

ENERGY CONSERVATION AND DEMAND MANAGEMENT PLAN

The Corporation of the Township of Nairn and Hyman
(2019-2023)



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OVERVIEW

The Corporation of the Township of Nairn and Hyman's Energy Conservation and Demand Management Plan provides a brief background and summary of the requirements relating to Ontario Regulation 397/11 Energy Conservation and Demand Management Plans. This regulation required certain public agencies, including Municipalities, to report on their energy consumption and greenhouse gas emissions annually, beginning in 2013. In addition to this, a five year energy conservation and demand management plan was required in 2014, to be updated every five years thereafter.

The Green Energy Repeal Act, 2018 was passed on December 2018 which repealed the 2009 Green Energy Act, and transferred authority of the reporting requirements to the Electricity Act, 1998.

Pursuant to the regulation: On or before July 1, 2019 and on or before every fifth anniversary thereafter, every public agency shall publish on its website and intranet site, if it has either or both, and make available to the public in printed form at its head office, all of the information this required to be published and made available under subsection (1), the Energy Consumption and Greenhouse Gas Emission Template that is required to be submitted and published on or before July 1 of that year and the following information:

- A revised forecast of the expected results of the current and proposed measures.
- A description of any proposed changes to be made to assist the public agency in reaching any targets it has established or forecasts it has made.
- A description of current and proposed measures for conserving and otherwise reducing energy consumption and managing its demand for energy.

The plan is to serve as a guide for the staff and Council during the capital planning and budgeting process. It will also provide a basis for the municipality to implement improvements to its infrastructure and operations that reduce energy, its associated costs, as well as environmental effects of the municipality's activities. This plan and data analysis that has been completed is part of the requirements under Ontario Regulation 507/18 and will be forwarded to the Ministry and made available to the public.

BACKGROUND

The Township of Nairn and Hyman is a small rural northern community with an overall size of 178.71 square kilometers, with a year-round population of 342 (2016 Stats Canada), and located just west of the City of Greater Sudbury, Ontario.

Established as a logging industry on the Spanish River, Nairn Centre is the core residential area. Although the Spanish River is no longer used for logging, the area still offers a wide range of recreational activities including fishing, boating, swimming, hunting, camping and several kilometres of scenic off-road trails.

The proximity of Nairn Centre to the mining and forestry industries surrounding the City of Greater Sudbury makes it an ideal location for those wishing to enjoy the benefits of an affordable rural atmosphere, within a short drive to employment opportunities.

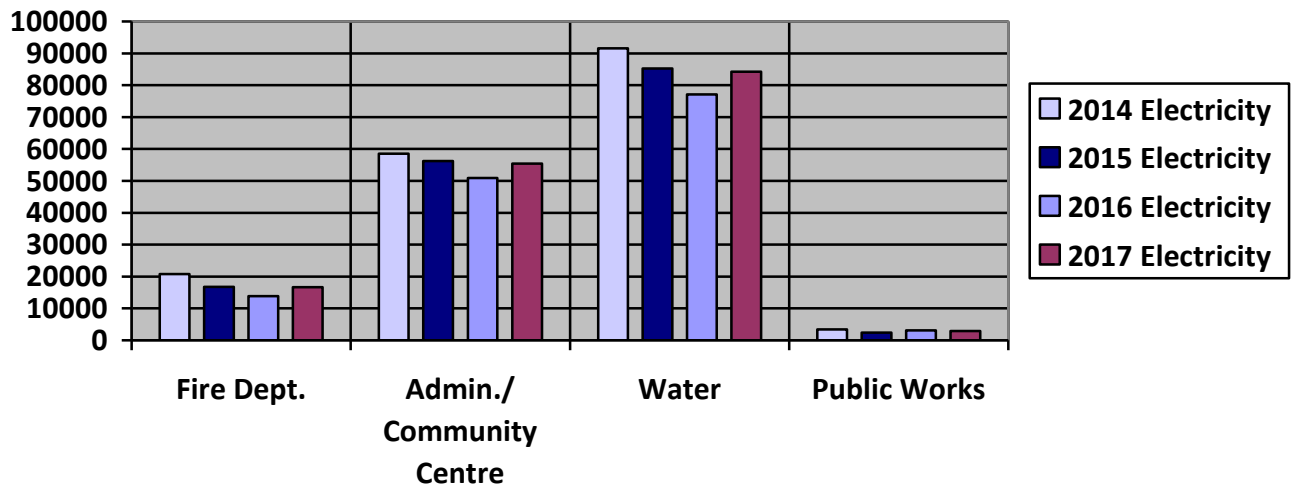
The Township operates with a staff of 8; a full-time Clerk-Treasurer, a full-time Municipal Superintendent, a full-time Deputy Clerk-Treasurer, 3 permanent part-time Public Work employees, a Fire Chief, a Deputy Fire Chief, and 13 volunteer fire personnel.

