strategic transition will center on installing high-efficiency electric heat pumps to replace or supplement gas boilers/furnaces for space heating. Upgrades will be timed with capital renewal cycles so that major interventions can convert a building to fully zero-carbon heating. These upgrades will also provide full cooling capability alongside any heating system retrofits so that new heat pump systems address both heating and cooling needs.  In the absence of approved funding to implement fuel-switching more broadly across the TCHC portfolio, TCHC has initiated pilot projects at 4 locations	TCHC		Electrical grid capacity TCHC operates within a broader jurisdictional context that can enable or constrain its net-zero efforts. One major factor is the electricity grid's carbon intensity, which is under provincial jurisdiction. Hitting TCHC's GHG targets assumes that Ontario's grid will continue to decarbonize; if the province's plans waver, TCHC's electrification measures yield less benefit. In that case, TCHC would face higher effective emissions or need alternative strategies to compensate.  Capital Renewal Timing The strategy heavily relies on syncing decarbonization projects with the normal lifecycle capital renewal schedule of buildings. A dependency here is that major building systems (boilers, façades, etc.) last decades, and the	Tenant Engagement Recognizing the dependency on tenant buy-in, TCHC's plan includes transparent communication about upcoming projects, soliciting resident input, and scheduling works to minimize inconvenience. TCHC is exploring ways to empower tenants as partners in the transition. By engaging the community in implementation, TCHC can help address workforce shortages while strengthening tenant support—people are generally more inclined to back projects that create local employment. This approach reframes a dependency (tenant cooperation) as an opportunity, building social buy-in that propels projects forward. Tenant conservation also represents a significant

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		(currently in construction) to explore the technology and apply lessons learned to future projects.			optimal moment to retrofit (end-of-life replacement) may not always align neatly with the 2030/2040 climate targets. TCHC's plan depends on strategic timing – catching as many buildings as possible when they naturally need upgrades. If timing is off (e.g. too many assets have long remaining life), TCHC might face either stranded asset costs or delays in achieving GHG reductions. This makes the capital planning data (age/condition of each system) a critical input.	challenge/opportunity towards these efforts. It is important to also note that a very small percentage of TCHC tenants receive a utility bill, so creative strategies are needed to secure sustained buy-in and connect tenants with the benefits of conservation and retrofit.
4	Upgrade Building Envelopes	Enclosure (building envelope) improvements – such as adding insulation, high-performance windows, air-tight façades (alongside improved ventilation) – are a high-impact action and TCHC has been implementing where feasible. By reducing heat loss and thermal demand, envelope upgrades dramatically cut the size and cost of new electric-based heating systems needed. Lower loads also improve energy affordability given electricity's higher price, and yield co-benefits such as improved comfort, indoor air quality, durability, and passive survivability during extreme weather. In short, deep energy retrofits that combine envelope upgrades with electric-based heating, ventilation and air conditioning (HVAC) will achieve significant GHG reductions in the 2026–2030 period.	TCHC		Infrastructure & Technical Constraints There are physical and technical dependencies that could limit or complicate projects. For example, many older buildings may need electrical service upgrades (transformers, panels) to handle new electric heating loads – TCHC will depend on Toronto Hydro and possibly provincial regulators to provide timely grid upgrades where needed. Available electrical capacity at both the building and neighborhood level is thus a constraint. Space and structural capacity are also factors: retrofitting large heat pump units, thermal storage tanks, or adding insulation and cladding requires sufficient space and structural support in each building. Buildings with confined mechanical rooms or structural limitations could be harder to retrofit, making the plan contingent on finding design solutions for those cases. Additionally, many TCHC buildings may contain hazardous materials (e.g. asbestos) or require extensive repairs, which must be addressed in tandem – these conditions can add cost and schedule risk. Each project depends on overcoming site-specific technical hurdles (i.e. power capacity, space, underlying repairs) to achieve the intended GHG reductions.	
5	Optimize Energy	TCHC plans to continue advancing	TCHC		Tenant and Community Factors	
	Management	efficiency measures that reduce emissions				

