

# *Framework for a Climate Change and Clean Air Action Plan*

## **Shade for Good Health and a Green City Conference**

Councillor Paula Fletcher  
City of Toronto

May 11, 2007



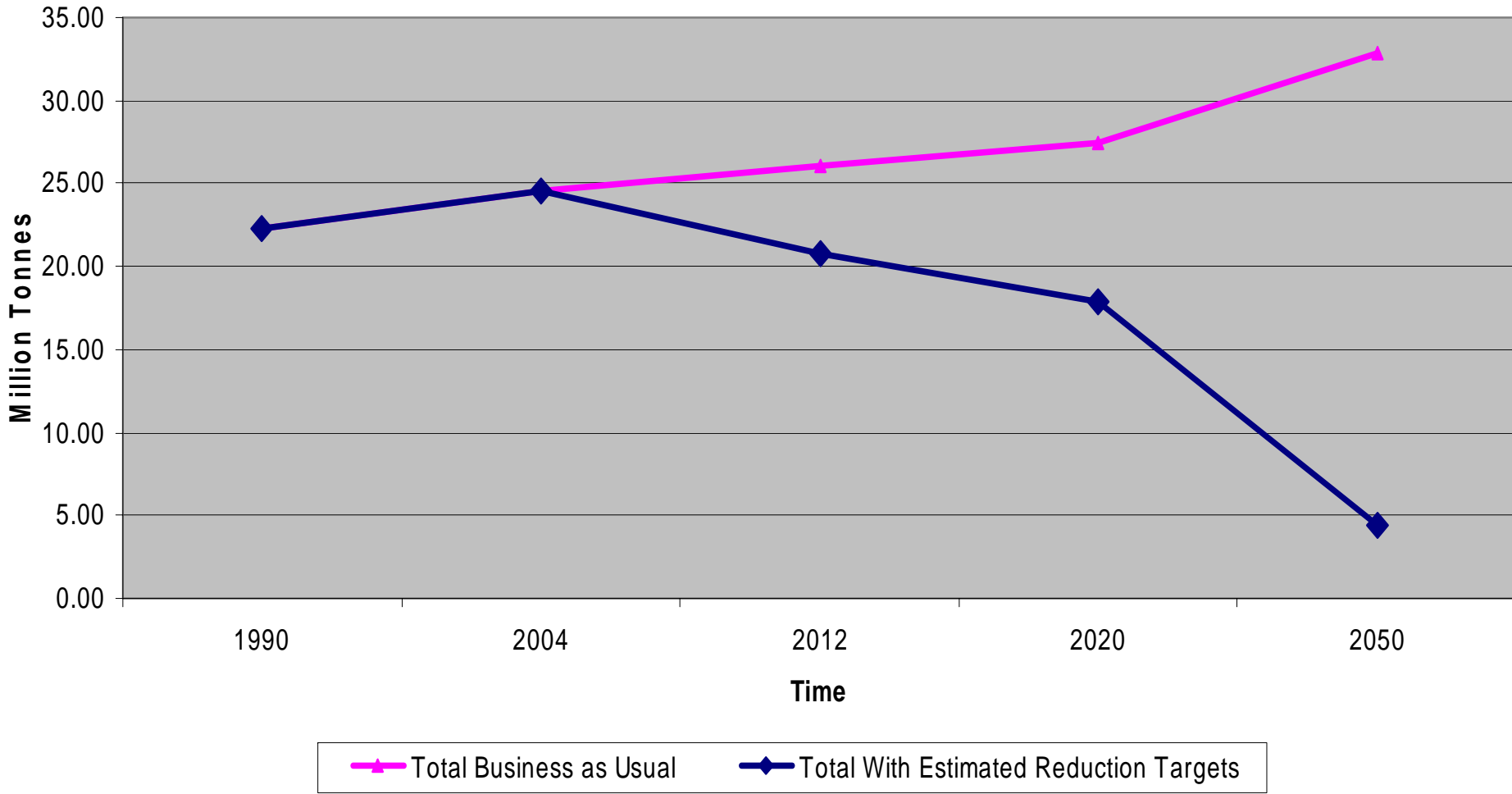
# Why are we addressing “Climate Change” and air pollution?

1. To respond the Mayor’s mandate for aggressive action on addressing climate change and improvements to air quality.
2. Imperative to address the public health impacts of air pollution: 1,700 premature deaths and 6,000 hospitalizations in Toronto per year
3. We must work to mitigate the conditions leading to climate change and implement adaptation strategies to address escalating social, environmental and economic effects.

