Parks & Environment Committee
Subcommittee on Climate Change Mitigation & Adaptation

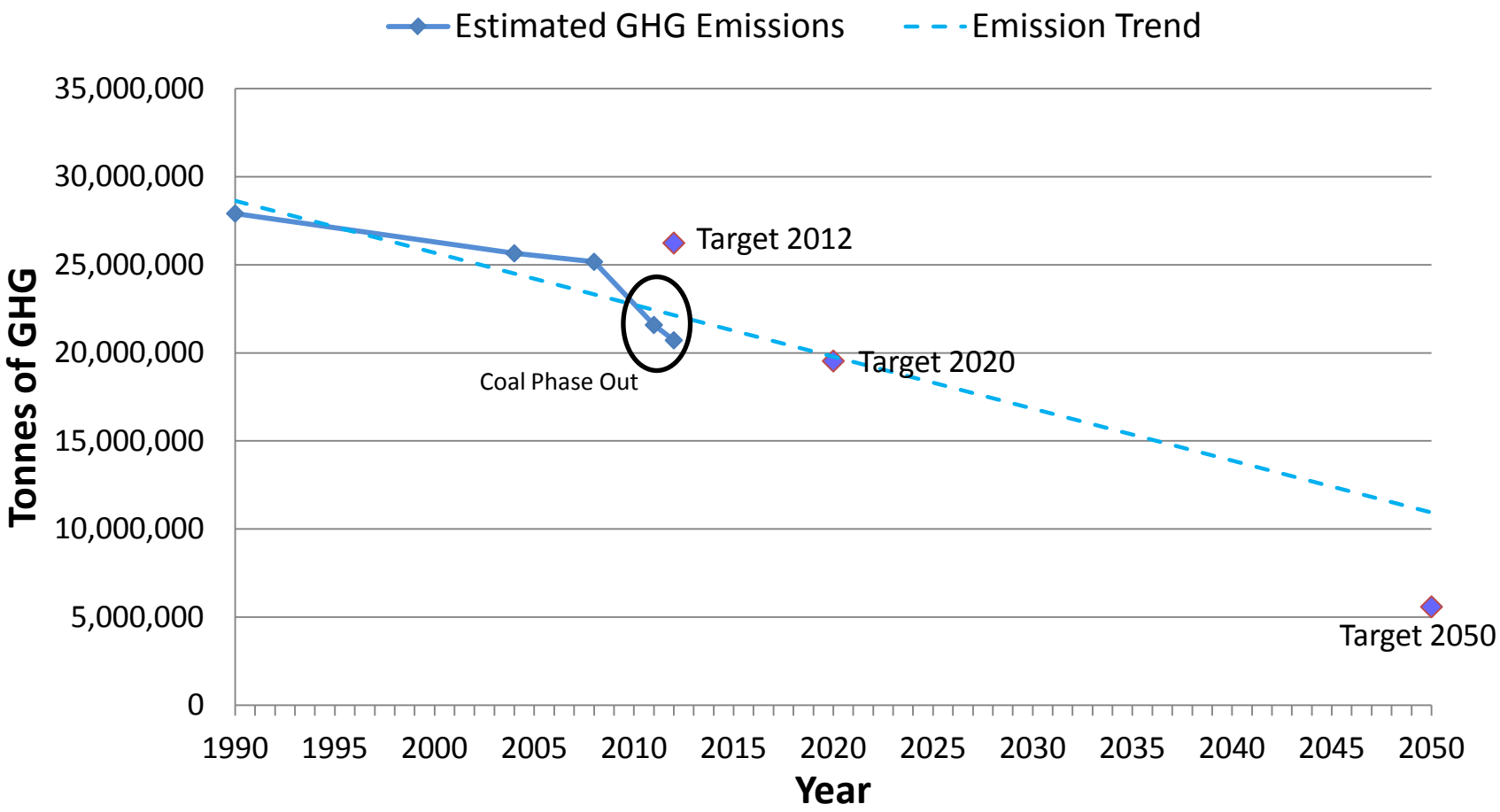
Background

March 2, 2015

Environment & Energy Division
City of Toronto

TORONTO

Greenhouse Gas Emissions and Targets, Current Status



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Toronto Exceeded its 2012 Greenhouse Gas Reduction Target