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		in both day-to-day operations and building systems. Operational improvements include upgrading to LED lighting, optimizing smart building controls, and addressing inefficiencies in existing systems. Capital retrofits, such as installing heat recovery ventilators and other energy conservation upgrades, will further enhance long-term energy performance.			TCHC's decarbonization depends on tenant cooperation and minimal social disruption. Deep retrofits in occupied multi-unit residential buildings require entry into units, temporary service interruptions, and, in some cases, tenant relocation during construction. The plan's success is tied to managing these challenges – strong tenant engagement is needed to gain support for upgrades that might be inconvenient in the short term. Large projects under occupied conditions are, therefore, often subject to delays or scope reduction.  New roofs or recently constructed roofs. Orientation and shading. Connection availability from Toronto Hydro to the grid. TCHC is also planning to pilot virtual net-metering for larger solar PV arrays on townhomes where tenants have their own electricity account.	
6	On-Site Renewables and Storage	TCHC has been an early adopter of integrating renewable energy generation where feasible to offset grid electricity consumption. For example, TCHC has the most solar photovoltaic (PV) systems on rooftops or over parking areas of any residential building portfolio in Canada: 42 solar PV systems, 4MW Capacity, avoids \$1 Million of electricity purchases from the grid per year. Studies show PV can be cost-effective with 15–20-year payback in multi-unit residential buildings, depending on available roof/parking area. Battery storage pilots are also considered to shift solar power to peak periods. While on-site renewables alone won't cover a high-rise's full electrical annual consumption or demand, they reduce net grid emissions and provide some resilience. In keeping with the recommendations outlined in TCHC's Net Zero Strategy Study prepared by WSP, TCHC should evaluate	TCHC			

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		photovoltaic (PV) systems for each project and incorporate them selectively within retrofit pathways.				
	Toronto Transit Commission (TTC) Buildings					
1	Net-zero planning and retrofit	TTC has completed detailed decarbonization (net-zero transition) plans for five representative facilities – identifying schedules, technologies, and costs for replacing fossil-fuel HVAC with electric/low-carbon systems – and will extend such plans to all remaining gas-heated buildings by 2027. These plans will directly drive projects to swap out boilers/chasers, upgrade controls, and install more efficient HVAC equipment.	TTC		Electrical grid capacity TTC's ability to switch to electric heating hinges on having enough power capacity. Implementation of low-carbon heating depends on Toronto Hydro (and sites) providing sufficient electrical service. If the local grid cannot support the additional loads, projects must be staged around utility upgrades.  Competing demands Other programs (such as the Green Bus Program and new subway trains) also require expanded power infrastructure. These competing priorities could constrain the timing and feasibility of building electrification. TTC will need to coordinate its schedule with broader city power plans.	Developing detailed plans TTC has already completed net-zero transition plans for five representative buildings and used them to create a portfolio-wide decarbonization roadmap. These plans specify how and when each fossil-fuel heating systems will be replaced with net-zero alternatives. By 2025–2027, TTC will extend this work by finalizing building-specific transition plans for every remaining gas-heated facility.  Electrical load studies To tackle grid constraints, TTC is conducting comprehensive electrical load assessments at each facility and a commission-wide load study. These studies will quantify the extra power needed for building electrification (and bus charging) and identify where utility upgrades are required.
2	Fuel-switching projects	TTC will implement fuel-switching projects (replacing oil/gas heating with electric heat pumps or other net-zero technologies) According to transition plan schedules. Decarbonization will generally align with asset renewal cycles, unless otherwise specified, to ensure financial efficiency while balancing the need for timely execution to meet greenhouse gas reduction targets.	TTC		Capital funding Meeting TTC's portion of the City's 2026–2030 emissions budget requires a substantial investment. TTC's own decarbonization capital (\$184 M budgeted) is far below the estimated \$1–3 billion needed. TTC's Finance and Intergovernmental Relations teams must obtain City capital, grants, or other government support. If adequate funds are not approved, many projects will be delayed beyond 2030. To ensure immediate financial efficiency amid budgetary pressures, decarbonization is largely planned to	Utility coordination Using the study results, TTC will coordinate with Toronto Hydro and other power providers to evaluate the feasibility, timelines, and costs of needed electrical upgrades. This proactive engagement aims to secure the necessary grid capacity ahead of major heating system conversions.  Ongoing alignment

