

This update is to comply with the below listed Ontario regulations which state as outlined below:

<https://www.ontario.ca/laws/regulation/r11397> - O. Reg. 397/11

<https://www.ontario.ca/laws/regulation/180507> - O. Reg. 507/18

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 that is 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.*

2014 Plan Results / Revised Forecast:

In 2014, the Village of Oil Springs committed to work to reduce total reportable energy consumption by 2%/yr (10% over 5 years) vs 2011 or 2012 usage. This reduction was to take place between July 1, 2014 and July 1, 2019.

It is estimated that the Village of Oil Springs will have achieved the following approximate levels of energy reduction between July 1, 2014 and July 1, 2019:

Reportable Facilities

- 6,697 kWh/yr electricity reduction at O-Reg. reportable facilities
 - 3.8% reduction in annual O-Reg. reportable *electricity* vs. 2012 baseline
 - 2.4% reduction in annual O-Reg. reportable *total energy* vs. 2012 baseline

Street Lights

- 71,000 kWh/yr electricity reduction via street lighting LED retrofits
- Equivalent to more than 76% of the Village's O-Reg. reportable 2012 electricity consumption or 25% of the Village's total 2012 reportable energy consumption (including natural gas)

The Village of Oil Springs recognizes that the 2014-2019 2%/yr targeted total energy reduction for *reportable* facilities was not met and that more focus on fund allocation for related projects is required to achieve more savings going forward. Renewed commitment to this investment is identified later in this plan update.

Nevertheless, The Village of Oil Springs, is proud to have made significant investments and accomplished very substantial energy savings of over *110kWh/yr per capita* across the municipal corporate portfolio of facilities, including street lights. Together, this results in a reduction of about 27% of the total reportable energy versus the 2012 baseline. We feel that this is a remarkable achievement which is worthy of celebration.

In addition, The Village of Oil Springs is proud to have commissioned two 10kW rooftop photovoltaic solar projects within the last 5 years which are feeding modern, renewable electricity into the electricity grid for use in Ontario.

Measures Implemented July 2014 to July 2018 & planned July 2018 to July 2019

In May 2016, Bluewater Power provided a high level energy audit report of the corporate facilities. Since that time, the Village has worked in partnership with Bluewater Power to pursue implementation of opportunities that make the most sense for the Village. The following is a brief description of some of the findings and accomplishments since the July 2014 Energy Conservation and Demand Management Plan was put in place.

4596 Oil Springs Line – Public Works Shop, office, Community Hall, Post Office

In 2012, 4596 Oil Springs Line accounted for roughly 48% of the total energy, 71% of the natural gas and 33% of the electricity consumed by all the corporate facilities of Oil Springs which are reportable under the Regulation. In April 2018, the Village received from Bluewater Power, a detailed breakdown of the energy at this facility which identified 16 areas for energy savings and provided a high level economic analysis. Bluewater Power provided data which showed that the on-site Cogeco tower consumes about 8648kWh/yr or about 29% of the total annual electricity for this site. This consumption is unavoidable and is beyond the control of the Village of Oil Springs. The Village has already begun to implement some of these and other low/no-cost opportunities. Where some additional financial investment is required, the Village will take the opportunities into consideration for future energy-cost-avoidance investments.

- Public Works shop
 - 2018: Upgraded lighting to LED and reduced the number of fixtures in operation and increase the light output at the same time.
 - Approximate energy savings: 30kWh/yr
 - 2018: Upgraded LED light over the shop door
 - Approximate energy savings: 250kWh/yr.

- Post Office
 - 2016: Removed 50% of the light tubes in operation
 - Approximate energy savings: 2297kWh/yr. This approx. 40% reduction in lighting energy Compared to the 2012 baseline period, represents a 7.5% reduction in electricity for all of 4596 Oil springs Line, and nearly 2.5% for the entire corporate portfolio of reportable facilities for the Village.
 - Aug 2017: Upgraded interior 24/hr operation and delivery and pickup area lighting to LED and occupancy controls
 - Approximate energy savings: 1600kWh/yr

- Sentinel Lighting
 - March 2014: Upgraded 3 light fixtures from HPS to LED
 - Approximate energy savings: 854 kWh/yr.

- Public Works office / Community Hall basement (58'rs Club)
 - April 2018: Changed dehumidifier scheduling to run it only during off-peak hours (7PM to 7AM + weekends).
 - Approximate energy savings: 1,714kWh/yr.

