

**REPORT NO. 175 of the  
ENVIRONMENT, TRANSPORTATION & PUBLIC SAFETY  
STANDING COMMITTEE**

of its meeting held November 20, 2013

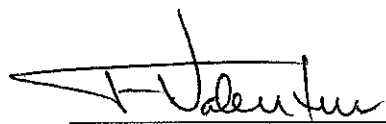
**Present:**  
Councillor J. Gignac  
Councillor A. Halberstadt  
Councillor R. Jones  
Councillor H. Payne  
Councillor F. Valentinis, Chair


That the following recommendations of the Environment, Transportation and Public Safety Standing Committee **BE APPROVED:**

Moved by Councillor Halberstadt, seconded by Councillor Payne,  
**THAT** the minutes of the Windsor-Essex County Environment Committee meeting held September 5, 2013 **BE RECEIVED** for information.

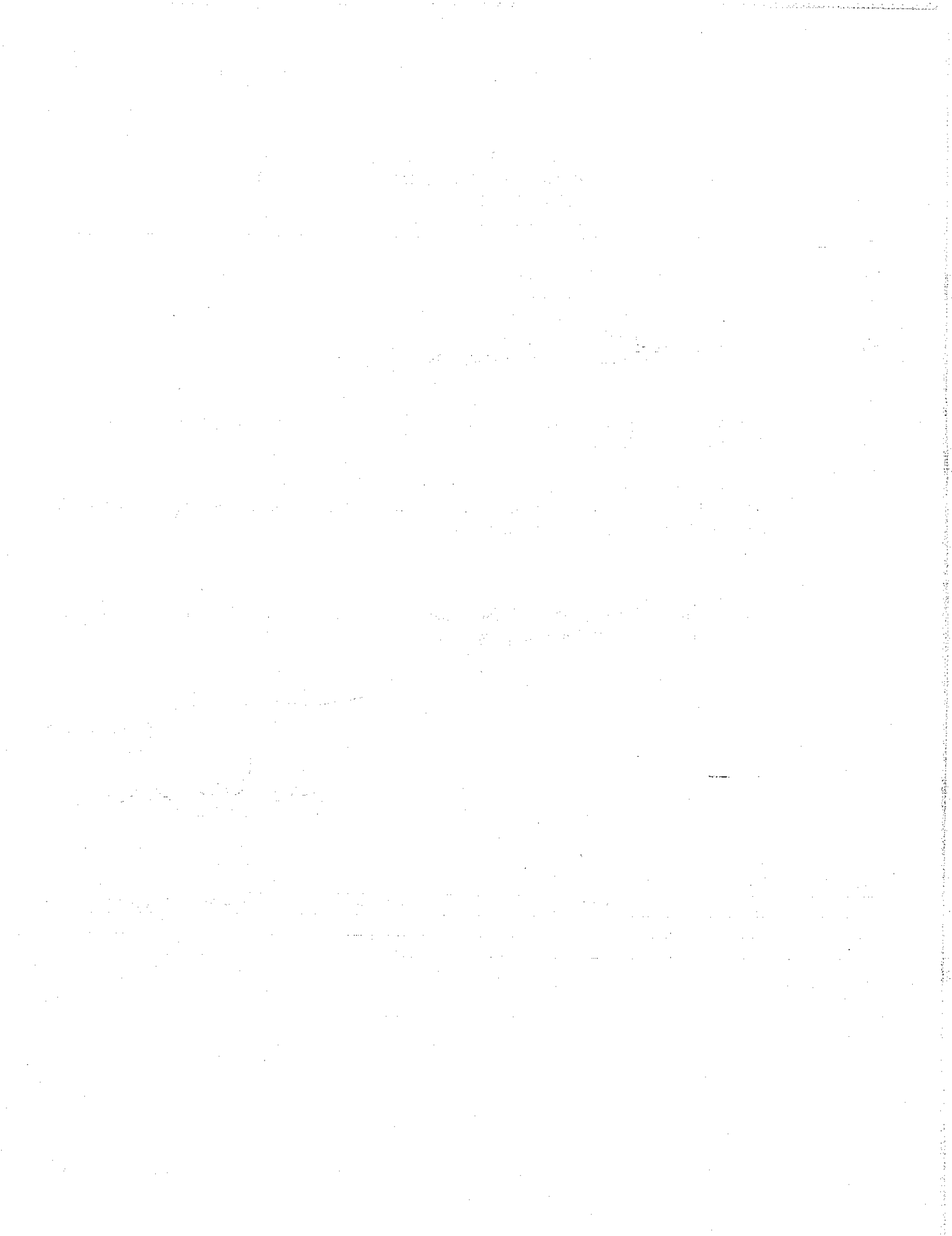
Carried.