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					coincide with asset renewal rather than occur in advance.	By aligning its capital program with the City's net-zero direction, TTC aims to ensure all upcoming HVAC and infrastructure projects account for electrification needs. By conducting a commission-wide load study this will inform budgeting for future electrical capacity upgrades at each building.
3	Electrical infrastructure upgrades	To accommodate electrification, TTC will conduct electrical load assessments across its buildings and then upgrade on-site electrical infrastructure (transformers, wiring, etc.) as needed. These studies will identify the capacity needed for each building's new electric heating and other low-carbon systems, enabling TTC to plan the required grid upgrades.	TTC			
4	Renewable energy integration	Where feasible, TTC will install on-site renewable generation (e.g. solar PV) to offset building electricity use, reducing scope 2 (electricity) emissions.	TTC			
5	Capital planning alignment	TTC is integrating the net-zero plans into its asset management and capital investment programs. Recommendations from the portfolio net-zero roadmap are under review to update HVAC design criteria and state-of-good-repair budgets, ensuring that all future building projects (e.g. roof, chiller replacements) incorporate low-carbon solutions.	TTC			
	Parks & Recreation					
1	Net-zero planning	In 2024, Parks and Recreation (P&R) completed Phase 1 of its GHG reduction planning, benchmarking baseline energy performance and identifying priority sites for fuel switching and solar PV installation. Based on utility billing, the study found total carbon emissions of 25,000 tons, with 83%	Parks & Recreation	ECF	Organizational Capacity P&R is continuing to build staff capacity to lead the implementation of P&R's energy transition plans. Currently, a single FTE is guiding the netzero planning and implementation, two additional resources are required to scale delivery of work to meet net-zero targets.	Organizational Capacity P&R is looking to retain 2 FTE positions in 2026 to support the transition program. In addition, P&R has engaged the support from ECF to provide netzero consultation support on active

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		attributed to natural gas fired equipment. Phase 2, a detailed, consultant-led transition plan that is underway and will be completed in 2026 will provide a prioritized roadmap to decarbonize approximately 100 key facilities that account for 80% of total emissions. This plan will outline capital cost requirements and further guide fuelswitching, renewable energy, conservation, and efficiency projects designed to achieve measurable GHG reductions.			Capital funding P&R has allocated \$46.9 million from the Gardiner/DVP upload savings in the 10-year Capital Budget to initiate GHG reduction initiatives and advance progress toward its Net Zero goal. This funding will help launch and address immediate priority projects. However, achieving net-zero objectives across the P&R portfolio will require significant investment due to the large number and diversity of assets. The total cost is anticipated to be in the hundreds of millions of dollars. Funding to address the existing SOGR backlog and other priorities is already constrained, creating additional financial challenges. Developing a detailed and accurate cost estimate will require comprehensive electrical studies for each facility to assess existing electrical capacity and define upgrade requirements and associated costs. Detailed funding needs will be confirmed through the transition plans and incorporated into future capital plans.	Capital Funding Significant funding will be required to complete the detailed electrical studies at each site and to achieve Net Zero. Early discussions need to occur with the CFO and Financial Planning Division to plan funding strategy to achieve net zero.
2	Fuel-switching projects	P&R has allocated \$46.9 million from the Gardiner/DVP upload savings to initiate GHG reduction initiatives and advance progress toward its Net Zero goal. This funding will be integrated into approximately 15 planned State of Good Repair (SOGR) projects in across various facilities to support fuel switching, electrical system upgrades, and the installation of solar PV systems in conjunction with roof replacement projects where feasible.	Parks & Recreation		Electrical Grid Capacity Growing electrical demand from facility electrification will challenge existing grid capacity, underscoring the need for early coordination with utilities and targeted infrastructure upgrades to ensure reliable power delivery.	Electrical Grid Capacity Increased electrical demand from facility electrification is expected to place pressure on existing grid infrastructure that may not have sufficient capacity to support widespread conversion. To address this dependency, P&R will collaborate with Environment & Climate (ECF), Corporate Real Estate Management (CREM), and Toronto Hydro through a coordinated planning framework to ensure electrical infrastructure readiness for future projects.

