

CORPORATION OF THE TOWNSHIP OF KERNS



5 Year Energy Conservation & Demand Management

2014 - 2020

Township of Kerns Energy Conservation and Demand Management Plan

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1.0 Commitment

Declaration of Commitment: As per Clerk-Treasurer directive, Kerns will allocate the necessary resources and implement a strategic energy management plan that will reduce energy consumption and its related environment impact.

Vision: Kerns will exercise stewardship in its use of finite energy resources to demonstrate leadership, optimize delivery of services and enhance the overall quality of life in the community.

Goals: To continuously improve the energy efficiency of the Municipality's facilities and processes in order to reduce operating costs, energy consumption and the associated greenhouse gas emissions.

Overall Target: The Municipality will endeavour to reduce or maintain consumption of fuels and electricity in all operations between now and the year 2020.

Objectives: The creation of a culture of conversation with the corporation will serve to reduce:

- Greenhouse gas emissions and ensure the wise use of resources
- Fiscal accountability through savings and cost avoidance will lead to both direct and indirect savings
- Demonstrate sound operating and maintenance practices
- Provide a forum for discussion within the corporation on energy management to explore new ideas and trends.

2.0 Organizational Understanding

Summary of Current Energy Consumption, Cost and GHGs: The total annual energy consumption in municipal operations is 19,627.57 EkWh/yr in 2012, at a cost of approx. \$ 3,319.14 Per year and GHG emission of \$ 10,527.97 per year.

Renewable Energy Utilized or Planned: The Township of Kerns aspires to show leadership in the promotion and development of renewable energy systems that are compatible with the corporate asset management and land use planning objectives.

Past Energy Initiatives: The Township of Kerns has implemented several energy reducing initiatives in the past including:

- Lighting Retrofit at the Municipal Office, Fire Hall and Garage as part of Hydro Ones Save on Energy program
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3.0 Resources Planning

Energy Leader: The Clerk-Treasurer is designated as leader of energy planning and has been given overall responsibility for corporate management.

4.0 Projects Execution:

Municipal Level: Kerns will carry out the required development of business procedures, communication programs and implement them methodically according to the planned time lines within the resource constraints that apply. The administration and implementation of this plan will be the responsibility of the Clerk-Treasurer however, since everyone uses energy in their daily activities, it will also be the responsibility of all Municipal Staff to be aware of their energy use and work towards conservation. Through staff engagement and web based energy management tools, staff will be able to see the results of their efforts, and benchmark between corporate facilities and with industry standards.

Asset Level: In order to sustain a corporate culture of conservation, staff must be engaged in an effective awareness and education program. Although facility management staff have the lead responsibility in ensuring Municipal facilities operate efficiently, all Municipal Staff should be familiar with and utilize efficient measures where possible. In addition, any facilities requiring rehabilitation and/or replacement will incorporate energy saving strategies where possible.

5.0 Review

Energy Plan Review: Senior Management will review and evaluate the Kerns energy plan, revising and updating it as necessary, on an annual basis within the corporate planning process.

6.0 Evaluation Progress:

Energy Consumption: The Municipality's energy consumption in 2012 was up to 19627.57 ekWh/yr compared to 2011 levels of 17,113.75 ekWh/yr.

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7.0 Energy Consumption and GHG Emissions

From: 2012-01-01 to: 2012-12-31

Facility Name	Address	Total Area Sq Ft	Hours/Week	Fuel types	Energy Consumption (ekWh/yr)	Cost (\$)	GHG Emissions	GHG Intensity	Energy Intensity
Fire	279272 Milberta Rd	3050	4	Propane	4,102.7 Lt	\$2,408.00	6898.074907		17.420254
				Elect	5,996.25kWh	\$967.73			
Milberta Church	279272 Milberta Rd	1539	16	Elect	3,603.92 kWh	\$899.81	4380.74909		12.672007
				Oil	1,475.1 Lt	\$1,582.02			
Hall	279272 Milberta Rd	2000	4	Propane	3,457.65 Lt	\$2,178.07	5616.123733		8.9532224
				Elect	2,998.13 kWh	\$ 483.84			
Garage	279272 Milberta Rd	3000	40	Propane	7,136.05 Lt	\$4,359.82	11572.41872		66.078402
				Elect	5,996.25 kWh	\$ 967.76			
Parks & Rec	279272 Milberta Rd			Elect	1,033.2 kWh	\$ 564.02	TVO - no longer here		
Grand Total						\$14,411.07	28467.36644		

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8.0 Programs

Description	Facility	Contact	Date	Status
Energy Awareness Management Meetings	All facilities	Michel Lachapelle	2014-07-01	Active
Details	Add energy awareness to meetings. This will provide a platform to discuss topics like the current costs of energy consumption., future implications of current usage, areas for improvements and ways to reduce energy use.			
Employee Participation	All facilities	Michel Lachapelle	2014-07-01	Active
Details	Invite employees from all departments of the Municipality to recommend ideas to reduce energy use in their departments.			
Energy Accounting	All facilities	Michel Lachapelle	2014-07-01	Active
Details	Monthly utility usage and costs should be monitored to identify trends and emphasize anomalies to better predict future usage requirements.			
Efficiency Standards	All facilities	Michel Lachapelle	2014-07-01	Active
Details	Standards of performance will be developed to identify and implement temperature regulations for each building for the following: <ul style="list-style-type: none"> • Indoor temperature for occupied space • Indoor temperature for unoccupied space • Desirable hot water tank temperature Maximum light levels for occupied space 			
Purchases Standards	All facilities	Michel Lachapelle	2014-07-01	Active
Details	All potential asset purchases will be subject to energy use evaluations to determine the energy consumption of the potential purchase. In the decision making process, preference will be given to asset's that use less kWh or are Energy Star rated.			
After Hours Lights Out	All facilities	Michel Lachapelle	2014-07-01	Active
Details	The Municipality will adopt a strategy to ensure that lighting is turned off during periods where facilities are not in use after hours. Staff who use the facilities after hours will be advised to keep only the areas of occupation lit after hours.			

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9.0 Processes

Description	Facility	Contact	Date	Status
Energy Planning at Meetings	All facilities	Michel Lachapelle	2014-07-01	Active
Details	Energy Planning will be added to discussions at Council Meetings to reduce consumption and increase cost savings.			

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10.0 Projects

Description	Facility	Contact	Date	Status
Enhance Building	All facilities	Michel Lachapelle	2014-07-01	Active
Details	Community Hall - Heating thermostat to be put on as timer to reduce oil usage when hall is not is use.			