Clerk's Note: The minutes of the Windsor-Essex County Environment Committee meeting held September 5, 2013 are attached as background information.

  
\_\_\_\_\_  
CHAIRPERSON

  
\_\_\_\_\_  
for COUNCIL ASSISTANT

NOTIFICATION:				
Name	Address	Email Address	Phone	FAX



KK/  
Windsor, Ontario September 5, 2013

A meeting of the **Windsor-Essex County Environment Committee** is held this day commencing at 5:30 o'clock p.m. at the Lou Romano Water Reclamation Plant, there being present the following members:

Councillor Alan Halberstadt, Co-Chair  
Councillor Hilary Payne  
Frank Butler (alternate for Rick Coronado)  
Derek Coronado  
Roger Dzugan (alternate for Mark Bartlett)  
Jesse Costa Gardner  
Evan Freeman-Gibb  
John Miller  
Mike Nelson  
Lindita Prendi (non-voting)  
Tamara Stomp  
Radwan Tamr (arrives at 5:43 p.m.)

**Regrets received from:**

Mark Bartlett  
Paul Henshaw  
Charlie Wright, Co-Chair

**Also present are the following resource personnel:**

James Bryant, County Engineering Department  
Sergio Grando, Manager Energy Initiatives  
Averil Parent, Environment & Sustainability Coordinator  
Karen Kadour, Committee Coordinator

1. **CALL TO ORDER**

Councillor Halberstadt, Co-Chair calls the meeting to order at 5:34 o'clock p.m. and the Committee considers the Agenda being Schedule "A" **attached** hereto, matters which are dealt with as follows:

2. **ADDITIONS TO THE AGENDA**

None.

3. **DECLARATIONS OF CONFLICT**

None disclosed.

4. **MINUTES**

Moved by T. Stomp, seconded by Councillor Payne,  
That the minutes of the Windsor Essex County Environment Committee at its meeting held July 4, 2013 **BE ADOPTED** as presented.  
Carried.

The Chair suggests that the letter originally sent to the Honourable Denis Lebel (new Minister of Infrastructure) regarding bike lanes on the new International Crossing be redirected to the Honourable Lisa Raitt, new Minister of Transport.

5. **PRESENTATION**

**Corporate Energy Initiatives & Reporting Requirements under the Green Energy Act**

Sergio Grando, Manager Energy Initiatives, City of Windsor is present to speak to the City of Windsor's Energy Initiatives. The PowerPoint presentation is **attached** as Appendix "A". Highlights of the presentation are as follows:

