



2014-2019

Conservation and Demand Management Plan Energy Consumption

5 Year Energy Conservation & Demand Management

Approved by Council on April 8, 2015

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Introduction

Located in Northern Ontario in the District of Algoma, the Township of The North Shore is comprised of 698 square kilometres, with three primary village areas of Serpent River, Spragge, and Algoma Mills. It is situated along the Highway 17 corridor 143 kilometres (89 miles) east of Sault Ste. Marie traveling from Algoma Mills and 115 kilometres (72 miles) west of Sudbury traveling from Spanish.

Ontario Regulation 397/11 made under the Green Energy Act, 2009, requires that every public agency shall prepare, publish and make available to the public and implement energy conservation and demand management plans. The required elements of the Plan include the following:

- ❖ Information on the municipality's annual energy consumption during the last year for which complete information is available for a full year;**
- ❖ The municipality's goals and objectives for conserving and otherwise reducing energy consumption and managing its demand for energy;**
- ❖ The municipalities proposed measures under its Plan, the cost and saving estimates for these proposed measures and the estimated length of time these measures will be in place;**
- ❖ A description of any renewable energy generation facility operated by the municipality and the amount of energy produced on an annual basis by the facility.**

The Township of The North Shore is prescribed as a public agency and therefore is required to record the annual energy consumption and manage the demand for energy. It is imperative that the energy efficiency of the Township of The North Shore municipal buildings continue to be improved due to the rising fuel costs, energy security and environmental concerns. Energy savings efforts focus on electrical, heating and cooling consumption to create potential savings.

Goals and Objectives

The objective is to improve our energy efficiency and lower costs while continuing to meet the needs of the municipality:

The goals are:

- ❖ To ensure that employees are more aware of the need for energy conservation and make every effort to reduce energy consumption;**
- ❖ To explore opportunities that may be available at a reasonable cost vs. benefit to reduce energy consumption;**
- ❖ To seek funding to increase energy efficiency of our municipal facilities.**

Municipal Office/Algoma Mills Fire Hall

The municipal office building contains the administration offices, Council Chambers and the Algoma Mills Fire Hall, and is located at 1385 Hwy 17 W. in the village of Algoma Mills. The municipal office is open five days a week, (40 hours) and the fire hall, which is not manned, operates an average of 1 hour a week. Council meetings are held twice a month in the evenings, with special meetings as needed. The lighting was upgraded to efficient fluorescents about six years ago. Automatic lights were installed in four rooms in 2010. All lights except one at the entrance are turned off when the building is not in use. The municipal office building is heated by propane and electric heat. All areas of the building are controlled with programmable thermostats whereby the heating/cooling is controlled according to season. Additional insulation was added in the attic and crawl space in 2014. All windows and doors will be checked for air leakage and repaired when needed.

Serpent River Fire Hall

The Serpent River Fire Hall is located at 5759 Hwy 17 in the village of Serpent River. The total area of the fire hall is 3000 sq. ft. There are two bays in which three fire response vehicles are housed. There is a meeting/training room at the upper rear of the building of which the volunteer fire department uses every second Thursday evening for a couple of hours. The source of heat for this building is propane. There are two overhead doors and a man door. The doors and windows will be checked for air leakage and maintained as need be.

Serpent River Water Plant

The SR water plant is located at 1502 Riverview Rd in the village of Serpent River. This water plant has an area of 249 sq. ft. The plant is in operation 24 hours a day, 7 days a week, as per the demand. The source of heat for this building is electric. The town is currently looking into adjusting the water pump to ensure that water is pumped into the reservoir during the night to take advantage of the off-peak savings. This idea can be attributed to Hilton Beach. There is a heat trace inside the intake line which is turned on in November and turned off at the end of March. Maintenance is done as needed.

Pronto East Water Plant

PE water plant is situated at 1029 Short Street in the village of Algoma Mills. The source of heat in this building is electric. It has an area of 1020 sq ft. and operates 24 hours a day, 7 days a week, as per demand. There is an automatic fan that removes moisture from the building. Maintenance is done as needed.

**Township of The North Shore - Energy Overview
2013**

Facility Name	Total Area	Average	Electricity	Annual	Propane	Greenhouse Gas	Energy	Energy
	sq. Feet	Hrs/Wk	Qty (kWh)	Flow	(Litres)	Emissions (Kg)	Intensity	Intensity
							(ekWh/sqft)	(ekWh/ Mega Litre)
Municipal Office	3945	40	54157.97		3875.3	11173.11444	20.6346	
Algoma Mills Firehall	759	1			1598.95	2463.95637	14.81094	
Serpent River Firehall	3000	10	9901.47		4215.81	7447.43611	13.18032	
SR Water Plant	249	168	74268.65	8.66		7132.76211	0	1013.45852
PE Water Plant	1020	168	80726.33	7.65		7752.95769	0	823.64459