

Energy Management Plan

Municipality of Huron Shores

From 2011-01-01 to 2015-12-31

Commitment

- **Declaration of Commitment:** Council Resolution: Council will allocate the necessary resources to develop and implement a strategic energy management plan that will reduce the Municipality's energy consumption and its related environmental impact.
- **Vision:** Council exercises stewardship in the efficient use of finite energy resources to demonstrate leadership, optimize delivery of services, and enhance the overall quality of life in the community. The Municipality will continue to reduce energy consumption/costs by educating and developing a culture of energy awareness and knowledge within the organization, while still maintaining an efficient and effective level of services.
- **Policy:** Council will incorporate energy efficiency into all areas of the Municipality's operation including organizational and human resources management procedures, procurement practices, financial management and investment decisions, and facility operations and maintenance.
- **Goals:** To continuously improve the energy efficiency of municipal facilities and processes in order to reduce operating costs, energy consumption and the greenhouse gas emissions that result from it.
- **Overall Target:** Council will attempt to reduce the Municipality's consumption of fuels and electricity in all municipal operations by an average of 1% per year between now and 2020.
- **Objectives:** 1. To implement energy audits on all municipal facilities during the next five years; 2. To reduce total energy consumption in municipal facilities, normalized to weather conditions, by 3% over the next three years; 3. To reduce energy consumption in all municipal recreation complexes by 1% during fiscal year 2014.

Organizational Understanding

- **Stakeholder Needs:** Internal stakeholders (Council and staff) need to be able to clearly communicate the corporate commitment to energy efficiency, and to develop the skills and knowledge required to implement energy management practices and measures. External stakeholders (the Province, community citizens and groups) need the municipality to be accountable for energy performance and to minimize the energy component of the costs of municipal services.
- **How We Manage Energy Today:** The management of energy consumption and the energy performance of the Municipality's facilities and equipment are the responsibilities of Finance (cost management), Public Works Department (maintenance), and department managers (operations).
- **Summary of Current Energy Consumption, Cost and GHGs:** The total annual energy consumption in municipal operations for 2011 was 605,200.56 ekWh, at a cost of \$61,245.43 and GHG emission of 88,488.55 tonnes eCO₂. In 2012, energy consumption was 580,343.6 ekWh, at a cost of \$59,923.91 and GHG emission of 85,019.09 tonnes eCO₂.
- **Summary of Current Technical Practices:** Assessment of operations and maintenance practices, facility and equipment condition, and energy performance indicators establishes the following priorities: development of standard operating procedures incorporating energy efficiency optimization, enhancement of preventative maintenance procedures, and building retrofits.

Strategic Planning

- **Links with other municipal plans:** As an integral component of the management structure, the energy management plan is coordinated with the municipality's budget planning process, preventative maintenance plans, and the overall asset management plan.

Structure Planning

- **Staffing requirements and duties:** Staff will incorporate energy efficiency into standard operating procedures and the knowledge requirements for operational jobs.
- **Consideration of energy efficiency for all projects:** Staff will incorporate life cycle cost analysis into the design procedures for all capital projects.

Resources Planning

- **Energy Leader:** Council will clearly designate leadership and overall responsibility for corporate energy management.
- **Key Individuals:** Council will identify staff members and personnel from its critical service providers who carry significant responsibility for energy performance or who can make essential input to energy management processes.
- **Internal Resources:** Staff will develop criteria for determining whether internal resources can be utilized for the implementation of energy projects.
- **External Consultants and Suppliers:** Staff will establish criteria based on our energy goals and objectives for the selection of external consultants and energy suppliers.
- **Energy Training:** Staff will develop and deliver energy training for relevant staff and Council members. This training will not be limited to operators and maintainers with "hands-on" involvement with energy consuming equipment but will also include others since they also make energy consumption decisions in their daily work. Training focused on the energy use and conservation opportunities associated with employees' job functions will be utilized whenever possible.

Procurement Planning

- **Consideration of energy efficiency for all projects:** Staff will incorporate life cycle cost analysis into the design procedures for all capital projects.
- **Consideration of energy efficiency of acquired equipment:** Municipal purchasing procedures will be modified as required to incorporate energy efficiency into the criteria for selection of materials and equipment.

Implementation Planning

- **Building Standards:** We will develop criteria for the design and/or acquisition of new buildings that include energy performance factors and that use, as appropriate, the principles embedded in performance standards such as Leadership in Energy and Environmental Design (LEED) and the Model National Energy Code for Buildings.