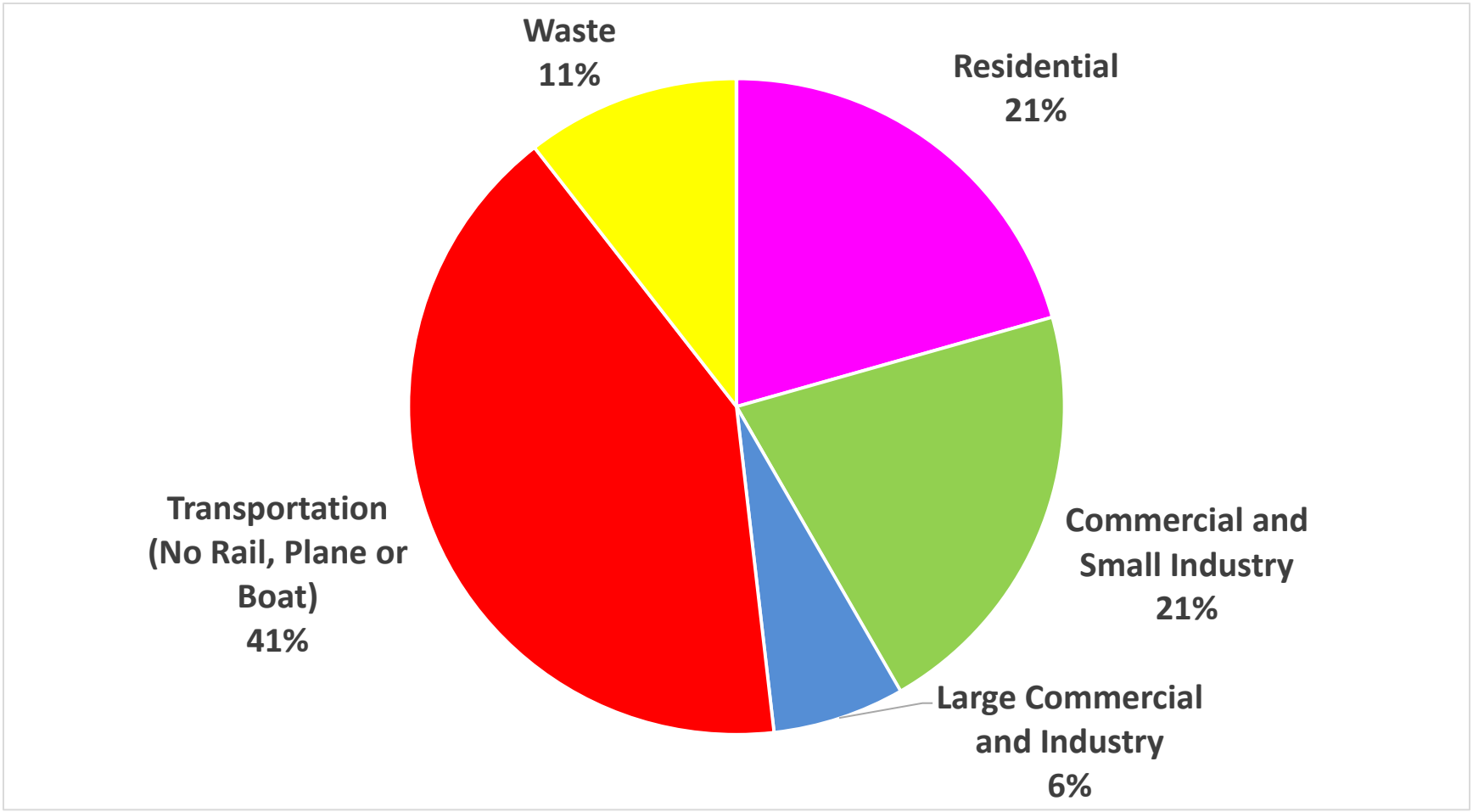
1. Success in residential waste diversion programs and methane capture systems at landfills

