

PE15.1

Attachment A

Attachment A: *TransformTO* Short-term Strategies

1. Supporting energy efficiency in buildings

Expand current programs to reduce energy use in houses, multi- residential and other buildings. This includes offering a suite of resources, incentives and innovative financing to save on energy costs, enhance the quality of housing stock and improve affordability across all neighbourhoods.

1.1 Enhance the Better Buildings Partnership: By increasing technical resources, financial assistance, and coordination of incentives for property owners, the BBP will incorporate new opportunities for greenhouse gas emission reductions in alignment with the Ontario Climate Change Action Plan, energy efficiency and resilience improvements in new and existing public and private buildings.

City of Toronto		Provincial Climate Change Plan Priority	<i>TransformTO</i> Community Consultation Priority	Range of Emission Reduction Potential by 2020 (tonnes CO ₂ e)
Lead	Partner			
Environment & Energy		✓	✓	185,000 to 415,000

1.2 Innovative financing mechanisms: The City has unique financing options to attract building owners to make energy efficiency and clean energy investments, including competitive Sustainable Energy Plan Financing loans and the Home Energy Loan Program, local improvement charge rebates and Toronto Atmospheric Fund’s Energy Savings Performance Agreements. The City will endeavour to scale-up these programs and explore new partnership opportunities to mobilize private capital for energy projects.

City of Toronto		Provincial Climate Change Plan Priority	<i>TransformTO</i> Community Consultation Priority	Range of Emission Reduction Potential by 2020 (tonnes CO ₂ e)
Lead	Partner			
Environment & Energy,	Toronto Atmospheric Fund			enabler

1.3 Dedicate funding for community-based climate action: The City will continue and seek to expand Sustainable Energy Plan financing for community based groups, including not-for-profit, interested in undertaking energy conservation and greenhouse gas emission reduction projects to ensure benefits are shared across all neighbourhoods. Access to low-interest financing will help to address financing barriers that disproportionately impact neighbourhoods from taking climate action.

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Lead	Partner			
Environment & Energy			✓	enabler

1.4 Improve energy efficiency of social housing: The City will improve the energy efficiency and quality of social housing by maximizing and leveraging the \$42 million in Provincial SHARP funding, coupled with financing from the Sustainable Energy Plan Financing program, to drive deep carbon and utility cost reductions, while improving the living conditions for low-income households.

City of Toronto		Provincial Climate Change Plan Priority	<i>TransformTO</i> Community Consultation Priority	Range of Emission Reduction Potential by 2020 (tonnes CO _{2e})
Lead	Partner			
Shelter, Support & Housing Administration	Toronto Community Housing, Environment & Energy, Toronto Atmospheric Fund	✓	✓	5,000 to 25,000

1.5 Continue support for residential property owners: The City will support residential buildings by providing a streamlined pathway of resources, incentives, and financing for property owners to undertake energy works. Funding and promotions will be scaled-up to renovate homes and multi-residential properties at a much greater rate. Expanding the Home Energy Loan Program and High-rise-Retrofit Improvement Support Program to include a broader scope of eligible properties, renewable energy and resilience improvements to protect owners from property damage attributed to extreme weather. Improvements to multi-residential properties will be further enabled by expertise, resources and ‘one-window’ service through the Tower Renewal STEP Program.

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Lead	Partner			
Environment & Energy, Social Development, Finance and Administration, Toronto Atmospheric Fund		✓	✓	3,000 to 40,000

2. Raising the bar for new construction & community energy planning

Continue to elevate the energy performance of new buildings trending towards net-zero energy through the Toronto Green Standard, while also integrating community energy planning and neighbourhood-scale energy solutions.

2.1 Advance leading-edge new construction standard: In consultation with green building leaders, the City will elevate energy efficiency standards for new construction with Version 3.0 of the Toronto Green Standard (TGS). The TGS will progressively raise-the-bar for better building energy performance and lower environmental impact, by setting out long-term energy and emission reduction targets by building type, thereby offsetting emissions from population growth. The higher energy performance metrics under a new Tier 2 requirement for new City Agency, Corporation and Division owned buildings, would demonstrate City leadership and is complemented by the City’s partnership in the delivery of the Province’s saveONenergy incentive program for High Performance New Construction across the City.