- Green Energy Act 2009 – Regulation 397/11 requires public agencies to report on energy use and to prepare energy plans
- Annual reporting on energy use and greenhouse gas emissions
- Must be publicly available online and in print
- Municipal requirements – offices, libraries, emergency services, i.e. police, fire, community centres, arenas, indoor pools, public works facilities, transit, parking garages, water pumping and water treatment plants
- Municipal benefits include – monitor energy use and GHG emissions, reduce the cost associated with energy consumption, make better use of equipment, i.e. better maintained HVAC systems, shift demand of energy intense activities to off peak times, improve asset management, learn about energy conservation through best practices, demonstrate commitment to energy use
- Current City of Windsor Energy Initiatives/Projects includes the following:
  - Corporate wide energy efficiency retrofit program (cost \$2.4 million, less incentives of \$450,000 resulting annual savings of \$247,000 with a simple payback of 7.8 years)
  - Installation of renewable energy
  - 3 solar thermal hot water system for outdoor pools at Mic Mac, Remington and Lanspeary
  - Energy audit of WFCU Centre and Capitol Theatre

- 350 kW solar PV roof mounted system at the Windsor International Aquatic & Training Centre
- Two energy efficient turbo blowers to be installed at Lou Romano cost \$700,000 saving \$181,000 annually, \$300,000 provincial incentive, simple payback period of 2.1 years, 1.5 million kWh annual reduction.
- Detailed Engineering Study to monitor dissolved oxygen levels in the aeration process at Lou Romano.
- Hired an Embedded Energy Manager through the Ontario Power Authority "SaveOnEnergy" program. Salary and incidental costs funded at 80%.
- Currently completing and maintaining a centralized and automated utility payment process for hydro, water and natural gas.
- Energy audit of WFCU Centre and Capitol Theatre
- Detailed engineering study of the City's 43 pump stations.
- Detailed engineering study of all pumps, motors, compressors at Little River.
- Detailed engineering study of the refrigeration plants at Forest Glade and South Windsor arenas.
- Undertaking a Building Performance Audit at 400 City Hall Square East
- Preliminary engineering study of air handling and rooftop system at Transit Windsor.
- Developing a sub-metering program for the City's larger consumers of electricity.
- Participating in Union Gas's commercial energy efficiency incentive programs.
- Develop and implement conservation initiatives to include communication, education and training programs that assist in promoting a culture of energy conservation.
- Continue to review energy savings opportunities through the provincial "SaveOnEnergy" program.

In response to a question asked by D. Coronado regarding why the fleets were excluded, S. Grando responds Regulation 397/11 does not require fleet data.

Councillor Halberstadt, Co-Chair thanks Sergio Grando for his presentation.

## **6. BUSINESS ARISING FROM THE MINUTES**

### **6.1 Smog Alert Actions Plans and Strategies**

Councillor Halberstadt, Co-Chair reports in a recent meeting held with the Executive Director of Parks and Facilities, it was determined there is no corporate policy

relating to smog alert days. It is generally agreed A. Parent will liaise with the Executive Director of Parks and Facilities to establish a smog alert policy.

## 6.2 Ojibway Shores Update

Councillor Halberstadt, Co-Chair states Mayor Francis received a letter from David Cree, President and CEO of the Windsor Port Authority inviting environmental groups along with City Council to a meeting to be held at the Port Authority office on September 23, 2013.

Councillor Halberstadt, Co-Chair advises it is the Federal Government's responsibility to step in and convert the Ojibway Shores property into an urban park or, a natural priority area.

Moved by T. Stomp, seconded by J. Costa Gardner,

That Councillor Halberstadt, Co-Chair **BE DIRECTED** to ask Mayor Francis to respond to the letter dated September 5, 2013 from David Cree, President and CEO of the Windsor Port Authority to request Mr. Cree appear as a delegation at a future City Council meeting.

Carried.

## 7. COORDINATOR'S REPORT

A. Parent reports WECEC promoted and encouraged residents to attend and comment on the Port Authority's proposal to develop the Ojibway Shores. Members of WECEC attended the public meeting held July 3, 2013 at Mackenzie Hall along with 400 concerned residents. This united action may have played a role in the Port Authority's decision to cease development and work with the City of Windsor on alternative actions for the property.

