

COMMITTEE OF THE WHOLE

For meeting to be held on: Submitted by: For: June 10, 2014 James Gates Action Treasurer

Subject:

ENERGY CONSERVATION AND DEMAND MANAGEMENT PLANS O.REG. 397/11

BACKGROUND

Ontario Regulation 397/11, Energy Conservation and Demand Management Plans, requires all broader public sector (BPS) organizations, including hospitals, municipalities, universities, colleges, school boards and municipal service boards responsible for water and sewage treatment and pumping operations to:

- Report on their annual energy use and greenhouse gas (GHG) emissions in designated buildings/facilities by July 1 beginning in 2013; and
- Develop and implement 5-year energy conservation and demand management plan (CDM) by July 1, 2014

This year BPS organizations are required to report their 2012 energy consumption data and develop their CDM plan by July 1, 2014.

- Energy consumption data is to be submitted to the ministry and made publicly available on the organization's website and intranet site and be available in printed form at their head office.
- CDM plans are to be made publicly available on their website and intranet site, and be available in printed form at their head office. While BPS organizations are not required to submit their CDM plans to the ministry, the portal includes an area for BPS organizations to indicate that their plan has been completed and to provide a link to it on their BPS organization's website.

The requirements are published in Ontario Regulation 397/11 – Energy Conservation and Demand Management Plans, under the Green Energy Act, 2009.

What is an ECDM Plan? An ECDM plan is comprised of two parts:

1. A summary of the public agency's annual energy consumption and greenhouse gas (GHG) emissions for its operations.

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2. A description of previous, current and proposed measures for conserving and otherwise reducing the amount of energy consumed by the agency's operations and for managing the agency's demand for energy, including a forecast of the expected results of the current and proposed measures.

ANALYSIS

The regulation relates to any municipal buildings that are owned or leased that:

- Are heated or cooled and the municipality is responsible for the payment of energy costs,
- Are related to the treatment or pumping of water or sewage, whether or not the building or facility is heated or cooled, and the municipality is responsible for the payment of energy costs.

This does not apply to non-building structures or energy sources (i.e., street lighting, etc.)

For the County of Middlesex under this regulation we must report on the County building (399 Ridout North) Ambulance Stations (April) and the Works Garages.

We do not report on 50 King as the Health Unit pays 100% of the energy costs and if required they would report; and we do not report on the County's Library buildings that are owned by the local municipalities because we do not pay the energy costs. We also do not report on Strathmere Lodge as it is not required. In the education sessions they recommended that if your home for the aged was going to be retrofitted it would be a good idea to include it in to ensure you would meet your energy savings goal. Since Strathmere Lodge is a new building, it has not been included.

We will be reporting on the Ambulance Stations for 2012 commencing in April when the Authority took over the service from the contractor.

RECOMMENDATION

That the Annual report of energy consumption, greenhouse gas emissions and the conservation and demand management plan be posted on our website.

Attachment

County of Middlesex Energy Conservation Plan June 10, 2014

Under Ontario Regulation 397/11, Energy Conservation and Demand Management Plans, requires all broader public sector (BPS) organizations to develop and implement 5-year energy conservation and demand management plans (CDM) by July 1, 2014.

Part 1 - July 1, 2013

In 2013, the County reported to the Ministry of Energy the 2011 energy usage.

Part 2 - July 1, 2014

In 2014, the County reports to the Ministry of Energy the 2012 energy usage and reports on energy reduction goal over the next five years.

The report and energy reduction goals are to be posted on the County's website.

This report is provided to update Council on compliance with Regulation requirements, to highlight results of the County's energy consumption for 2012 and to provide information on the next steps required for compliance with the July 1, 2014 requirements.

Energy Savings

The County has commenced energy savings at the County Building and traffic lights.

In 2011 the Council Chambers lighting was upgraded to a more efficient system.

Although the County does not report energy used for traffic lights, we are implementing a Traffic Lights Retrofit Program initiated in 2013. It replaces older inefficient traffic lights with a higher efficiency lighting solution. To date one intersection has been completed, two are scheduled for 2014.

As upgrades are made at county facilities, we will be investigating a more energy efficient solution.

Over the next five years our goal is to save 1% of our current energy usage by implementing energy saving solutions. 1% represents 3,870.2758 GHG Emissions (Kg).