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Lead	Partner			
City Planning	Environment & Energy, Toronto Atmospheric Fund	✓	✓	10,000

2.2 Advance community Energy Planning: The City will maximize the potential for Community Energy Planning (CEP) preparation and implementation for all new major developments and revitalization areas. Key CEPs underway include the downtown core (TOcore), Yonge & Eglinton, Consumers Next, Finch Corridor. There are also three Net-zero Communities CEPs under-way: Port Lands, Six Points Interchange, and Mt. Dennis.

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Lead	Partner			
Environment & Energy	City Planning & Stakeholders	✓		enabler

2.3 Advance low-carbon/Renewable Thermal Energy Networks (District Energy): The City is working with key stakeholders to significantly scale-up the development of thermal energy networks and map low-carbon/renewable energy sources across Toronto. These networks connect buildings at the neighbourhood scale with local low-carbon energy sources, such as, sewer heat recovery, lake water cooling, large geo-exchange fields augmented with solar thermal collectors, as well as, biogas and biomass from municipal operations.

City of Toronto		Provincial Climate Change Plan Priority	<i>TransformTO</i> Community Consultation Priority	Range of Emission Reduction Potential by 2020 (tonnes CO ₂ e)
Lead	Partner			
Environment & Energy	Various	✓	✓	10,000 – 100,000

2.4 Create Renewable Energy Strategy: The City will investigate ways to advance the city-wide adoption of clean, renewable energy technologies such as solar PV, wind and geo-exchange through a comprehensive long-term strategy developed with industry stakeholders.

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Lead	Partner			
Environment & Energy	Economic Development		✓	enabler

3. Advancing sustainable transportation

Encourage the shift towards sustainable methods of transportation, which promotes active living and reduces human health risk.

3.1 Explore road pricing: The City will explore user charges on the Gardiner Expressway and Don Valley Parkway as a solution for tackling gridlock and reducing emissions from private transport. In addition to providing a new source of revenue, road pricing options can support reduced traffic congestion, a modal shift to transit, and improve air quality. A comprehensive road pricing options and impact study is currently being undertaken by Transportation Services.

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Lead	Partner			
Transportation Services			✓	5,000

3.2 Support safe cycling and walking: The City will encourage active transportation by implementing the Road Safety and Cycling Network Plans and Complete Street Guidelines. Doing so will make walking and cycling more accessible, safe and a viable option for commuters.

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Lead	Partner			
Transportation Services	City Planning	✓	✓	75,000

3.3 Enhance transit service: The City will continue to invest in transit service enhancements to meet the needs of current users and encourage a greater shift to public transit by commuters. The development of a comprehensive regional rapid transit network is supported by the TTC and Metrolinx, through such projects as: new express bus routes, York Spadina Subway Extension Project, Finch West, Sheppard East and Eglinton Crosstown LRTs, and Union Station revitalization.

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Lead	Partner			
Toronto Transit Commission	City Planning		✓	-

3.4 Develop a freight strategy: The City will address the health and environmental impacts from goods movement by developing an urban freight strategy. Doing so will

improve the efficiency of transportation of goods in the city and reduce air pollution and transport emissions from heavy trucks.

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Lead	Partner			
City Planning, Transportation Services	Environment & Energy, Toronto Atmospheric Fund			enabler

3.5 Enable electric vehicles (EVs): The City will work with the Province to support the anticipated adoption of EVs by developing policies and program to expand EV use in Toronto, particularly with respect to vehicle charging stations and parking. Also, the City will partner with Toronto Hydro to provide needed infrastructure and electrical grid resilience for EV use.

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Lead	Partner			
Transportation Services	Environment & Energy, Toronto Parking Authority	✓	✓	50,000

4. Leading by example

Accelerate investment in low-carbon technologies and processes across City-owned facilities and operations. Through the Tier II policy for capital projects, energy efficiency retrofits, renewable energy projects and employee commuter options, the City will demonstrate leadership in curbing carbon emissions by strategically managing its own assets. The City will also implement its long term waste management strategy which is designed to minimize future carbon emissions from waste.