## 8. SUBCOMMITTEE REPORTS

### 8.1 Air

Discussed under Item 6.1

### 8.2 Transportation

F. Butler states Transit Windsor is considering a 10% fare increase (25 cents).

### 8.3 Provincially Significant Wetlands

J. Costa Gardner indicates Dr. John Hartig, Refuge Manager, Detroit International Wildlife Refuge along with Dr. Richard Wyma, General Manager, Essex Region Conservation Authority have been invited as speakers for the next Green Speaker series.

A. Parent advises the report to City Council requesting Peche Island, McKee Park, Goose Bay Park, St. Rose Beach Par, Bridges Bay Park, Black Oak Heritage Park, Ojibway Park, Tallgrass Prairie Heritage Park and Spring Garden Natural Area be designated as part of the International Wildlife Refuge has been delayed. Paul Pratt, Naturalist, City of Windsor will present his report to WECEC upon completion.

### 8.4 Water Quality

A. Parent states the Water Quality Subcommittee continues to utilize an ERCA student to conduct research to be used in a potential phosphorous campaign in 2014. This campaign would build on the blue green algae video by educating residents regarding how to read product labels such as fertilizer and laundry soap and compare the phosphorous content for various products.

## 9. NEW BUSINESS

### 9.1 Storage of Nuclear Waste

Moved by T. Stomp, seconded by F. Butler,

**WHEREAS** the Municipality of Kincardine has offered to host a Deep Geologic Repository (DGR) of low and intermediate level nuclear waste at the Bruce Nuclear Power Station site, supported by Ontario Power Generation (OPG); and

**WHEREAS** concern has been expressed by other Municipalities in both Canada and the United States, as well as individuals, citizens and environmental groups; and

**WHEREAS** The Town of Kingsville, in the Province of Ontario shares many of those concerns, including but not solely related to the risk of embedment of nuclear waste at a site less than 1 kilometre from the Great Lakes, a source of drinking water to 40 million people and supplying 21% of the world's fresh water; and

**WHEREAS** the proposed site is in limestone above an ancient waterbed, and there has been no intensive research done on other sites available in the granite of the Canadian Shield, or elsewhere; and

**WHEREAS** there has not been a disaster/containment plan articulated;

**THEREFORE BE IT RESOLVED** that the City of Windsor and County of Essex is not in support of the Kincardine location for a DGR at this time, and requests more information, alternatives and plans be presented, and more research and results be reported and critically reviewed before a final decision is made.

Carried.

**9.2 Bi-Annual WECEC Report**

Moved by T. Stomp, seconded by J. Costa Gardner,  
That the Bi-Annual Report 2013 to the Environment, Transportation & Public  
Safety Standing Committee **BE ENDORSED.**  
Carried.

**9.3 2014 WECEC Budget Request**

Moved by Councillor Payne, seconded by .R. Dzugan,  
That the 2014 WECEC Budget submission **BE APPROVED.**  
Carried.

**9.4 Potential WECEC meeting at Riverdance Community Centre**

This item is deferred to a future WECEC meeting to allow Paul Henshaw to be in  
attendance.

**10. COMMUNICATIONS**

- 10.1 The Windsor Star: Ojibway Shores plan to store DRIC dirt dated July 5, 2013 is received for information.
- 10.2 The Windsor Port Authority Media Release regarding Ojibway Shores dated July 10, 2013 is received for information.
- 10.3 The Windsor Star: Push for Ojibway urban park gains steam dated July 12, 2013 is received for information.
- 10.4 The Windsor Star: Ojibway clear-cutting put on hold dated July 18, 2013 is received for information.
- 10.5 The Windsor Star: Video shows pet coke dust cloud hitting Windsor's riverfront dated July 30, 2013 is received for information.
- 10.6 The Windsor Star: Petcoke site operator halts shipments dated July 20, 2013 is received for information.
- 10.7 Media Release: Agreement between ERCA and U.S. Fish and Wildlife Signed, dated August 14, 2013 is received for information.