# Impacts of Greenhouse Gases: Climate Change

- Greenhouse Gases are produced when fossil fuels (oil, coal and natural gas) are combusted and utilized as power and heat.
- Since the Industrial Revolution the concentration of greenhouse gases (carbon dioxide, methane and nitrous oxide) has steadily increased in the atmosphere.
- These gases return more of the energy that would naturally escape from the earth back to the earth. This is known as the “greenhouse” effect.

# Projected vs. "Business As Usual" Greenhouse Gas Emissions City Government and Toronto Urban Area



# SMOG

- Smog is caused by sunlight reacting with volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>) (vehicle emissions) to produce ground level ozone, which is harmful to humans, animals and plants.
- Trans-boundary sources contribute significantly to “smog days”.

A wide-angle photograph of the Toronto skyline across a body of water. The CN Tower is the most prominent feature on the left. The sky is blue with light clouds. In the foreground, several ducks are swimming in the water.

# CHANGE IS IN THE AIR

TORONTO'S COMMITMENT TO AN ENVIRONMENTALLY SUSTAINABLE FUTURE

Framework for Public Review  
and Engagement  
March 2007



# Change is in the Air

- Change is in the Air... “is an invitation to the citizens of Toronto to get involved in developing and implementing the city’s new Climate Change and Clean Air Action Plan. It’s not a draft plan, but rather a framework for meeting our greenhouse gas and air pollution reduction targets.”

Mayor Miller’s Message.

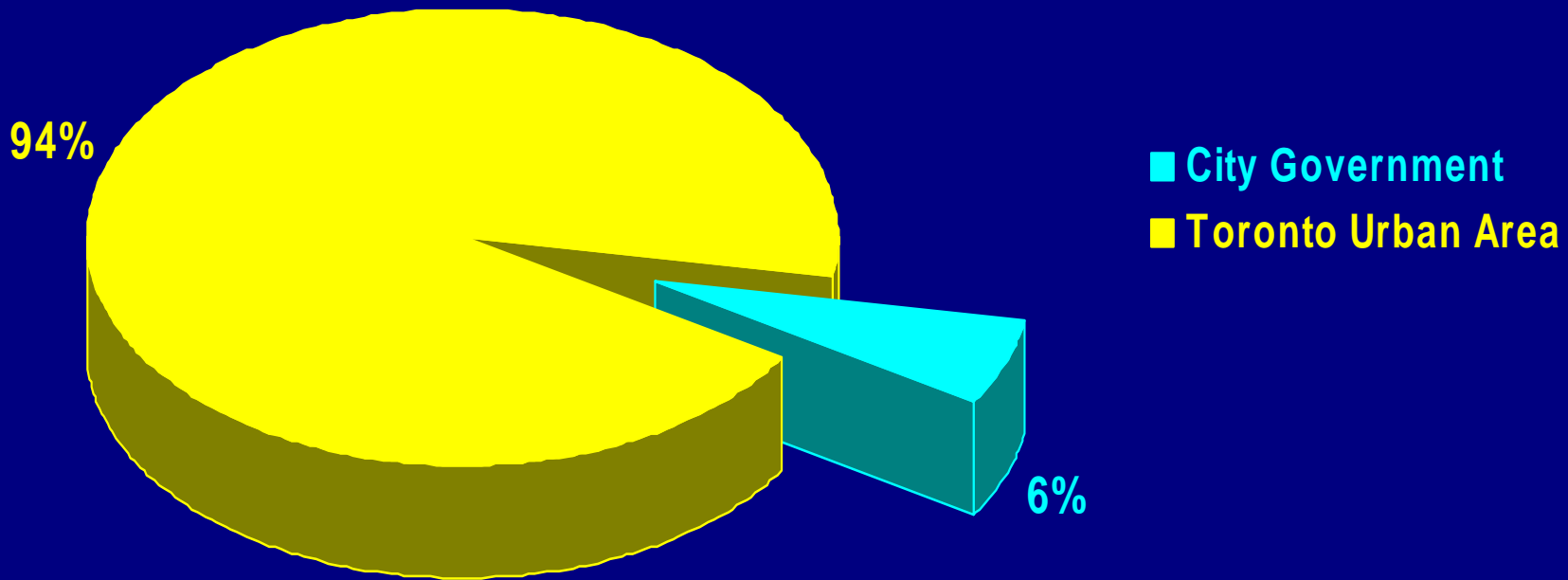
# Greenhouse Gas Reduction Targets

- Change is in the Air sets the following reduction targets for the Toronto area based on a 1990 baseline:
  - **6% by 2012 (Kyoto target)**
  - **30% by 2020**
  - **80% by 2050**