An Energy Management Plan under the O.Reg 507/18 focuses on buildings and facilities owned or leased by the municipality that are either heated or cooled, or are related to the treatment or pumping of water. As such this plan relates to the Townships' Municipal buildings that are heated or cooled, which include the Municipal Office, Community/Recreation Centre, Fire Stations 1 & 2, Public Works Garage as well as the Water Treatment Plant.

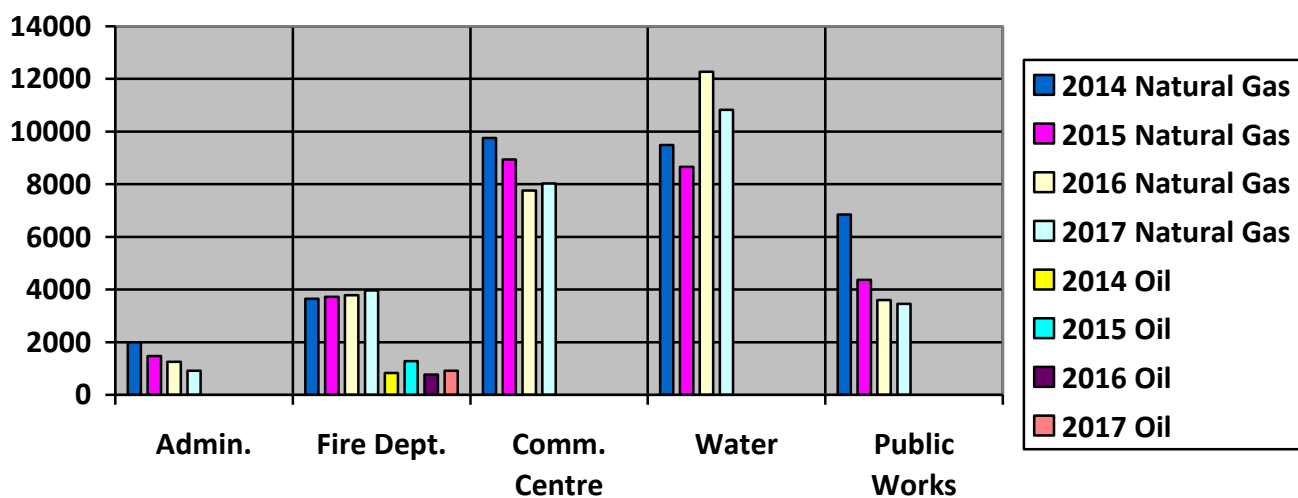
As can be seen in the following energy consumption charts, levels have fluctuated over the last four years where data has been completely compiled (2014-2017). Increases and decreases can be attributed largely to the usage demands of the municipal buildings and to ever changing climate factors. Progress has been made every year in reducing the municipality's Greenhouse Gas Emissions.