2. The phasing out by 2014 of the use of coal to generate electricity

3. Drop in industrial activity and associated energy use

4. Implementation of energy efficiency programs, regulations and standards

Estimated Greenhouse Gas Emissions by Sector for Toronto, 2012



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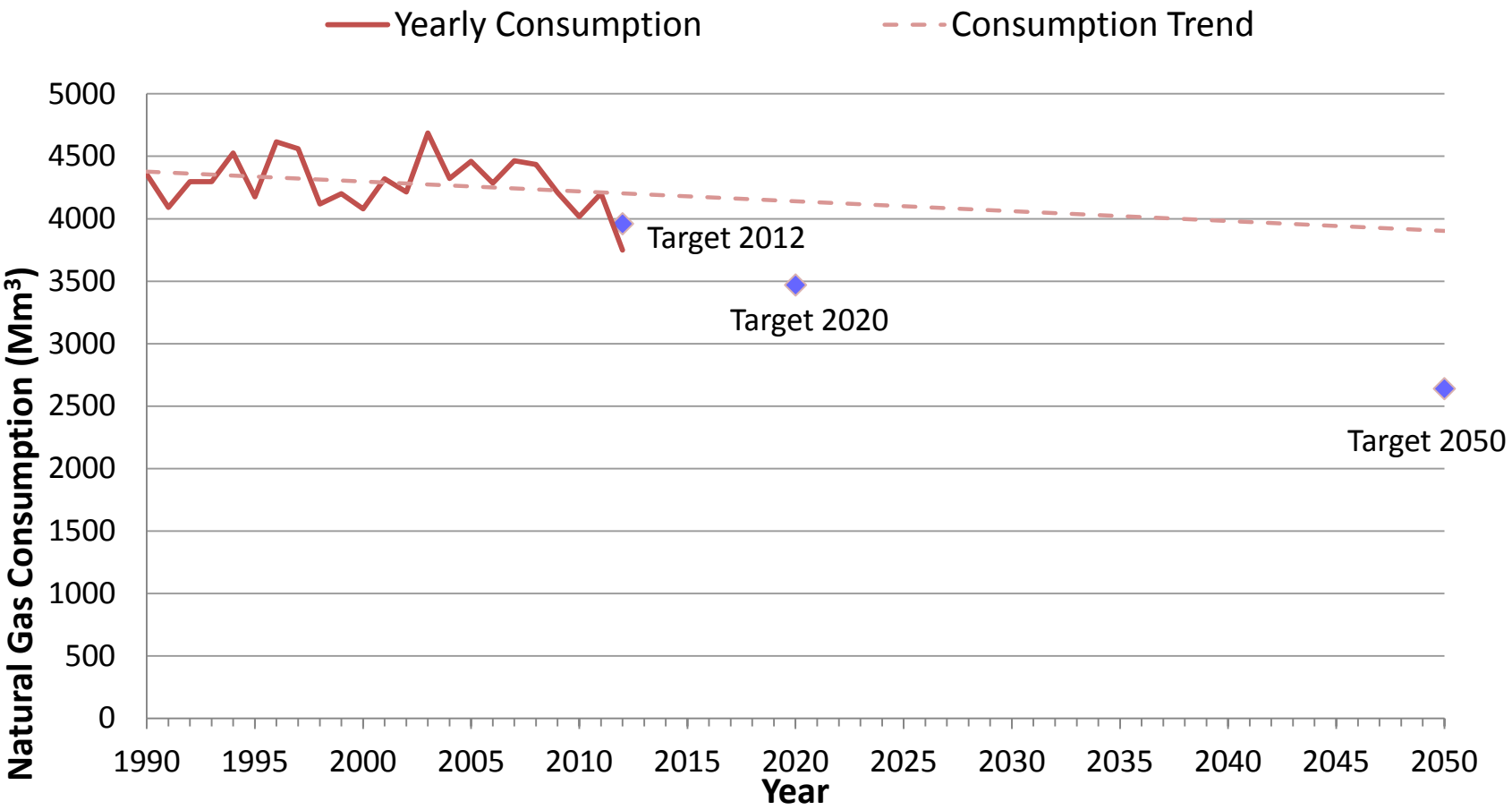
Natural Gas Consumption Targets and Current Trends



