



# Hamilton

---

2014 Green Energy Act 397/11

Energy Conservation and Demand Plan

Public Works Department

Office of Energy Initiatives

June 27, 2014



Hamilton

# INFORMATION UPDATE

COPY

<b>TO:</b>	Mayor R. Bratina and Members of Council
<b>DATE:</b>	June 27, 2014
<b>SUBJECT/REPORT NO:</b>	City of Hamilton's Green Energy Act (397/11) Submission (City Wide) ~ (CASP1411)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>SUBMITTED BY:</b>	John Mater, C.E.T Director of Corporate Services and Strategic Planning Public Works
<b>SIGNATURE:</b>	

The purpose of this Information Update is to advise Council that staff have completed the City's first annual submission requirements as mandated by the Green Energy Act (GEA) for the City's 2012 energy usage and greenhouse gas (GHG) emissions and 2014 Energy Plan.

As required by the Province of Ontario's Green Energy Act (GEA) all municipalities, municipal service boards, post-secondary educational institutions, hospitals and school boards are required to submit annual reports on their energy usage and GHG emission data for each owned facility. This includes all utility account information for energy (e.g. electricity, natural gas, district energy) and water by facility or site. Information is only required for facilities that have conditioned space (e.g. heating or cooling). Hamilton Water facilities and operations are included in the reporting. City Housing Hamilton and City leased space (e.g. City Centre) are excluded from the reporting requirements.

This reported data represents over 2,200 utility accounts and building square footage by facility. This information is used to calculate and report on the City's GHG emissions and energy intensity equivalent kilowatt hours per square foot (ekWh/sqft) and equivalent kilowatt hours per mega litre (ekWh/Mega Litre) for each location. The data reported will be posted to the Ministry of Energy's website and the City's website at [www.hamilton.ca/energy](http://www.hamilton.ca/energy).

The City began submitting reported data in 2012 and continues to submit annually following the GEA's guidelines. Reported data is for the last year for which full data is available. Reporting of 2012 energy consumption and GHG data will be required by July 1, 2014.

The GEA also requires all municipalities to develop and implement energy Conservation and Demand Management (CDM) plans starting in 2014 and every five years thereafter.

Each energy plan requires the following elements:

- Information on the public agency's annual energy consumption during the last year for which complete information is available for a full year (2012)

---

*OUR Vision: To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities.*

*OUR Mission: WE provide quality public service that contribute to a healthy, safe and prosperous community, in a sustainable manner.*

*OUR Values: Accountability, Cost Consciousness, Equity, Excellence, Honesty, Innovation, Leadership, Respect and Teamwork*

**SUBJECT: City of Hamilton's Green Energy Act 397/11) Submission  
(City Wide) ~ (CASP1411) Page 2 of 2**

---

- The public agency's goals and objectives for conserving and otherwise reducing energy consumption and managing its demand for energy
- The public agency's proposed measures under its CDM plan, the cost and saving estimates for these proposed measures and the estimated length of time these measures will be in place
- A description of any renewable energy generation facility operated by the public agency and the amount of energy produced on an annual basis by the facility.

The City's Corporate Energy and GHG Emission Reduction Targets can be found in Table 1.

Table 1

Year	Energy Consumption Reduction Target	GHG Emission Reduction Target
2020	Initial 20% 2005 Base Year	20%
2030	45%	50%
2050	60%	80%

The City's energy plan to meet the above targets is found in the Corporate Energy Policy, 2012 Annual Energy Report posted on the City's website [www.hamilton.ca/energy](http://www.hamilton.ca/energy) and the City's proposed future energy initiatives for 2015 as shown below.

**Proposed 2015 City of Hamilton Energy Initiatives**

Type of Project	# of Projects	Electricity Savings kW/h	Gas Savings m <sup>3</sup>	Total Annual Savings	Total Costs	Simple Payback
Lighting	4	2,426,333		\$266,897	\$600,000	2.2
Building Automation Systems	5	169,300	9,300	\$20,483	\$100,000	4.9
Arena Refrigeration Optimization	18	2,750,000		\$302,500	\$450,000	1.5
Building Recommissioning	3	1,500,000	25,000	\$170,000	\$350,000	2.1
Combined Heat and Power	1	1,100,000	60,000	\$133,000	\$850,000	6.4
Street lighting	3	900,900		\$108,108	\$360,000	3.3
Total		8,846,533	94,300	\$1,000,988	\$2,710,000	2.7

**SUBJECT: City of Hamilton's Green Energy Act 397/11) Submission  
(City Wide) ~ (CASP1411) Page 3 of 3**

---

For further information, please contact Tom Chessman, Manager, Office of Energy Initiatives at extension 2494.

Copy to:

Chris Murray, City Manager  
Gerry Davis, General Manager, Public Works  
Mike Zegarac, General Manager, Finance & Corporate Services  
Michael Kirkopoulos, Corporate Communications Manager  
Rose Caterini, City Clerk  
Lauri Leduc, Legislative Coordinator  
Anna Apkarian, Manager of Finance & Administration, Public Works  
Kelly Anderson, Public Affairs Coordinator, Public Works  
Rick Male, Director of Financial Services & Corporate Controller, Corporate Services  
Dan McKinnon, Director, Water and Wastewater Operations, Public Works  
Al Dore, Acting Director of Operations, Public Works  
Gary Moore, Director of Engineering Services, Public Works  
Brian McMullan, Director, Financial Planning & Policy, Corporate Services  
Craig Murdoch, Director of Environmental Services, Public Works  
Beth Goodger, Director of Corporate Initiatives, City Manager's Office  
Don Hull, Director of Transportation, Public Works  
Dave Cunliffe, Director of Fire Operations/Deputy Fire Chief, Community & Emergency Services  
Geoff Lupton, Director, Energy, Fleet & Traffic, Public Works  
Rom D'Angelo, Director Facilities Management & Capital Programs, Public Works  
Chris Herstek, Director of District Recreation Operations, Community and Emergency Services  
Anna Bradford, Director of Tourism & Culture, Planning and Economic Development  
Robin Hewitt, Director, Finance and Facilities, Hamilton Public Library  
Rob Norman, Director of Strategic Planning, Public Works  
Dan Bowman, Manager of Fleet, Facilities and Supply Services, Hamilton Police Services  
Lyle Stedman, Manager, Central Fleet, Public Works  
Tom Chessman, Manager, Office of Energy Initiatives, Public Works

---

*OUR Vision: To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities.*

*OUR Mission: WE provide quality public service that contribute to a healthy, safe and prosperous community, in a sustainable manner.*

*OUR Values: Accountability, Cost Consciousness, Equity, Excellence, Honesty, Innovation, Leadership, Respect and Teamwork*