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3	Electrical infrastructure upgrades	Several fuel switching projects will require upgrades to electrical service and related infrastructure at facilities. To enable electrification, P&R will conduct electrical readiness assessments for the 100 priority buildings. These assessments will directly inform necessary upgrades to transformers, switchgear, and distribution systems, and will support the scoping and advancement of enabling work within upcoming SOGR projects.	Parks & Recreation			
4	Renewable energy integration	P&R will expand on-site renewable generation, primarily through solar PV installations, to directly offset electricity consumption and lower operating costs.	Parks & Recreation	ECF		
5	Net-Zero Standards for New Builds	P&R is continuing to construct new facilities to current TGS net-zero standards and that are net-zero. Several facilities recently completed or in design and construction are/will be net zero:  Rouge Valley community recreation centre and childcare centre, Davisville aquatic centre, Western North York community recreation and childcare centre, Lawrence	Parks & Recreation			
		Heights community centre and childcare centre, Don Mills community recreation centre, John Innis community recreation centre, Wabash community recreation centre, Downsview community recreation centre, Ramsden community recreation centre, High Park school and visitor centre, Humber Bay recreation building, Toronto botanical garden yard, High Park Greenhouse, FIFA Training Site Field house, Scarborough Gardens Arena				

# **Resource Requirements for Transition Planning**

Achieving the above actions and completing zero carbon transition plans for every building by 2027 will require increased investments and staffing. Division and agency have estimated the capital funding and human resources needed to develop detailed decarbonization plans and pre-engineering studies for their facilities (distinct from the capital required for the retrofits themselves).

#	Fund & Human Resources for Transition Planning by 2027	Description
	Corporate Real Estate Management	
1	Feasibility Studies for 300+ Buildings	The Net-Zero Carbon Plan mandates developing a detailed "Zero-Carbon Transition Plan" for every City-owned building. This means conducting energy audits and feasibility studies for 165 core CREM sites plus 150–300 additional leased or transitional sites. TCREM has already embarked on completing detailed plans for the first 165 buildings. Each building's study will produce a roadmap of retrofit actions, costs, and timelines to achieve zero carbon.
2	Funding Estimate	Funding is in place to develop feasibility studies and energy audits for the first 165 buildings identified in CREM's plans.
3	Human Resources	CREM will continue to leverage existing staff to manage and deliver these building transition plans. These City staff will oversee the work and integrate it with capital planning. In addition, the City will engage external engineering and technical consultants for technical analysis –energy engineering firms, architects, and specialists to conduct building-by-building studies.
	Toronto Community Housing Corporation (TCHC)	
1	Comprehensive planning	Through external consultations TCHC is recommended to undertake a detailed, asset-by-asset Net Zero transition study. This means developing a site-specific decarbonization plan for each of the1,325+ buildings in the portfolio. Completing all these building transition plans by the end of 2027 will require significant funding and staffing. The scale is enormous – TCHC aims to retrofit 80% of its buildings by 2040 and 100% by 2050, implying every single building needs a viable pathway to zero carbon. Preparing these site plans will involve detailed engineering audits, feasibility studies, and capital planning for each property.
2	Funding needs	The overall capital investment to decarbonize TCHC's portfolio is estimated at \$4–6 billion over the next 25 years. Planning costs (studies, audits, design development) typically constitute a few percent of capital costs. Preliminary estimates suggest that developing all building-level transition plans could require funding on the order of tens of millions of dollars between now and 2027; however, this commitment will need to be reviewed and confirmed. TCHC is expected to tap multiple funding sources for this purpose. Fortunately, numerous grants and financing programs (federal, provincial, etc.) are available to support low-carbon studies in affordable housing. For example, the Canada Mortgage and Housing Corporation (CMHC) and Federation of Canadian Municipalities (FCM) offer funding that can cover feasibility studies and some staffing costs for deep retrofit projects. TCHC will need to aggressively leverage these programs to fund the planning phase.
3	Workforce needs	A substantial increase in human resources is required to develop and execute the transition plans by 2027. TCHC's current Facilities Management and Capital Planning teams are experienced but were originally sized for more modest retrofit targets. To effectively plan for net-zero across all buildings, the organization will need to at least triple the capacity of its core retrofit team. This includes hiring additional project managers, engineers, energy analysts, and financing specialist's familiar with deep retrofit projects.
4	Timeline and deliverables	By 2027, TCHC expects to have a zero-carbon transition roadmap for every building or at least each major building archetype. These plans will detail the required retrofit measures, phasing, and costs per site. Achieving this will likely involve batching buildings by type or region and rolling out audits and studies in waves. Adequate project management and funding oversight is needed to coordinate dozens of simultaneous building studies. Overall, securing the necessary funding (planning grants, internal budget allocations) and assembling a larger dedicated team are critical to complete all building plans by the end of 2027.
	Toronto Transit Commission (TTC) Buildings	

