



London  
CANADA

An aerial photograph of London, Ontario, showing a mix of green trees in the foreground and a city skyline with various skyscrapers in the background under a clear blue sky. The word "LONDON" is written across the middle of the image in large, white, semi-transparent capital letters.

LONDON

# **Corporate Energy Management Program and Conservation and Demand Management (CDM) Plan**

**Prepared for Civic Works Committee**

**July 21, 2014**



CITY OF LONDON  
**Strategic Plan**

2011-2014





## RESULT: A GREEN AND GROWING CITY

How do we know that our city is green and growing?

- Sustainability - Londoners making environmentally friendly choices, including transit modes
- Consumption - waste diversion, energy conserved, greenhouse gas emissions
- Nature Protection - leaf cover, watershed health, green space and biodiversity
- Responsible Growth - assessment growth, population and housing density

### Our Strategies:

- Protect our *natural heritage and environment*
- Promote a *“green culture”* and the fundamentals of *sustainability*
- Reduce *carbon footprint* through wise actions that benefit our local, regional and global environment
- Develop *walkable, connected communities with great public spaces*
- *Facilitate, plan and manage growth* for the greatest long term benefit of all
- Demonstrate *environmental leadership* in all municipal operations
- Establish London as a *leader in green technologies*



# Corporate Energy Management Program

1. Track, monitor, take action
2. Renewables
3. LEED Buildings and components
4. Conservation & demand management
5. Procurement
6. Culture of conservation

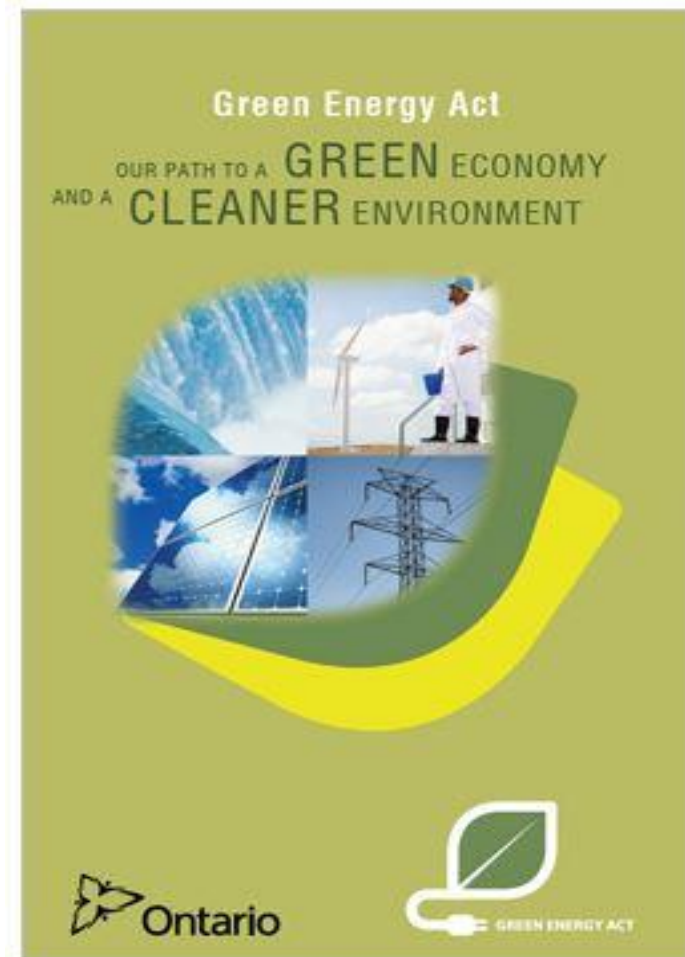




# *Green Energy Act, 2009*

## **Ontario Regulation 397/11**

- Establish baselines for past and current energy management activities
- Create a strategy for energy reduction targets towards the five year CDM plan





# Conservation and Demand Management (CDM) Plan



CITY OF LONDON  
Corporate Energy Conservation and  
Demand Management (CDM) Plan  
June 2014

energyMatters  
people thinking green

London  
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# Key Principles in Preparing Plan

1. Budget – no new budget; maximize existing
  2. Incentive Opportunities - maximize
  3. Economic Development/ Business Opportunities
  4. Level of Commitment
- ... and Ministry of Energy Requirements**





# How have Corporate Service Areas been Engaged?

Directly involved:

- Long term goals
- Current status of actions
- Identify proposed actions
- Place in two time periods:
  - 2014/2015
  - 2016-2019







# How are we going to be better off?

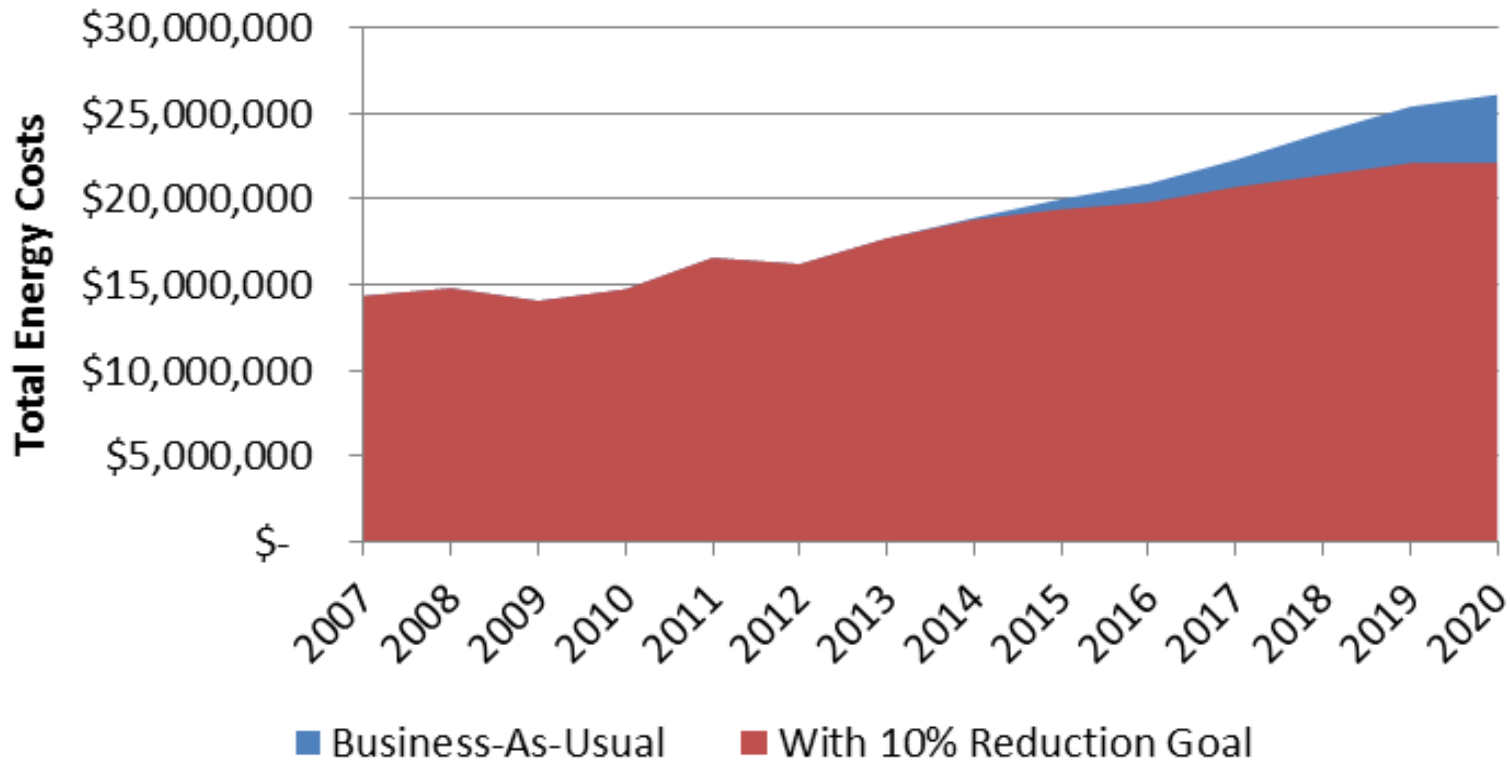


The 5 year CDM Plan proposes a goal of an additional **10%** reduction in overall annual energy use by 2020