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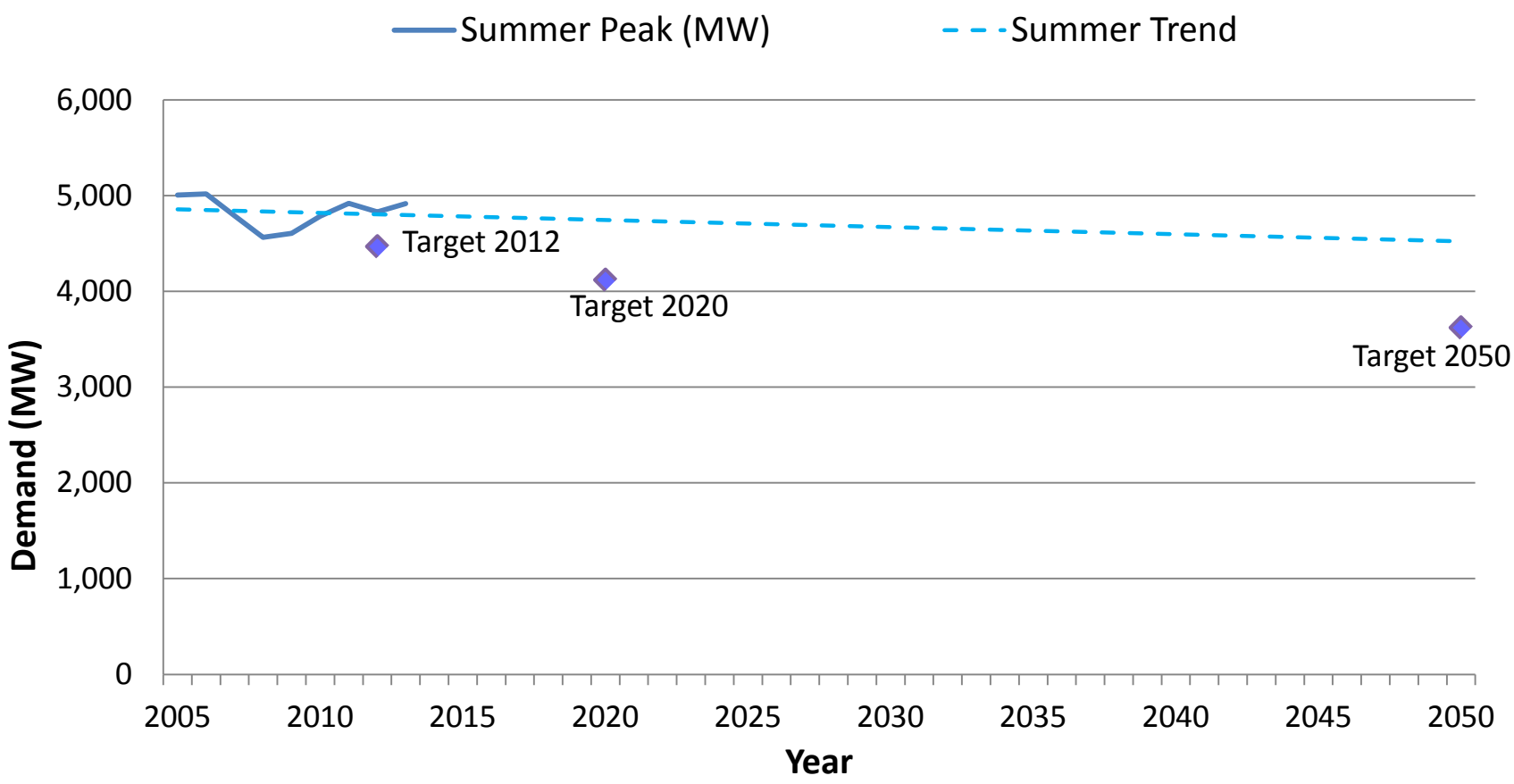
Annual Electricity Peak Demand Targets and Current Trends



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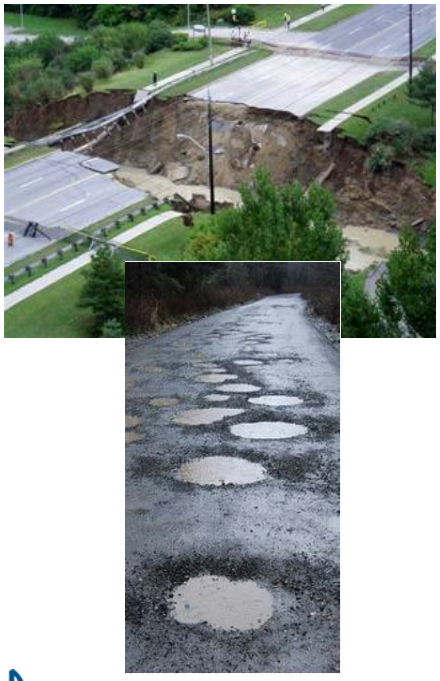
Impact of Changing Climate and Weather Patterns