# The Targets are for All of Toronto

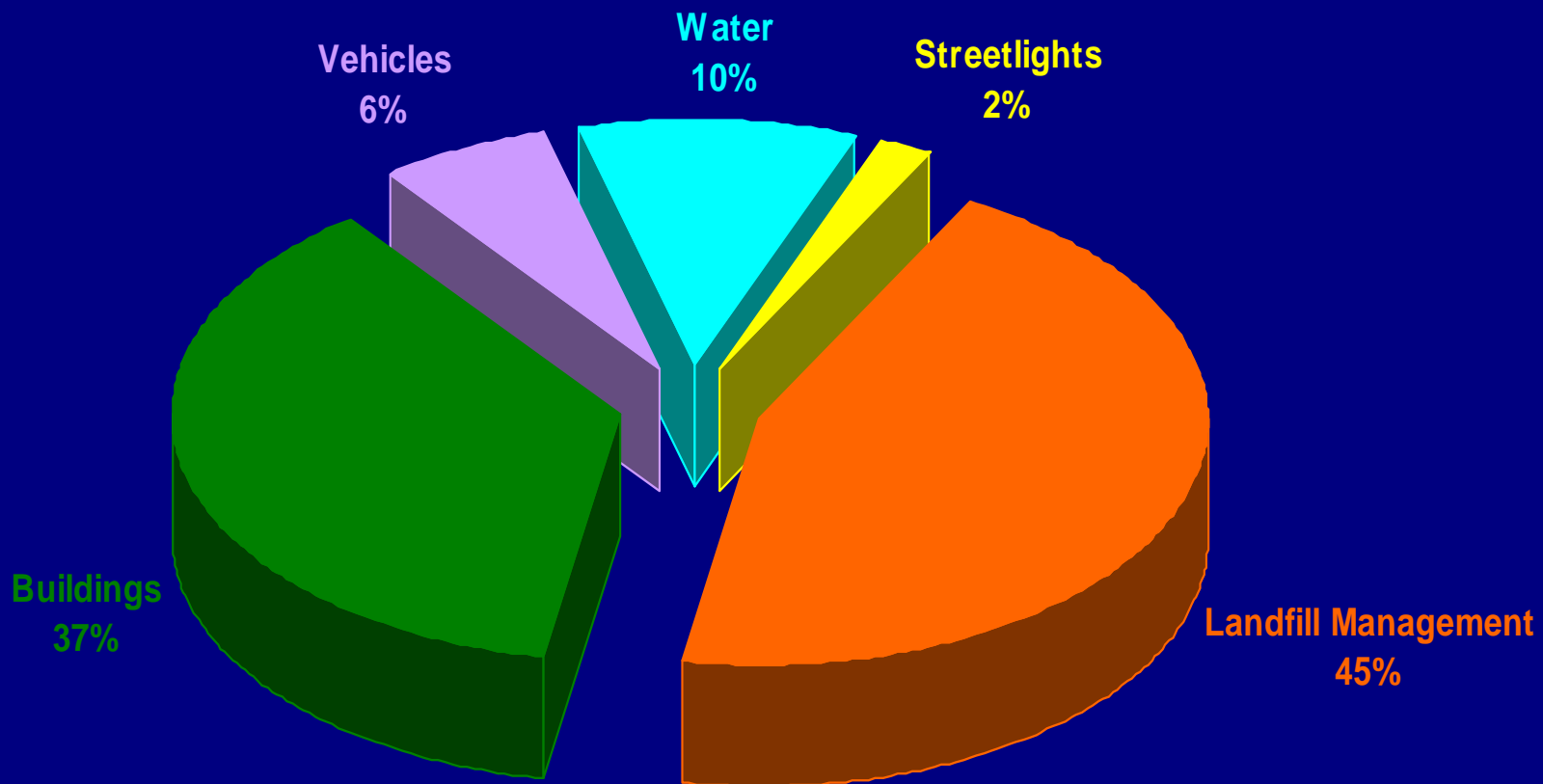
- City government is part of the problem and will be part of the solution (responsible for 6% of emissions).
- The City Urban area, comprising small and large businesses, trucking companies, people driving cars and heating and cooling their homes are also part of the problem and also need to be engaged to be part of the solution (responsible for 94% of emissions).