- 10.8 The Windsor Star: Concerns raised over proposed nuclear waste dated August 18, 2013 is receive for information.
- 10.9 The Windsor Star: Petcoke removal hailed as victory dated August 21, 2013 is received for information.

11. **DATE OF NEXT MEETING**

The next meeting will be held on October 3, 2013 at 5:30 o'clock p.m. at the Lou Romano Water Reclamation Plant.

12. **ADJOURNMENT**

There being no further business, the meeting is adjourned at 7:17 o'clock p.m.

\_\_\_\_\_  
COUNCILLOR HALBERSTADT, CO-CHAIR

\_\_\_\_\_  
COMMITTEE COORDINATOR



**AGENDA**  
**WINDSOR-ESSEX COUNTY ENVIRONMENT COMMITTEE**  
held on Thursday, September 5<sup>th</sup>, 2013  
Meeting at 5:30p.m. At the Lou Romano Water Reclamation Plant (4155 Ojibwa

1. **CALL TO ORDER**

2. **ADDITIONS TO THE AGENDA**

3. **DECLARATION OF CONFLICT**

4. **MINUTES**

Adoption of the minutes of the meeting held July 4<sup>th</sup>, 2013 – emailed separately.

5. **PRESENTATION**

Sergio Grando, Manager Energy Initiatives, City of Windsor – Corporate Energy Initiatives & Reporting Requirements under the Green Energy Act

6. **BUSINESS ARISING FROM THE MINUTES**

- 5.1 Smog alert action plans and strategies
- 5.2 Ojibway Shores Update

7. **COORDINATORS REPORT**

WECEC Coordinator Monthly Report – attached.

**SUBCOMMITTEE REPORTS**

- 7.1 Air
- 7.2 Transportation
- 7.3 Provincially Significant Wetlands – attached.
- 7.4 Water Quality – attached.

9. **NEW BUSINESS**

- 8.1 Notice of Motion re. storage of nuclear waste – attached.
- 8.2 Bi-Annual WECEC report – attached.
- 8.3 2014 WECEC budget request – attached.
- 8.4 Potential WECEC meeting at Riverdance Community Centre

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11. **DATE OF NEXT MEETING**

The date of the next meeting will be October 3<sup>rd</sup>, 2013 at Lou Romano Water Reclamation Plant at 5:30 o'clock p.m.

12. **ADJOURNMENT**

**City of Windsor  
Energy Initiatives**

**Energy Planning  
Ontario  
Regulation 397/11**

## Outline

- Regulatory Context 397/11
- Why Energy Planning?
- City of Windsor Energy Initiatives

# Regulatory Content

- Green Energy Act 2009  
Regulation 397/11 requires public agencies to:

Report on Energy  
Use

Prepare Energy  
Plans

# Reporting Requirements

- Annual reporting on energy use and greenhouse gas emissions
- Must be publicly available online and in print
- 2011 energy use due by July 1, 2013

# Municipal Requirements

- Offices
- Libraries, art and cultural facilities
- Emergency services e.g. police, fire
- Community centers, arenas, indoor pools, multi-use recreation complex
- Public works facilities, transit, parking garages
- Water pumping and water treatment facilities

## Annual Energy Consumption (2012)

- 86.4 million kWh of electricity
- 4.2 million cubic meters of natural gas
- 700,000 cubic meters of water
- District Energy
  - 5,030 MWh of chilled water
  - 2,660 MWh of hot water
- 2013 budget is \$14.1 million



## Municipal Benefits

- Monitor energy use and GHG emissions
- Benchmark the energy used in similar type buildings within the municipality, across the province and with other jurisdictions
- Reduce the cost associated with energy consumption
- Ensure more stable energy budgeting

## Municipal Benefits Cont'd

- Make better use of equipment (e.g. better maintained HVAC systems)
- Shift demand of energy intense activities to off peak times
- Improve asset management
- Learn about energy conservation through best practices
- Compare similar facilities energy use
- Demonstrate commitment to energy issues

