



ENERGY CONSERVATION & DEMAND MANAGEMENT PLAN



The Corporation of the Town of Gore Bay
Energy Conservation & Demand
Management Plan
2014 - 2020

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Introduction

Ontario Regulation 397/11 made under the Green Energy Act, 2009, requires every public agency to prepare, publish and make available to the public, and implement energy conservation and demand management plans.

A summary of the public agency's annual energy consumption and greenhouse gas emissions for its operations must also be prepared and made available to the public. Also required is a description of previous, current and proposed measures for conserving and otherwise reducing the amount of energy consumed by the public agency's operation and for managing the public agency's demand for energy, including a forecast of the expected results of current and proposed measures.

The Corporation of the Town of Gore Bay is prescribed as a public agency and therefore is required to record the annual energy consumption in our facilities. As well, the Municipality has produced this report stating our goals for conserving and reducing energy, proposed energy conservation measures.

The Town of Gore Bay is committed to demonstrating leadership in environmental stewardship. Evidence of the municipality's efforts in this regard can be seen in our ongoing landfill monitoring management and continuous improvement in our waste management and recycling activities among other areas. This report examines another critical area of stewardship – that of energy conservation – with the overall objective of reducing costly energy waste and greenhouse gas emissions.

Goals & Objectives Statement

The Town of Gore Bay has many goals and objectives for conserving and otherwise reducing energy consumption and managing our demand for energy. We are driven to improve the energy efficiency of our buildings and operations due to the rising fuel costs, energy security and environmental concerns. We have developed a plan to **reduce energy consumption by 5 percent by the year 2020** using 2012 energy consumption data as a baseline (see data below).

The Municipality is making an effort to encourage growth in clean, renewable sources of energy, as well as focusing our energy savings efforts on electrical, water, heating and cooling consumption at our facilities to create potential savings. We are also committed to introducing energy efficient systems into our buildings as new facilities are constructed and others undergo renovations.

Many improvements have been made to our facilities in the past to reduce greenhouse gas emissions and many more efforts are ongoing. The Municipality provides a full range of services to its residents including: municipal administration services, building approvals, by-law enforcement, water and waste-water services, police (OPP) and fire services, public works, waste management and parks and recreational services.

Summary of Goals & Objectives

- 1)** To obtain and analyze critical data and information with regard to the individual components within our Town buildings which consume energy.
- 2)** To obtain professional engineering advice on ten of our buildings (five large, five small) concerning potential energy savings within the duration of the plan.
- 3)** To commit a targeted amount per annum over the duration of the plan towards investigating and implementing both short term and long term energy conservation initiatives.
- 4)** To cultivate, encourage and implement ideas from all staff with regard to behavioural actions that may be instituted to reduce energy consumption.
- 5)** With respect to facilities where output can be measured in dollars (arena), reduce the ratio of energy expense to revenue earned by 1% per annum.
- 6)** With respect to facilities where output can be measured in units (lift station), reduce the ratio of energy expense to units produced by 1% per annum.

Measures

- 1)** Put forth a proposed investment / commitment to CDM in the 1st draft of the annual proposed budget for the initial five year term of our CDM plan.
- 2)** Develop and implement an employee engagement program to solicit ideas from targeted buildings in-house staff.
- 3)** With respect to funds targeted directly towards annual energy conservation, a measure of economic feasibility i.e. total dollar savings, length of payback period, predictability of outcome, etc. must be the determining factor in choosing between numerous proposed energy saving projects and ideas.
- 4)** With respect to funds allocated in the normal course of operations budgeting, it will be the department head and / or facility manager's responsibility to at all times consider energy savings and demand management in their spending decisions.
- 5)** With respect to funds allocated annually in the capital budgeting process, it is recognized that huge potential exists over the long term for both energy conservation and demand management strategies. Senior management must take a pro-active role in intervening to ensure fiscally rewarding opportunities are effectively implemented.
- 6)** With respect to town facilities where user fees generate the majority of revenue to fund their operation (i.e. arenas) it is imperative that changes to the cost of energy inputs are communicated to users and reflected in the pricing structure of facility rentals.

Monitoring and Evaluation

Externally, provincial legislation requires that we report on the results of our CDM plan at the end of the five year planning period (2020). The reporting requirements are prescriptive and extensive but most obviously include a breakdown of the actual results achieved.

Internally, actual and current statistical data will be available continuously to highlight operational areas of concern, guide effective decision making, and monitor real time results vs. benchmarked figures and expected achievement targets.

Conclusion

It is of critical importance that energy conservation and demand management strategies become part of the fabric of decision making at the Town of Gore Bay. Not only are there operating costs to be saved annually, but particularly during the capital budgeting process there is a window of opportunity to re-visit how we intend to deliver services in the future which may reduce the demand for energy. We know intuitively that momentum down this path will require the input and consensus of council, management, all staff, and particularly our service users. Our careful, common sense allocation of budgeted funds, and our energy conservation decisions (both in the now and the future) must stand up to rigorous, non-emotional financial scrutiny, and our successes and failures must be both measurable and transparent.

Overview of Facilities & Usage

To deliver its services, the Municipality operates a number of facilities. An overview of principal municipal facilities can be found in the chart below (based on 2012 energy consumption data):

Building Description & Address	FLOOR AREA (sq. ft)	ELECTRICITY USAGE (kWh)	GREENHOUSE GAS EMISSIONS (kg)
Municipal Office 15 Water Street	4154	78285	7518.54
Medical Centre 70 Meredith Street	11598	48106	4620.10
Old Firehall/Apartments 8 Dawson Street	4480	18849	24771.11
Community Hall 52 Meredith Street	8500	23987	27027.40
Tourist Pavilion 20 Water Street	4500	37132	3566.25
Marina 30 Water Street	1000	5887	565.44
Harbour Centre 40 Water Street	9531	98436	9453.84
Lapidary Building 1 Purvis Drive	800	31605	3035.42
Public Works Garage 3 McQuarrie Blvd	3000	17332	13945.36
Memorial Arena 11 Phipps Street	26136	220552	26843.36
Museum 12 Dawson Street	5000	56685	5444.03
Water Treatment Plant 119B Lighthouse Road	n/a	463969	44559.58
Sewage Lift Station 10 Water Street	n/a	141766	13615.21