ARROW in column A to read through the document.	Energy Consumption and Greenhouse Gas Emissions Reporting - for 2012							
Confirm consecutive 12-mth period (mth-yr to								
mth-yr)								
Sector								
Agency Sub-sector	County							
Organization Name	County of Middlesex	Please fill in the mandatory fields indicated in re						
Operation Name	Operation Type	Address	City	Postal Code				
Stephenson Building	Administrative offices and related facilities, including municipal council chambers	2160 Yonge Street	Toronto	M7A 2G5				
County Building	Administrative offices and related facilities, including municipal council chambers	399 Ridout Street No	r London	N6A 2P1				
Transportation - District 1 (Central Garage)	Storage facilities where equipment or vehicles are maintained, repaired or stored	1988 Gainsborough R	London	N6H 5L2				
Transportation - District 2	Storage facilities where equipment or vehicles are maintained, repaired or stored	560 Shaw Road	Dorchester	N0L 1G4				
Transportation - District 3	Storage facilities where equipment or vehicles are maintained, repaired or stored	22681 Melbourne Ro	Melbourne	NOL 1TO				
Transportation - District 4	Storage facilities where equipment or vehicles are maintained, repaired or stored	1754 Elginfield Road	Parkhill	N0M 2K0				
Transportation - District 4	Storage facilities where equipment or vehicles are maintained, repaired or stored	1786 Elginfield Road	Parkhill	N0M 2K0				
Transportation - District 6	Storage facilities where equipment or vehicles are maintained, repaired or stored	15294 Plover Mills Ro	Bryanston	N0M 2A0				
Transportation - District 9	Storage facilities where equipment or vehicles are maintained, repaired or stored	21906 Simpson Road	Glencoe	NOL 1M0				
Station 1 - Waterloo - Headquarters	Ambulance stations and associated offices and facilities	340 Waterloo Street	London	N6B 2N6				
Station 2 - Meg Drive	Ambulance stations and associated offices and facilities	45 Meg Drive	London	N6E 2V2				
Station 3 - Oxford Street	Ambulance stations and associated offices and facilities	611 Oxford Street We	London	N6H 1T8				
Station 4 - Trossacks	Ambulance stations and associated offices and facilities	1601 Trossacks Avenu	London	N5X 2G3				
Station 6 - Glencoe	Ambulance stations and associated offices and facilities	147 McKellar Street	Glencoe	NOL 1M0				
Station 7 - Strathroy	Ambulance stations and associated offices and facilities	61 Albert Street	Strathroy	N7G 1V4				
Station 8 - Parkhill	Ambulance stations and associated offices and facilities	179 Mill Street	Parkhill	NON 2KO				
Station 9 - Lucan	Ambulance stations and associated offices and facilities	188 George Street	Lucan	NOM 2J0				
Station 10 - Nilestown	Ambulance stations and associated offices and facilities	2024 Westchester Bo	Nilestown	N6M 1H6				
Station 12 - Komoka	Ambulance stations and associated offices and facilities	22494 Komoka Road	London	NOL 1RO				
Station 13 - Byron	Ambulance stations and associated offices and facilities	3100 Colonel Talbot F	RLondon	N6P 0B3				
Station 14 - Hyde Park	Ambulance stations and associated offices and facilities	2225 Hyde Park Road	London	N6H 5K2				

ed, in addition to submitting data on your energy usage.

			Energy Type and	Energy Type and Amount Purchased and Consumed in Natural Total (calculated in webform)					
			Electrici	ty	Natural (Gas			
Total Floor		Avg						Energy Intensity	
Area	Unit	hrs/wk	Quantity	Unit	Quantity	Unit	GHG Emissions (Kg)	(ekWh/sqft)	Comments
135034	Square meters	70	2181065	kWh	125300	Cubic meter			max. 255 characters
57,492.00	Square feet	35	698,067	kWh	18647	Cubic Meter	102,296.876349	15.58900643	
21,183.38	Square feet	66	251,307	kWh	35806	Cubic Meter	91,831.314642	29.82740164	
9,500.00	Square feet	40	48,345	kWh	11069	Cubic Meter	25,570.404063	17.47198564	
9,152.00	Square feet	40	61,361	kWh	8155	Cubic Meter	21,311.173625	16.17466362	
9,152.00	Square feet	40	57,429	kWh	5950	Cubic Meter	16,764.711810	13.18447041	Gas Heat
4,050.00	Square feet	40	3,368	kWh	0	Cubic Meter	323.462720	0.83160494	Hydro Only
2,500.00	Square feet	40	8,148	kWh	5517	Cubic Meter	11,213.123079	26.71257828	
3,842.00	Square feet	2	58,053	kWh	0	Cubic Meter	5,575.410120	15.11009891	Electric Heat Only
16,100.00	Square feet	168	138,813	kWh	18016	Cubic Meter	47,393.136552	20.51447394	
4,880.00	Square feet	168	32,471	kWh	9467	Cubic Meter	21,017.080649	27.27134526	
2,000.00	Square feet	168	21,771	kWh	1863	Cubic Meter	5,613.124941	20.78527428	
2,142.00	Square feet	168	22,338	kWh	2727	Cubic Meter	7,301.081349	23.95889257	
2,178.00	Square feet	168	12,517	kWh	1285	Cubic Meter	3,631.588375	12.01730645	
2,742.00	Square feet	168	-	kWh	2382	Cubic Meter	4,503.473514	9.23244523	
1,728.00	Square feet	168	-	kWh	660	Cubic Meter	1,247.813820	4.05922038	
2,940.00	Square feet	168	15,615	kWh	1604	Cubic Meter	4,532.230308	11.10950827	
2,178.00	Square feet	168	18,022	kWh	0	Cubic Meter	1,730.832880	8.27456382	
2,568.00	Square feet	168	13,744	kWh	1712	Cubic Meter	4,556.727184	12.43720959	
2,340.00	Square feet	168	18,545	kWh	1705	Cubic Meter	5,004.580835	15.66895717	
4,036.00	Square feet	168	-	kWh	2967	Cubic Meter	5,609.490309	7.81283805	