Energy Consumption by Department

2014 – 2017 Electricity Consumption (kwh)

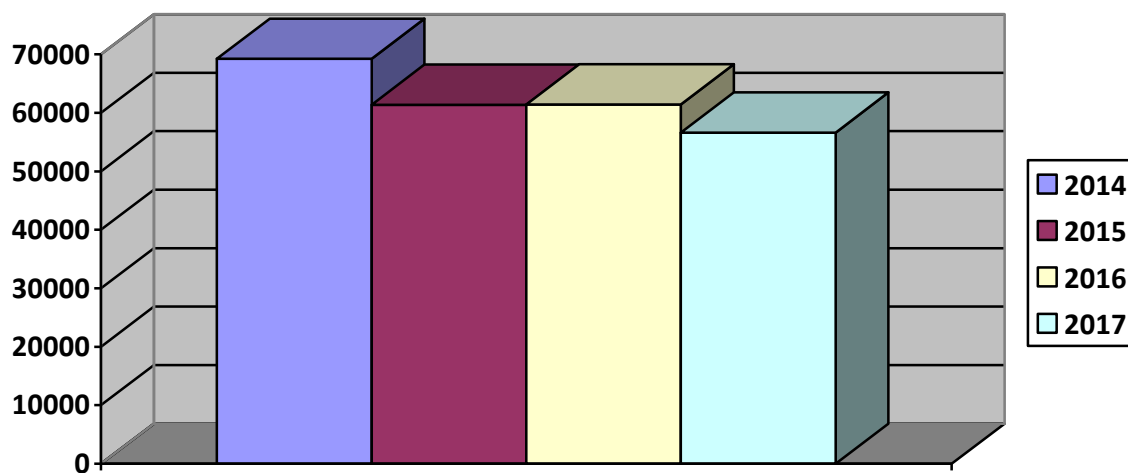


2014 – 2017 Natural Gas Consumption (m3) and Heating Oil (litres)



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2014 – 2017 GREENHOUSE GAS EMISSIONS (kilograms)



GOALS AND OBJECTIVES

- To improve energy efficiency within the municipality's facilities, reduce greenhouse gas emissions and energy consumption in day to day operations and extend the lifecycle of assets, where possible;
- To maximise fiscal resources through direct and energy cost avoidance;
- To increase energy conservation knowledge and mindfulness among staff; and
- To support Ontario's Long-Term Energy Plan.

CONSERVATION EFFORTS

The Corporation of the Township of Nairn and Hyman has been committed to energy conservation in order to reduce energy consumption and decrease operating costs. It is the intention of the municipality to further develop the Energy Conservation and Demand Management Plan and enhance the municipality's commitments as projects develop through Council's approval and as the Town's aging infrastructure requires rehabilitation and/or replacement. Council will review the proposed energy conservation measures during annual budget discussions. These proposed measures may change as technology is improved, or the priorities of Council are altered.

INCENTIVE FUNDING

The Corporation of the Township of Nairn and Hyman is challenged with significant budget pressures to address infrastructure and energy costs. The municipality will take advantage of all funding and grant opportunities related to energy efficient projects. As funding opportunities arise that are suitable for specific energy conservation projects, staff will report to Council and clearly outline the cost savings.

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COMPLETED AND IN-PROGRESS PROJECTS

- Street Lighting upgraded to LED
- Replacement of heating timers in Water Treatment Plant
- Upgrading emergency lighting to LED in Water Treatment Plant

IDENTIFIED FUTURE PROJECTS

- Replace Hyman Fire Station oil furnace with a propane high-efficiency furnace
- Replace insulation in Nairn Fire Station
- LED lighting retrofit in Water Treatment Plant

SUMMARY

The Corporation of the Township of Nairn and Hyman's Energy Conservation and Demand Management Plan will assist the municipality in meeting energy related goals. These goals will need to be established annually through Council's approval of the municipality's budget. This plan can help reduce energy usage and costs by implementing effective energy reduction strategies, managing energy retrofits, monitoring and tracking the Township's energy usage and introducing energy awareness programs to staff.