1. Increased risk of damage and disruption to City infrastructure and services



2. Impact on human health, especially the more vulnerable

3. Increased risk of property damage and damage to the natural environment

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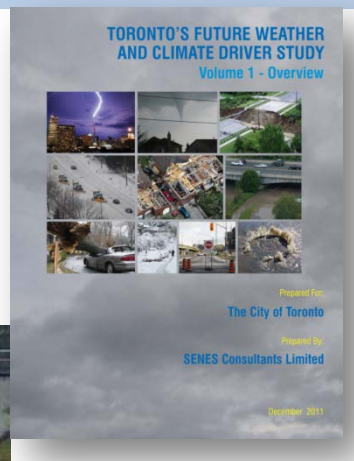
Forecast: Toronto's Future Weather

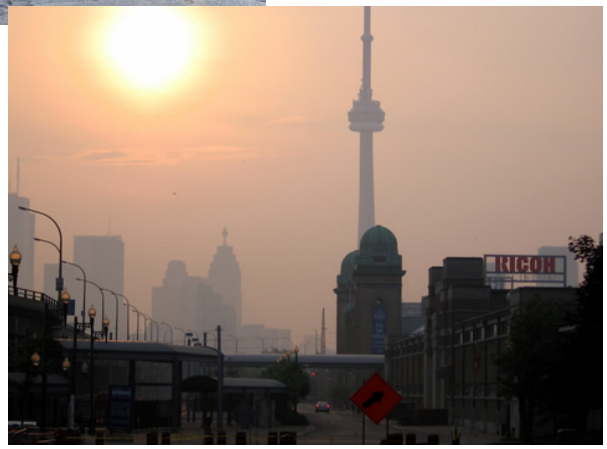
1. More Intense Rain

Less total rain but more frequent and intense rainstorms, such as the July 2013 storm.



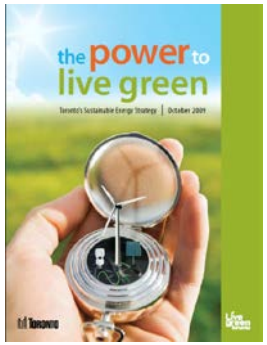
2. Hotter Summers

A five-fold increase in the average number of events of three or more days with above 30 degrees Celsius temperature.



Strategies, Action Plans, Policies

Adopted	Action Plan / Strategy / Policy
July 2007	Climate Change, Clean Air and Sustainable Energy Action Plan
Nov 2009	Power to Live Green: Toronto's Sustainable Energy Strategy
July 2008	Ahead of the Storm: Toronto's Climate Change Adaptation Strategy
July 2014	Resilient City Initiative and Climate Change Risk Management Policy
In Progress (Nov 2015)	Toronto Official Plan – revised Climate Change & Environment Policies



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Recent Council Directives

Strategic Action #6: Environmental Sustainability	Resilient City Initiative	Low Carbon City
October 2013 Develop integrated strategies to address Toronto's environmental priorities. Starting in 2015, publish an annual environment and energy progress report for Toronto.	**July 2014** Council adopted a key policy and gave direction for implementation.	**July 2014** Council asked for identification of the transformative changes required to achieve a low carbon city by 2050.

Subcommittee on Climate Change: Initial Terms of Reference

Overview:

1. interested members of the Parks and Environment Committee;
2. serve until December 31, 2016;
3. chaired by Councillor Gord Perks;
4. will make recommendations to, and report through, Parks and Environment Committee; and
5. will determine and report back on its terms of reference, which are to include:
   - a review of City policies,
   - expert advice, and
   - international best practices to mitigate and adapt to climate change.

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Today's Discussion

Purpose: To identify the potential role and work of the Subcommittee on Climate Change Mitigation and Adaptation.

Guiding Questions:

1. What do you feel the Subcommittee should accomplish by December 31, 2016?

2. How would you or your group like to be involved & engaged in the work of the Subcommittee?

Council Target: 80% GHG emissions reductions by 2050

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Next Steps

	DATE	ACTIVITY
1	April 15, 2015	Parks & Environment Committee will review proposed final terms of reference for the Subcommittee on Climate Change, including proposed work plan

Thank You

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More Frequent and Intense Weather Extremes

Extreme Weather	Parameter	Units	2000 - 2009	2040 - 2049
Rainfall	Maximum amount in one day	MM	66	**166**
	# of days with more than 25 mm	Days	19	**9**
	Average annual daily maximum	MM	48	**86**
Heat	Maximum daily temperature	Degrees	37	**44**
	# of days above 30 degrees	Days	20	**66**
	Number of heat waves per year	3 or more days	0.6	**2.5**

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