# City Government and Toronto Urban Area % of Greenhouse Gas Emissions

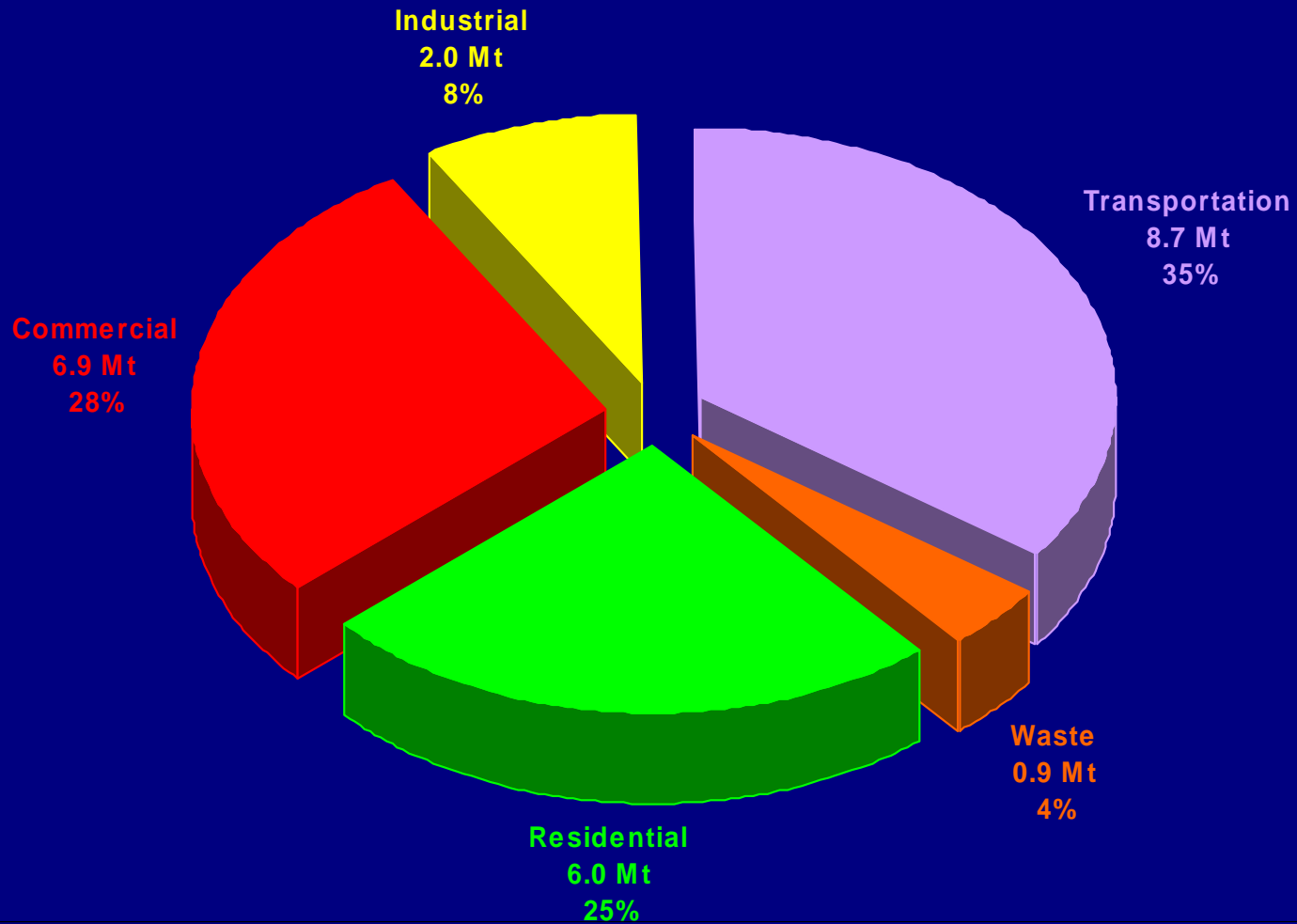


# City Government

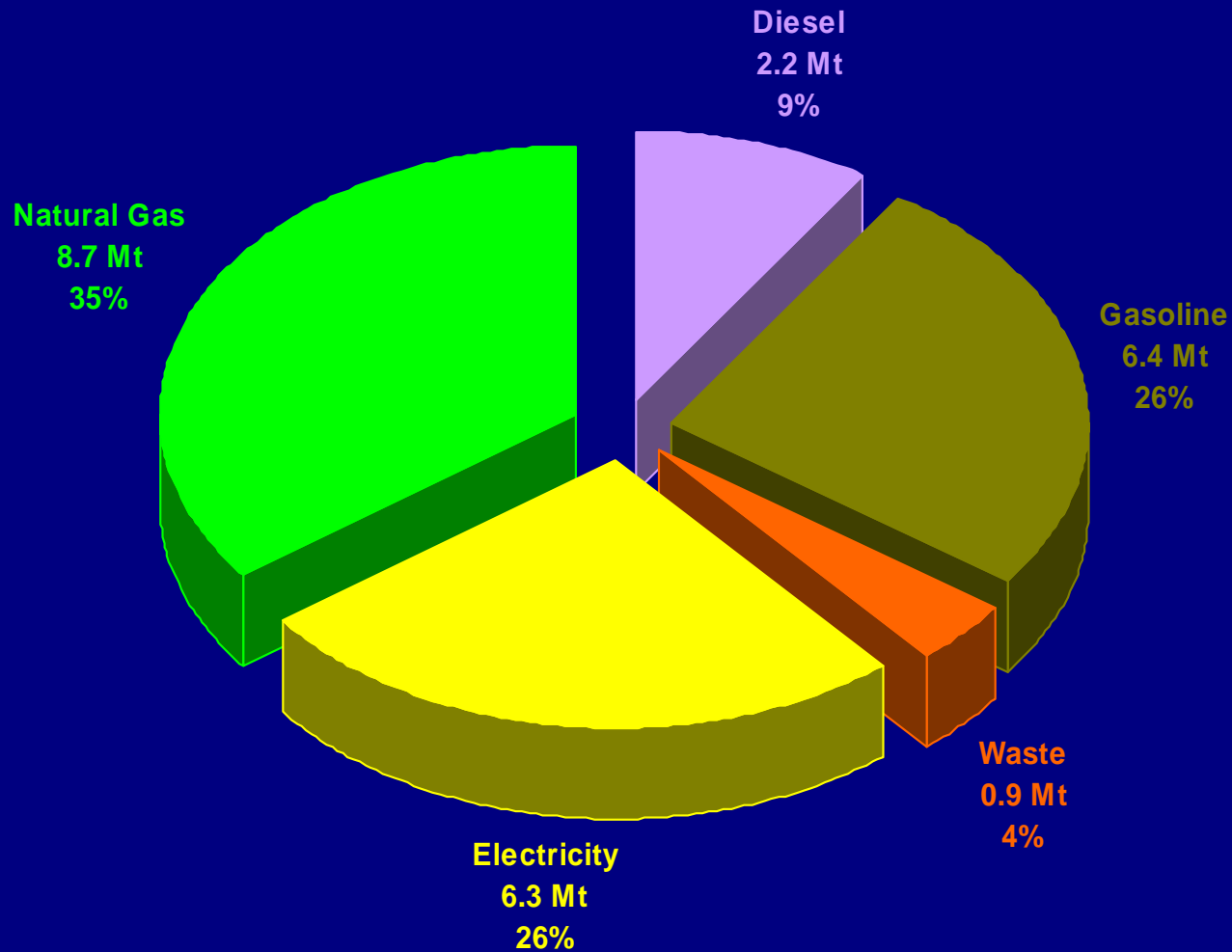
1,590,736 tonnes Greenhouse Gas Emissions (2004)



# Toronto Urban Area Greenhouse Gas Emissions (2004) by Sector



# Toronto Urban Area Greenhouse Gas Emissions (2004) by Source



# 27 Potential Actions

- Change is in the Air contains 27 potential actions.
- Potential actions are linked to energy sources: natural gas; gasoline; diesel; electricity; and solid waste:
- Summary:
  - reduce use of fossil fuels
  - improve our use of energy and heat
  - use more energy efficient technologies
  - emphasis on renewable energy sources

# Potential Actions...

- Make City Hall a showcase of environmental sustainability
- Mandatory green building standards for new buildings, including businesses and residences, no later than 2012
- Conserve 90 megawatts of electricity by 2012
- Continue development at City Centres and along major corridors
- Double the existing tree canopy to 34%
- Implement an adaptation strategy

# Additional Information

- [www.toronto.ca/environment](http://www.toronto.ca/environment)
- Public deputations at Parks and Environment Committee on June 18