4.1 Expand energy retrofits at City facilities: The City will accelerate the implementation of its Energy Conservation and Demand Management (ECDM) Plan to drive energy consumption savings of 30% or greater across its real estate portfolio. In addition to accelerating energy retrofits, greater effort will focus on building operations and maintenance, training of building operators, coordination of energy retrofits with major renovations and opportunities to generate on-site electricity and enhance building resilience.

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Lead	Partner			
Environment & Energy	All – Divisions, Agencies and Corporation		✓	15,000 to 40,000

4.2 Scale-up renewable energy installations: The City will dramatically expand its renewable energy capacity by completing 56 solar photovoltaic installations at City facilities by the end of 2017. Planning is already underway to double this capacity by 2020.

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Lead	Partner			
Environment & Energy	All – Divisions, Agencies and Corporation		✓	450 to 900

4.3 Utilize landfill gas and biogas: The City is currently examining various options with regards to biogas and landfill gas utilization. One promising emissions reduction and revenue generation project is the production and utilization of Renewable Natural Gas (RNG). RNG is produced by upgrading biogas or landfill gas to natural gas quality, at which point it can be injected directly into the natural gas grid. Once in the grid, it can be used to fuel natural gas vehicles, provide heating for homes and/or be used to generate electricity. It can also serve as a proof-of-concept for other City operations, like wastewater plants, that generate biogas.

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Lead	Partner			
Solid Waste Management	Fleet Services	✓		95,000

4.4 Improve fleet fuel efficiency: The City will continue to make strides with its Green Fleet Plan to reduce carbon emissions and tail-pipe pollutants that cause smog by implementing strategies including anti-idling devices, alternative fuel plans, fleet resizing and eco-driving programs across City fleets.

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Lead	Partner			
Fleet Services Division		✓	✓	-

4.5 Promote Smart Commute for Toronto Public Service: A revamped Smart Commute Program will be launched. It will encourage City staff to shift towards sustainable commuting options, like transit, active transportation, carpooling, and alternative work arrangements. Elements of the Program may include a formalized telework policy, discounted transit passes, car-bike-ride sharing services, and end-of-trip facilities for cyclists and walkers.

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Lead	Partner			
Environment & Energy	All – Divisions, Agencies and Corporation			1,500

5. Engaging and collaborating with stakeholders

Support effective inter-divisional collaboration and work closely with the community, local utilities, and other levels of government.

5.1 Continue *TransformTO* Community Engagement: *TransformTO* talked to over 2,000 Torontonians in 2015-2016. Continued engagement and collaboration with residents, businesses and stakeholders, especially those whose views are traditionally under-represented will be critical to the development and implementation of Toronto’s 2050 deep carbon reduction strategy. Using scenario modelling results based on current and projected data, visualizations of a low-carbon, healthy equitable and prosperous Toronto will be created to stimulate community dialogue through online and in-person channels in order to refine the City’s long-term carbon reduction strategy and enhance its ability to generate a variety of public benefits.

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Lead	Partner			
Environment & Energy, Toronto Atmospheric Fund		✓	✓	enabler

5.2 Use building energy disclosure as an engagement tool: The City will ramp-up direct marketing and outreach activities to building owners by utilizing energy performance benchmarks. This strategy can drive energy savings by allowing better targeting of resources to buildings most in need of support. The City will also publish annual reports on city-wide building energy use as a means of understanding market trends and opportunities for enhanced policy and program development.

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Lead	Partner			
Environment & Energy		✓		enabler

5.3 Leverage Live Green Toronto: The City will expand its engagement with community stakeholders and private sector partners to drive climate action delivery through the multi-faceted program that includes information, programs, volunteer network and events that educate and inform greener lifestyles for Torontonians.

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Lead	Partner			
Environment & Energy			✓	enabler

5.4 Collaborate with utilities on local programming: The City will work alongside Toronto Hydro and Enbridge Gas to support urban renewable energy development, to expand customer access to utility data, and to manage issues related to city-wide energy growth, such as reducing demand in high-growth, energy constrained areas. Opportunities will be explored to improve customer experience by integrating available incentives and rebates offered by the utility companies in conjunction with City programs.

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Environment & Energy	Toronto Hydro, Enbridge Gas			enabler