#	Fund & Human Resources for Transition Planning by 2027	Description
1	Budgeted funding and staff	The TTC's approved 2024–2033 budget already includes the funding and staffing needed to produce zero-carbon transition plans for every building. In fact, City of Toronto staff confirmed that TTC's 2024 "Portfolio Net-Zero Transition Plan" (based on five archetype buildings) satisfies the municipal bylaw requirement for building-level plans. In other words, no new budget was explicitly requested for plan development – the work is covered under existing capital and operating budgets. For the implementation phase of these plans, additional funding and staffing requirements will be needed.
2	Existing teams	TTC will rely on its current multi-disciplinary teams (the Innovation & Sustainability Group, engineering/operations staff, etc.) to develop the remaining plans.
3	Scale of implementation funding	While planning resources are budgeted, the TTC notes the actual capital costs to implement all these retrofits are very large. Preliminary estimates indicate decarbonizing the top 20 emitting facilities by 2030 would require on the order of \$1–2.3 billion and fully decarbonizing all gas-heated buildings could cost \$1.6–3.4 billion. (By comparison, only about \$184 million is currently funded through 2030 for HVAC/electrification works.) This gap underscores that, while planning is funded, execution will demand substantial additional capital (likely from the City, provincial or federal sources).
	Parks & Recreation	
1	Staff Resources	P&R is continuing to build staff capacity to lead the implementation of P&R's energy transition plans. Currently, a single FTE is guiding the net-zero planning and implementation, two additional resources are required to scale delivery of work to meet net-zero targets. P&R has engaged the support from ECF to provide net-zero consultation support on active Capital Projects with energy focused scope.
2	Capital Funding	P&R has allocated \$46.9 million from the Gardiner/DVP upload savings in the 10-year Capital Budget to initiate GHG reduction initiatives and advance progress toward its Net Zero goal. This funding will help launch and address immediate priority projects. However, achieving net-zero objectives across the P&R portfolio will require significant investment due to the large number and diversity of assets. The total cost is anticipated to be in the hundreds of millions of dollars. Funding to address the existing SOGR backlog and other priorities is already constrained, creating additional financial challenges. Developing a detailed and accurate cost estimate will require comprehensive electrical studies for each facility to assess existing electrical capacity and define upgrade requirements and associated costs. Detailed funding needs will be confirmed through the transition plans and incorporated into future capital plans.

## **Accountability Plan Statement for Corporate Buildings**

We, the undersigned – comprising the Executive Director of Corporate Real Estate Management (CREM) and the heads of the City of Toronto divisions, agencies, and corporations responsible for Corporate buildings – hereby present this unified Accountability Plan Statement, supported further by detailed Accountability Plans specific to our respective portfolio of buildings where we exercise operational control. This joint statement outlines our collective commitments for greenhouse gas (GHG) emission reduction in the City's Corporate building portfolio, in compliance with Chapter 669 (By-law 600-2023) of the Toronto Municipal Code.