Street Lighting

In March 2014 the Village of Oil Springs upgraded 124 street light fixtures from HPS to LED. Street lighting is outside the scope of the O-Reg. reporting and tracking requirements. However it is important to note the significant investment of about \$55,000 that the Village of Oil Springs paid for this upgrade – nearly 3 times the total 2012 annual energy budget for the Village, with a 2012 population of 704.

- Approximate Energy Savings: 71,000kWh /yr. This represents a reduction equivalent to more than 76% of the Village's O-Reg. reportable 2012 electricity consumption or 25% of the Village's total 2012 reportable energy consumption (including natural gas)

Renewable Energy projects

With funding from the Ontario micro Feed-In Tariff, The village of Oil Springs, in partnership with Bluewater Power, commissioned two x 10kW rooftop solar feed-in-tariff projects, located at 4589 and 4596 Oil Springs Line. These projects each began producing clean, solar-generated electricity on May 2, 2016.

- Approximate Energy production:
 - 58,528kWh from May 2, 2016 to Dec31, 2018. This is approximately equivalent to the average single family home's electricity supply needs for about 7 years.
 - 22,000kWh/yr average forecasted for next 20 years
 - Equivalent to about 23.7% of the total 2012 annual electricity consumption or 8.9% of total energy consumption (including natural gas) of all the Village's O-Reg.. reportable facilities.

Under the reverse-lease agreement with Bluewater Power, these solar projects cost the Village or Oil Springs nothing to install and they provide a guaranteed revenue stream to the Village of \$2500/yr for 20 years from the date of commissioning.

FUTURE Measures to Implement (July 2019 to July 2024)

The Village of Oil Springs is proud to have accomplished a lot in terms of both energy reduction and clean energy production over the last 5 years. The Village of Oil Springs commits to continue to actively look for ways to maintain energy reductions that have been achieved and to look for and pursue further opportunities to reduce energy consumption in an economically viable and responsible manner.

Specifically, the Village of Oil Springs commits to allocating a minimum of \$1,500/yr into a reserve to be used specifically for any individual or portfolio of energy-reduction projects which are expected to yield a net simple return on investment of at least 8.3%, providing a simple payback period of 12 years or less. The Energy Committee will meet together at least twice a year to discuss related matters and ensure project proposals are available for Council consideration at least once per year in time for budget deliberations. Council would still have final say on whether or not to proceed with any project.

Funds unused in any one year may be carried forward to the next, in order to help pay for projects with a higher cost. It is recognized that the economic and other benefits to the tax-payers can and often do far exceed the simple direct economic impacts of the cost of energy. With that in mind, the Village is committed to considering other factors outside of direct cost-of-energy impacts and simple payback which may in our opinion cause an energy-related project to make sense for the community. It should be noted that \$1,500 is about 7.5% of the Village's total energy budget in 2012 and so is a significant amount that represents our commitment to good stewardship of our finite financial and energy resources.

The Village of Oil Springs will investigate and utilize utility grants (such as the Small Business Lighting program) and other sources of available funding when available to assist with stretching the available funding to make the most of available opportunities and get the most value for the tax payer.

The following is a short list of some specific areas for investigation and consideration of opportunities over the next 5 years. Staff have in some cases, already begun some of the initial investigations and further details may be on file. This is not an exhaustive list. The areas of opportunity will change over time as may be influenced by a variety of factors.

Youth Centre

- Lighting - main hall
- Air Conditioning & Dehumidification
- Heating & ventilation system
- Building Envelope

Oil Springs Municipal Office

- Lighting – basement, main floor, exterior
- Humidifier – controls
- Water seepage – affecting humidity and dehumidification energy

Fire Hall

- Lighting – interior, exterior
- Humidifier – controls
- Water seepage – affecting humidity and dehumidification energy

4596 Oil Springs Line

Post Office

- Lighting – interior – various opportunities have been itemized for Staff
- Ceiling fan controls
- Envelope

Solar Net Metering opportunities

- Main Office
- Pump Station (2658 Oil Heritage Road)

Other areas for future investigation include:

- With the assistance of Bluewater Power, Union Gas and other allies, investigate opportunities for viable implementation of and utilization of grants for implementation of renewable energy technologies such as:
 - solar PV / Net Metering
 - solar thermal
 - geothermal
 - micro cogeneration using renewable fuels
- Solar powered outdoor security lighting where none currently exists such as the parks at the West end and East end (Optimist Park) of town.