# ENERGY COST AVOIDANCE of approximately \$4 million per year by 2020

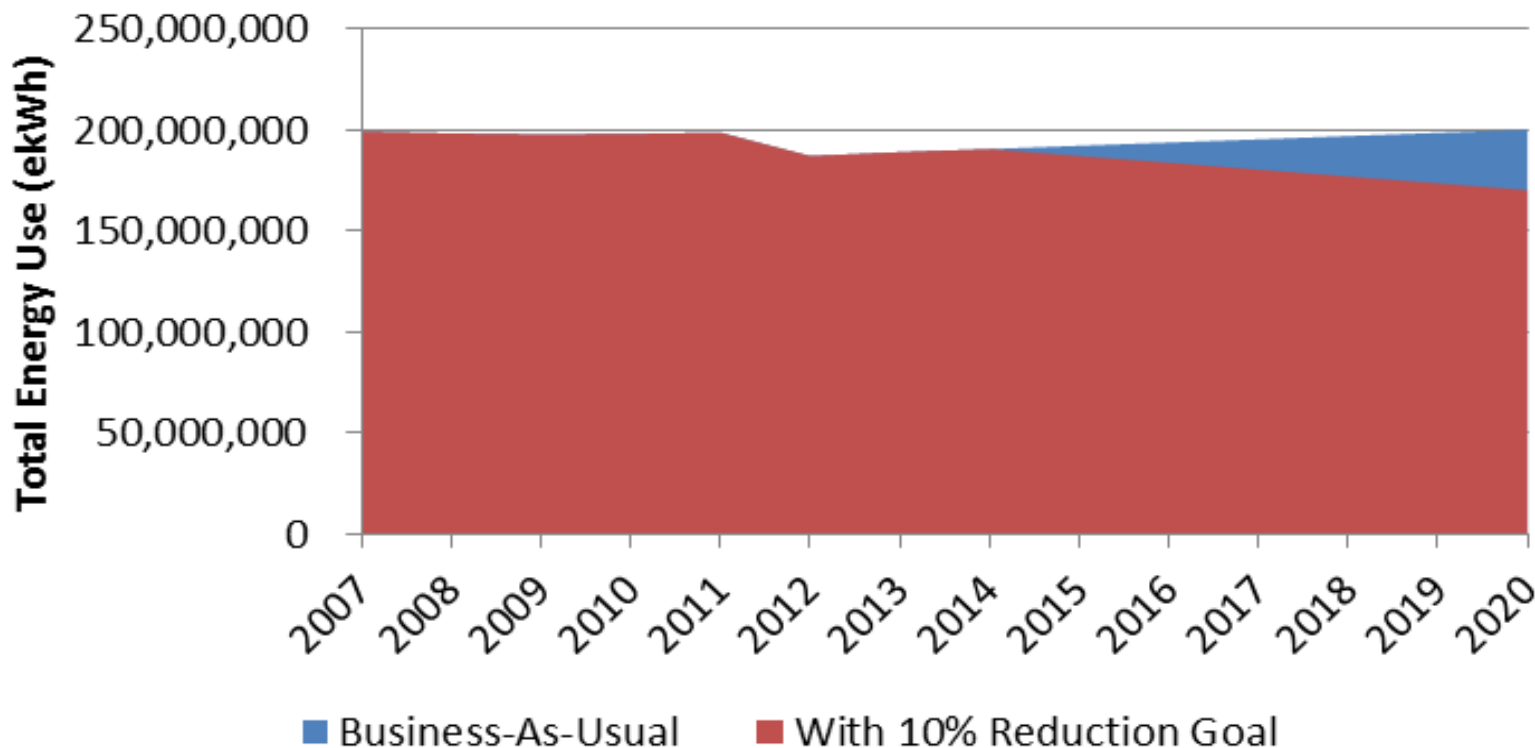
## Projected Total Energy Costs





# ENERGY USE REDUCTION of approximately 30 million ekWh per year by 2020

## Projected Total Energy Use

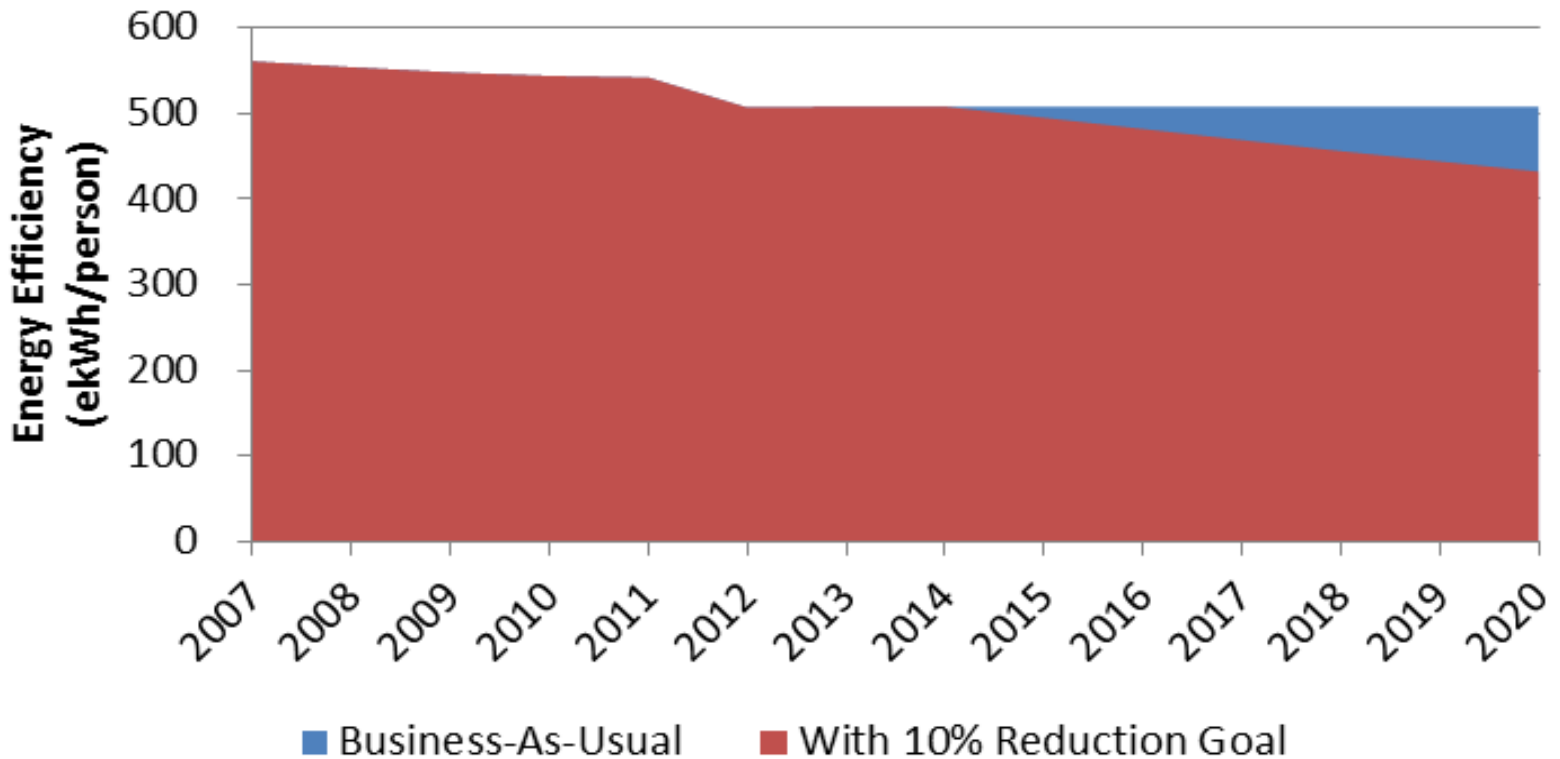




# SERVICE DELIVERY ENERGY EFFICIENCY

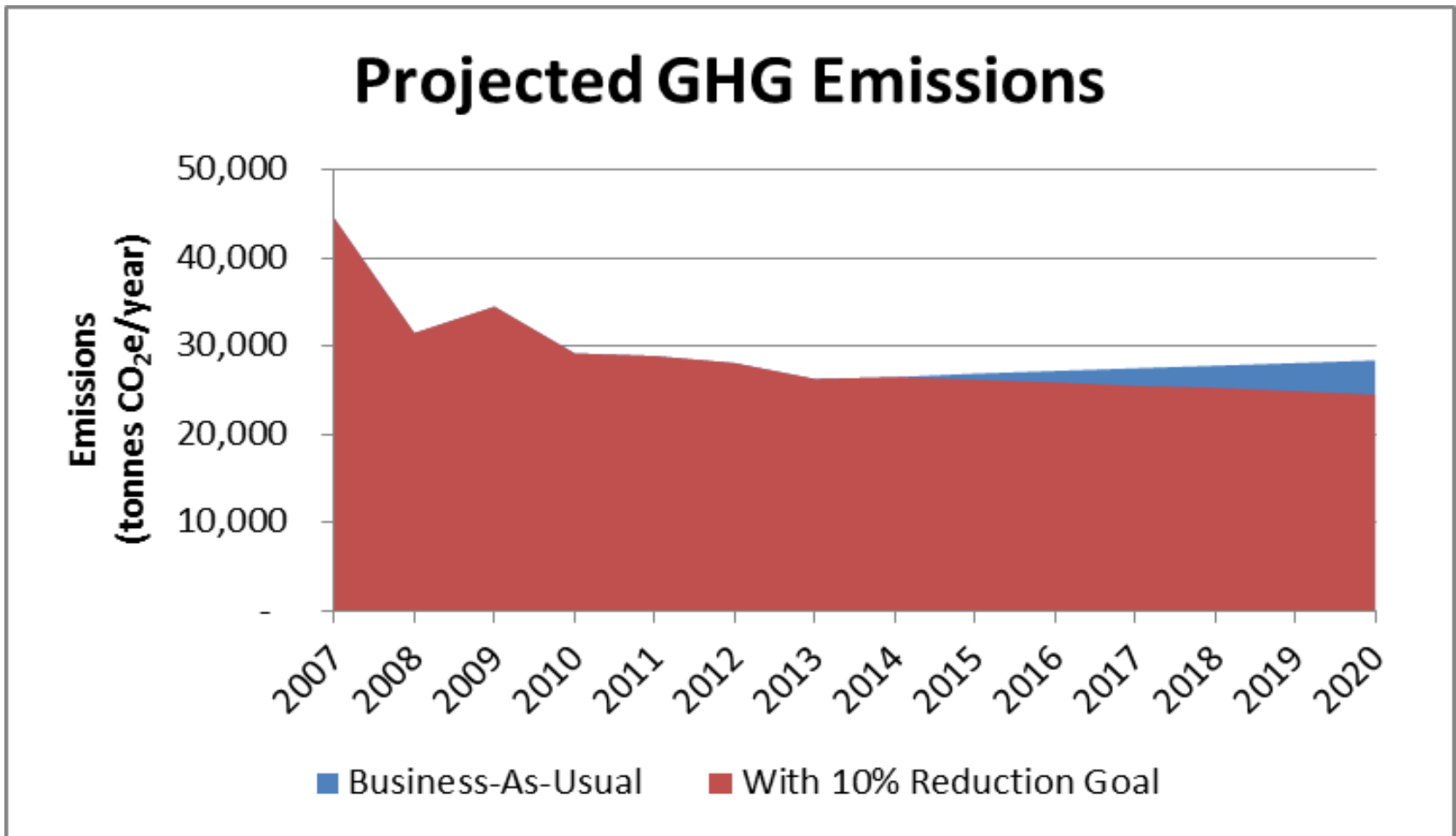
## improvement of 15% annually by 2020

### Projected Energy Efficiency





# GHG REDUCTION INCREASED by approximately 3,900 tonnes annually by 2020





# How will the CDM be implemented?

**35 measures/actions** in  
4 prescribed categories:

1. Tracking and Monitoring
2. Technical
3. Organizational
4. Behavioural

To be implemented in  
two time periods:

- 2014 and 2015  
(13 measures/actions)
- 2016 to 2019  
(22 measures/actions)



# What will it cost to implement the CDM Plan?

- No additional budget requested to implement CDM Plan
- Maximize existing budgets identified in asset renewal projects
- Utilize existing Corporate Energy Program annual budgets

Annual budgets range based on projects:

- Operating = \$300,000 to \$600,000
- Capital = \$250,000 to \$1 million



# Reporting on Progress

- Annual progress reporting
- ‘Living plan’ - propose adjustments to maximize benefits
- Celebrate actions and provide recognition







London  
CANADA

THE CITY OF OPPORTUNITY

An aerial photograph of a city skyline, likely London, Ontario, Canada. The foreground is dominated by a dense forest of green trees. A blue river flows through the center of the image. In the background, a variety of high-rise buildings and skyscrapers are visible against a clear blue sky.

# Corporate Energy Management Program & the CDM Plan