Overview of the Net Zero Carbon Plan

For Clean Air Partnership

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Overview of Plan Initiatives

Lower Carbon New Builds

Implementing net zero carbon requirements for new builds by adopting the highest Toronto Green Standard



Fuel Switching and Efficiency Retrofits

Primary method for emissions reduction (50% of total); switching from high to low carbon fuel systems for new and existing buildings, considering efficiency retrofits when possible



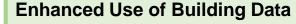
Training and Education

Training staff on how to efficiently manage new systems



Offset and Off-site Renewables

Purchasing carbon offsets to balance out operational emissions and offset outstanding emissions



Consolidating City building information to track/analyze energy consumption, calculate carbon emissions, set KPIs and track progress

On-site Renewables

Implementing on-site energy generation and storage across the building portfolio



Strategic Divestment

Divesting from carbon-intensive assets to focus on creating lower-carbon buildings



Implementation of the Net Zero Carbon Plan

Initially, implementation will focus on working with Financial Planning to integrate the Plan into the capital planning process, using a climate lens and the asset management strategy. Integration will incorporate strategic divestment and enhanced use of building data to guide investment decisions, so that by 2023 net zero considerations will be seamlessly included in all state of future investment work.

Strategic Divestment + Enhanced Use of Building Data to Guide Investments, Lower Carbon New Builds

Integration into the Capital Planning Process

Investments into City Buildings (e.g. Fuel Switching and Efficiency Retrofits)



2021-2022 2023 2024

Costing Breakdown and Options

Creating net zero emissions buildings will be prioritized in the capital planning process using the climate lens and Financial Planning's asset management strategy. As such the City expects emissions reductions can be achieved with no net new increases to the capital budget.

Initiative	Annual Average Expenditure for 80 percent reduction by 2040 (\$ millions)	Annual Average Expenditure for Net zero emissions status by 2040 (\$ millions)
Fuel Switching and Efficiency Retrofits	90.0	165.0
Lower Carbon New Builds	5.0	5.0
Training and Education	10.0	10.0
On-site renewables and storage	25.0	25.0
Total Estimated Cost*	130.0	205.0
Total Estimated Investment to 2040	2,600.0	4,100.0
Total Estimated Carbon Reduction	114,000 tonnes ¹	131,000 tonnes ²



¹Represents approximately 14,000 homes' energy use for one year.

²Represents approximately 16,000 homes' energy use for one year.

Funding Opportunities

Corporate Real Estate Management is exploring funding and loan opportunities provided by other orders of government and associated programs to support implementation of the Plan.



Canadian Infrastructure Bank Commercial Building Retrofits Initiative provides financing for energy retrofits projects on infrastructure portfolios owned and/or managed by the public sector.



Infrastructure Canada's Green and Inclusive Community Buildings Program aims to build more community buildings and improve existing ones while also making the buildings more energy efficient, lower carbon, more resilient, and higher performing.



Green Bonds are an option the City may wish to consider.



Benefits



This investment is expected to:





 Avoid up to \$90 million per year in utility costs by 2040 through fuel switching*;



- Improve local air quality; and
- Create 2000 to 4000 new jobs in the community and increase activity within the local economy (approximately \$6 to \$8 billion in gross domestic product growth)



330 Progress







Mount Dennis Daycare





Etobicoke Olympium

Deep Energy Retrofit





New PF&R Facilities







Thank you