# Consumption Data Sample

Energy Consumption and GHG Emissions

From: 2011-01-01 To: 2011-12-31

Facility Name	Address	Total Area (m <sup>2</sup> )	Average Hours/Day	Fuel Type(s)	Consumption	Cost (\$)	Energy (kWh/m <sup>2</sup> )	GHG Emissions (kg CO <sub>2</sub> e/m <sup>2</sup> )	GHG Intensity (kg CO <sub>2</sub> e/m <sup>2</sup> )	Energy Intensity (kWh/m <sup>2</sup> )
Facility Primary Type: Office										
35B City Hall	350 City Hall Sq. W.	6189	5.70	NG	168757.00 m <sup>3</sup>	69341.09	1793811.78	322336.68	51.99	291.28 (kWh/m <sup>2</sup> )
				Elect.	1184844.00 kWh	133358.59	1184844.00	34798.33	15.38	192.38 (kWh/m <sup>2</sup> )
				Cooling GJ	140.00 GJ - Chilled Water	1536.00	11784.50	1546.42	0.28	1.91 (kWh/m <sup>2</sup> )
408 Building	400 City Hall Sq. E.	14307	5.71	NG	31580.00 m <sup>3</sup>	12846.08	338737.48	59888.83	4.19	23.47 (kWh/m <sup>2</sup> )
				Elect.	2370476.00 kWh	269430.87	2370476.00	189638.00	13.23	168.69 (kWh/m <sup>2</sup> )
				Cooling GJ	4183.00 GJ - Chilled Water	40500.00	352704.82	46174.53	3.23	24.81 (kWh/m <sup>2</sup> )
				Dist H. GJ	2688.00 GJ - Steam or Water	21378.00	750844.48	170758.03	11.84	58.78 (kWh/m <sup>2</sup> )
Petstair Parking Garage	428410406438 Petstair St.	10488	0.00	NG	6837.00 m <sup>3</sup>	3206.34	73724.89	13143.79	1.28	7.03 (kWh/m <sup>2</sup> )
				Elect.	31783.78 kWh	3681.73	31783.00	2547.83	0.24	3.03 (kWh/m <sup>2</sup> )
City Hall Heating Plant	448 City Hall Square E.	58	23.93	Elect.	14834.00 kWh	1977.38	14834.00	1179.72	21.29	268.87 (kWh/m <sup>2</sup> )
Public Works	1268 McDougall Ave.	1487	5.70	NG	20273.00 m <sup>3</sup>	8308.30	215488.82	38478.49	28.22	148.87 (kWh/m <sup>2</sup> )
				Elect.	189436.00 kWh	20917.83	189436.00	13884.86	9.24	116.58 (kWh/m <sup>2</sup> )
Soil Wasterecycling Centre	3548 E.C. Row	1813	23.93	NG	20596.00 m <sup>3</sup>	8788.68	222787.38	38772.22	38.28	219.88 (kWh/m <sup>2</sup> )
				Elect.	169341.00 kWh	19703.77	169341.00	13507.28	13.37	167.17 (kWh/m <sup>2</sup> )
Crawford yard	1531 Crawford Yard	557	5.70	NG	11908.00 m <sup>3</sup>	5118.03	128223.68	22381.17	40.58	227.18 (kWh/m <sup>2</sup> )
				Elect.	4882.00 kWh	1308.64	4882.00	374.98	6.86	6.19 (kWh/m <sup>2</sup> )
Field House	2388 McDougall Ave.	446	5.71	NG	9038.00 m <sup>3</sup>	3981.66	96277.03	17198.54	38.54	218.87 (kWh/m <sup>2</sup> )
				Elect.	23784.00 kWh	3138.80	23784.00	1922.72	4.27	63.33 (kWh/m <sup>2</sup> )
Labview Marine	9208 Riverside Dr. E.	371	7.98	NG	1718.00 m <sup>3</sup>	977.38	18237.37	3258.38	8.79	48.18 (kWh/m <sup>2</sup> )
				Elect.	74348.00 kWh	8897.58	74348.00	5947.84	16.03	208.48 (kWh/m <sup>2</sup> )
Parks Administration Bld.	2458 McDougall Ave.	1483	5.70	NG	17748.00 m <sup>3</sup>	7471.27	188238.78	33663.78	22.58	128.11 (kWh/m <sup>2</sup> )
				Elect.	172873.00 kWh	21333.73	172873.00	13813.84	9.24	116.58 (kWh/m <sup>2</sup> )
Pitfalls Pump Station	3488 Pitfalls	40	23.93	Elect.	13881.00 kWh	1688.13	13881.00	1118.48	27.94	138.43 (kWh/m <sup>2</sup> )