- **Communication Programs:** Council will develop a communication strategy that creates and sustains awareness of energy efficiency as a corporate priority among all employees, and conveys its commitment and progress to its stakeholders.

Implementation Planning

- **Business Procedures:** We will carry out a comprehensive review of all business processes and modify them as necessary in order to incorporate energy efficiency considerations.

Projects Execution

- **Municipal Level:** Staff will carry out the required development of business procedures and communication programs and implement them methodically according to the planned time lines within the resources constraints that apply.
- **Asset Level:** Staff will use department and facility energy team representatives to facilitate the implementation of facility level business procedures and communication initiatives, including energy performance reporting.

Review

- **Energy Plan Review:** Council and staff will review and evaluate the municipal energy plan, revising and updating it as necessary, on an annual basis within the corporate planning process.
- **Discussion of Progress:** Council and staff will correlate the progress towards corporate goals and objectives, and update those goals and objectives accordingly.

Evaluation Progress

- **Energy Consumption:** The Municipality's energy consumption in 2012 was reduced to 2,089.24 GJ from our 2011 levels of 2,178.72 GJ.

Programs

Description	Facility	Contact	Date	Status
Energy Training	Office	Sandra Leach, Treasurer/Tax Collector	2014-06-09	Active
Details	We have sent and will continue to send employees to energy training seminars on the latest in energy conservation initiatives.			
Energy Awareness		Sandra Leach, Treasurer/Tax Collector	2014-06-09	Active
Details	We continue to raise energy conservation awareness throughout the municipality. We have informed our building supervisors (committee/board members) of our energy conservation initiatives. We look to them for help in identifying energy savings.			

Processes

Description	Facility	Contact	Start	End	Status	Cost	Save (ekWh/yr)	Save (\$)	ROI
Energy Budgets		Sandra Leach, Treasurer/Tax Collector	2014-06-09	2014-06-09	Active	0.00	0	0.00	0
Details	We have included energy conservation as part of each committee's annual budget requirements. They will identify energy challenges, provide possible solutions and the resulting financial impact.								
Efficient Lighting		Sandra Leach, Treasurer/Tax Collector	2014-06-09	2014-06-09	Active	0.00	0	0.00	0
Details	Going forward, the Municipality plans to gradually replace the lighting throughout the municipality with more energy efficient alternatives.								
Energy Partners		Sandra Leach, Treasurer/Tax Collector	2014-06-09	2014-06-09	Active	0.00	0	0.00	0
Details	The Municipality continues to build long-lasting relationships with energy saving organizations such as LAS and Good Energy Solutions Inc., who share information and best practices. To date, LAS has helped track our energy consumption and build a long-term plan. They also conduct informative seminars and offer energy saving incentives. Good Energy Solutions Inc. will be conducting our energy audits, which will aid in finding additional energy savings.								
Turn It Off		Sandra Leach, Treasurer/Tax Collector	2014-06-09	2014-06-09	Active	0.00	0	0.00	0
Details	In efforts to raise energy awareness throughout the municipality, Staff is encouraged to turn electrical units off when not in use, especially during peak hours and weekends.								

Projects

Description	Facility	Contact	Start	End	Status	Cost	Save (ekWh/yr)	Save (\$)	ROI
New Windows	Office	Sandra Leach, Treasurer/Tax Collector	2014-07-01	2014-08-01	Active	25000.00	4692	230.00	230
Details	Installation of new Low E, Argon filled, Zone C rated windows at the municipal office.								
Insulation	Ward 1 Hall	Sandra Leach, Treasurer/Tax Collector	2014-02-03	2014-02-07	Completed	3225.79	860	40.00	40
Details	Insulated the attic and the crawl space								
Energy Audits		Sandra Leach, Treasurer/Tax Collector	2014-07-01	2014-12-31	Pending	1000.00	0	0.00	0
Details	The Municipality will be conducting energy audits of municipal buildings. The audits will assist in finding greater energy savings.								
Heat Pump	Ward 4 Hall & Garage	Sandra Leach, Treasurer/Tax Collector	2014-07-01	2014-08-29	Active	10000.00	0	0.00	0
Details	A new energy efficient heat pump/air conditioner is to be installed at the hall to replace the old, inefficient heating source.								