The plan addresses the required elements for roles/responsibilities, staff training, funding/resources, and reporting as set out in the bylaw. Our commitments are aligned with Toronto's TransformTO Net Zero Strategy and Corporate climate goals, and we confirm our collective responsibility to plan and allocate resources accordingly.

## Roles and Responsibilities for GHG Reduction Projects

The Executive Director of Corporate Real Estate Management will provide a summary of actions aimed at significantly reducing building sector GHG reductions. CREM will coordinate efforts across divisions, sharing technical expertise and best practices. CREM will also facilitate access to external funding programs and advise on budget preparation for climate initiatives.

Each Division, Agency, and Corporation head will designate one or more leads responsible for identifying, developing, implementing, and maintaining emission-reduction projects in their building portfolios. The City will issue clear staffing guidance—scaled to portfolio size and complexity—and will review these roles through the annual carbon budget process.

These leads will integrate GHG reduction goals into their business plans and capital projects. They will prepare detailed project proposals and funding requests (for the City budget and carbon budget, or external grants) to secure necessary resources.

Responsibility for initiating budgetary requests lies with the building portfolio owner. Division/Agency heads will ensure that each GHG reduction project has an associated funding request included in divisional budgets. CREM will support this process by reviewing project business cases and advising on alignment with city-wide targets.

### **Staff Training and Capacity Building**

Staff will receive training in climate action and building decarbonization. By educating staff on the City's TransformTO objectives and the Toronto Green Standard, we ensure everyone understands the technical and policy context of their projects.

Attachment 2

We commit to continuous capacity-building by sharing resources and lessons across divisions. As new technologies and methods emerge, staff will be updated through working groups or divisional networks.

## **Zero Carbon Transition Plans: Funding and Resources**

We confirm that each division/agency will allocate the funding and human resources needed to complete a Zero Carbon Transition Plan for every building in its portfolio by December 31, 2027. Each Division/Agency head will ensure that project teams have dedicated staff time and budget to carry out energy audits, engineering studies, and stakeholder consultations required for these plans.

If any necessary resources are not yet secured, we will seek them through the 2026 budget process. Each division is preparing its 2026 budget submission to include requests for any additional funding or new positions needed to meet the 2027 deadline.

#### **Reporting on GHG Emission Reductions**

Each Division/Agency will assign staff to monitor and report on the outcomes of all GHG reduction projects or portfolio-level reporting, where applicable.

Through regular progress reviews, we maintain accountability and transparency for all projects in our portfolios.

The undersigned have reviewed and agree to the above roles, responsibilities, and commitments. By our signatures below, we confirm our joint dedication to reducing greenhouse gas emissions from Corporate buildings and to allocating the planning, budget, and staff resources necessary to reach our net-zero goals.

Signature:	
J	(Original signed by)
	Patrick Matozzo
	Executive Director, Corporate Real Estate Managemen

Signature:	(Original signed by) Shanley McNamee General Manager, Children's Services
Signature:	(Original signed by) Pat Tobin General Manager, Economic Development and Culture
Signature:	(Original signed by) Dan Boyle Chief Executive Officer, Exhibition Place
Signature:	(Original signed by) Nicole Welch General Manager, Long-Term Care Homes
Signature:	(Original signed by) Clyde Wagner Chief Executive Officer, Performing Arts Centres

Signature:	
o.g.rataro.	(Original signed by) Tom Azouz (A) General Manager, Parks and Recreation
Signature:	
	(Please refer to signed detailed Accountability Plan, available upon request) Matt Keliher General Manager, Solid Waste Management Services
Signature:	
	(Original signed by) W. Scott Collier President, Toronto Parking Authority
Signature:	(Original signed by) Moe Hosseini-Ara City Librarian, Toronto Public Library
Signature:	(Original signed by) Mandeep Lali Chief Executive Officer, Toronto Transit Commission

Signature:	
	(Please refer to signed detailed Accountability Plan, available upon request) Lou Di Gironimo
	General Manager, Toronto Water
Signature:	(Original signed by) Dolf DeJongh Chief Executive Officer, Toronto Zoo
Signature:	(Original signed by) Ashley Curtis Acting General Manager, Transportation Services