# Energy Management Plan Requirements

- 5-year energy conservation and demand management (CDM) plans
- Must be publicly available
- Addresses all types of energy use in facilities (excluding fleet)
- Approved by senior management/City Council
- Plan must be posted by July 1, 2014
- Updated every 5-year period

# Energy Plan Content

- Annual energy consumption
- Goal and objectives
- Past and current energy conservation and demand management (CDM) measures
- Proposed CDM measures, with lifespan, cost and saving estimates
- Existing or planned renewable e.g. heat pumps, solar technologies, wind, biomass, etc.

## Current City of Windsor Energy Initiatives/Projects

1. Corporate wide energy efficiency retrofit program (M & V Phase)  
Cost \$2.4 million, less incentives of \$450,000 resulting annual savings of \$247,000 with a simple payback of 7.8 years.
2. Installation of renewable energy
  - a) 3 solar thermal hot water system for outdoor pools at Mic Mac, Remington and Lanspeary – consumption reduction from 13% to 37%.

## Energy Initiatives/Projects Cont'd

- b) 350 kW solar PV roof mounted system at the Windsor International Aquatic & Training Centre – Annual revenues 275,000 for 20 years.
- 3. Two Energy efficient turbo blowers to be installed at Lou Romano cost \$700,000 saving \$181,000 annually, \$300,000 provincial incentive, simple payback period of 2.1 years, 1.5 million kWh annual reduction.

## Energy Initiatives/Projects Cont'd

4. Detailed Engineering Study to monitor dissolved oxygen (DO) levels in the aeration process at Lou Romano.
5. Hired an Embedded Energy manager through the Ontario Power Authority "SaveOnEnergy" program. Salary and incidental costs funded at 80%.
6. Currently completing and maintaining a centralized and automated utility payment process for hydro, water and natural gas.



## Energy Initiatives/Projects Cont'd

7. Energy audit of WFCU Centre and Capitol Theatre.
8. Detailed engineering study of the City's 43 pump stations.
9. Detailed engineering study of all pumps, motors, compressors at Little River.
10. Detailed engineering study of the refrigeration plants at Forest Glade and South Windsor arenas.

## Energy Initiatives/Projects Cont'd

11. Undertaking a Building Performance Audit at 400 City Hall Sq. as part of the "Town Hall Challenge" program
12. Preliminary engineering study of air handling and rooftop system at Transit Windsor.
13. Developing a sub-metering program for the City's larger consumers of electricity.
14. Participating in Union Gas's commercial energy efficiency incentive programs.

## Energy Initiatives/Projects Cont'd

15. Develop and implement conservation initiatives to include communication, education and training programs that assist in promoting a culture of energy conservation.
16. Continue to review energy savings opportunities through the provincial "SaveOnEnergy program.
17. Continue to monitor; identify and communicate solutions for energy accounts that display out of scope consumption patterns.



C O R P O R A T E

# ENERGY WINDSOR

P O W E R L E S S   W I T H O U T   Y O U