

August 9, 2017

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

RE: Annual Energy Consumption Report

Background

In 2011 the Ontario Government passed O. Reg. 397/11 Energy Conservation and Demand Management Plans outlining annual energy reporting and planning for Municipalities, municipal Service Boards, Universities and Colleges, Schools and Hospitals. This regulation outlined what facilities were to be reported on and the data that was to be reported. The first reporting year for energy consumption and greenhouse gas emission data was 2013 with data from 2011. The Town of Fort Frances has been submitting energy reports in accordance with the regulation since the initial submission deadline of July 1, 2013. On June 18, 2014 the Town of Fort Frances 5 Year Energy Conservation and Demand Management Plan was taken to the Operations and Facilities Executive Committee and then to Council on June 23 for approval and was submitted to the Ministry of Energy prior to the July 1, 2014 Deadline. In accordance with Chapter 3 of the Energy Conservation and Demand Management Plan, the following is an annual report of the energy consumption of the Town of Fort Frances

Upcoming Regulation milestones

The next deadlines for the Town to complete work under the regulation is July 1, 2019 where the Town has to update it's energy conservation and Demand Management Plan for the next 5 years including proposed energy saving projects, anticipated savings and costs.

Information

Due to the wealth of data, analysis available and required for the review of energy data, the following information contained in this report is a summary of the energy consumption and solar generation from the Town of Fort Frances Facilities. The data for the 2017 energy submission to the Ministry of Energy contains information for the 2015 year consumption. This report will encompass all data to the end of 2016.

Electrical

Spreadsheet #1 attached to this report is an overview of the 2011 base year for electrical consumption as well as 2013, 2014, 2015 and 2016 years. The items marked with an asterisk are all of the facilities that are heated solely or partially with electrical energy. There is a column showing the difference between the current year and base year consumption.

Natural Gas

Spreadsheet #2 attached to this report is an overview of the 2011 base year for natural gas consumption as well as 2013, 2014, 2015 and 2016 years. There is a column showing the heating degree days, as natural gas usage is largely driven by the outdoor air temperature. There are also columns showing the difference from the base year of 2011.

Solar

The 4 – 10kW solar installations have been online and generating power since late in 2011 under the Ontario Power Authority MicroFIT program. At the time of the Town's enrolment in the program, a 20 year contract to supply power via a rooftop solar generation system was signed for \$0.80 per kWh. There is no requirement to annually report on the solar generation to the Ministry of Energy, however traditionally an annual report to Council has been completed outlining the solar generation. Spreadsheet #3 attached to this report is an overview of the generation occurring at the solar sites.

Energy Conservation and Demand Management Plan Updates:

With the changes in positions which took place in 2016, the Town's Energy Conservation and Demand Management Plan requires an interim update as the plan appoints the Chief Building Official as the Corporate Energy Leader. This role will be taken care of by the Manager of Operations and Facilities. Attached to this report is the updated sections of the Town's Energy Conservation and Demand Management Plan.

Summary of Additional Energy Initiatives:

With the changes in position in 2016, a formal report was not brought through council, the required reporting to the Ministry was completed on time, and therefore there has been a lapse in updates to Council on Energy initiatives completed over the last two periods. Some of the initiatives completed were:

1. Installation of new energy efficient windows and ridged insulation at the Public Works garage (2015)
2. Construction of a new Animal Shelter building (2015)
3. Application of rigid foam insulation along the Council Chambers at the Civic Centre. (2016)
4. Installation of a new high efficiency furnace and Air Conditioner at the Public Works garage. (2016)
5. Replacement of 6 - 1000W Halogen Rink Lights to 300W LED equivalent (installation in Fall 2017) at McIrvine Rink

Conclusions and Recommendations

Although not every facility is seeing a reduction in consumption every year, due primarily to changes in weather patterns from year to year and the above data not being normalized to heating degree days, the overall trend in normalized consumption is downward showing that our energy initiatives are working. It is the recommendation of Administration that:

1. The annual energy consumption report be accepted and made available to the public per the Town's Energy Conservation and Demand Management Plan
2. The Town's Energy Conservation and Demand Management Plan be updated to reflect the Manager of Operations and Facilities as the Corporate Energy Leader.

Respectfully Submitted

A handwritten signature in black ink, appearing to read 'Travis Rob', with a stylized flourish at the end.

Travis Rob, EIT
Manager of Operations and Facilities

Council approval of this report will ensure that:

- 1. The annual energy consumption report be accepted and made available to the public per the Town's Energy Conservation and Demand Management Plan**
- 2. The Town's Energy Conservation and Demand Management Plan be updated to reflect the Manager of Operations and Facilities as the Corporate Energy Leader.**