

TOWNSHIP OF EAST ZORRA-TAVISTOCK



ENERGY MANAGEMENT PLAN

2019

Approved by Township Council June 19, 2019

2019 Energy Management Plan Update

Ontario Regulation 507/18 (Broader Public Sector: Energy Reporting and Conservation and Demand Management Plans) requires broader public sector (BPS) organizations, such as municipalities, to develop an Energy Management Plan and update it every five years. This Energy Management Plan was developed in compliance with the regulation and covers the period from 2020 to 2024. This updated plan builds on the Township's 2014 Energy Management Plan and the experience gained in energy conservation over the last 5 years.

Hard copies of the plan are available at the Township Office at 90 Loveys Street, Hickson.

Our Commitment

Vision:

We exercise stewardship in our use of limited energy resources in order to exhibit leadership, improve the delivery of our services, and enrich the overall quality of life in our township.

Policy:

We will integrate energy efficiency into all areas of our activities including our financial management decisions and facility operations and maintenance.

Objectives:

- Maximize our financial resources through direct and indirect energy savings.
- Reduce the impact of our operations on the environment.
- Increase the comfort and safety of staff and patrons of the Township facilities.
- Improve the reliability of Township equipment and reduce maintenance.
- Promote the responsible use of land and natural resources
- Improve the community's understanding of energy consumption which is necessary for us to meet our corporate energy management goals.

Factors which influence Energy Consumption

Special events, such as the following items, may influence energy consumption:

- Predicted increase/decrease in building occupancy
- Unusual weather (i.e. mild winter, hot and humid summers)
- Closing a facility
- An increase/decrease in unit energy cost by the supplier
- Addition of new facilities

Historical Energy Conservation Initiatives

In the past, the Township has undertaken multiple initiatives in response to the need to maximize financial resources by becoming more efficient in our use of energy. Some of these initiatives have included:

- Turning off lighting and computer equipment when not in use
- When facilities are upgraded, energy efficient equipment and lighting is incorporated whenever feasible and cost effective.
- Programmable thermostats are used whenever possible
- Lighting retro-fits have been completed for most facilities over the last several years
- All streetlights were replaced with high efficiency LED streetlights in 2012

Recent Energy Conservation Initiatives

- In 2017, the Innerkip Community Centre converted to a natural gas HVAC system (from electric). A lighting retro-fit was also undertaken.
- A lighting retro-fit was undertaken at the Tavistock and District Recreation Centre, in 2018
- A lighting retro-fit was undertaken at the Hickson Fire Hall in 2018
- In terms of renewal energy generation, the Township leased space to EARTH Community Power One LP to place rooftop solar photovoltaic panels on two Township facilities, in 2018.

Energy efficiency is always a consideration for new buildings and equipment purchases

Long-Term Goals

The Township wishes to continuously improve the energy efficiency of our facilities and activities to reduce our operating costs, our energy consumption and our greenhouse gas emissions.

In order to achieve the above, four main goals have been identified:

- Continued reduction in energy consumption
- Continued GHG reduction
- Continued Cost savings
- Investigate options to incorporate renewable energy installations at Township facilities

Overall Target

To reach its goals, the Township will attempt to lessen our electricity and fuel consumption by a continued average of 1% per year until 2024, which will yield cost savings and reduce emissions.

Energy Consumption Data:

	2012 Base	Recent 5-Year Average Consumption (2013-2017)	2017 Consumption	2024 Targets
Electrical Consumption (kWh)	1,095,248	1,163,476	1,003,459	1,105,302
Natural Gas Consumption (m3)	94,341	104,245	101,544	99,033
GHG Emissions (kg)	283,551	250,589	246,725	238,060
Energy Intensity (ekWh/sq ft)	168	178	175	171

Action Plan – Proposed Energy Conservation Initiatives

An evaluation of the Township's current activities concerning energy initiatives showed actions to be implemented that will develop our energy performance.

Process Improvement:

- Provide energy data to senior management and other staff
- Develop a communications plan to encourage energy efficiency and energy savings to staff

Program Implementation:

- Ensure a preventative maintenance program is implemented for each facility
- Continue to revise and update the Township's Energy Management Plan
- Develop and execute a facility walk-through checklist to be used by employees

Projects:

- Continue to upgrade systems
- Implement alternative energy projects
- Integrate green building features to increase energy and water efficiency
- Choose energy efficient equipment when making replacements

Staff Resources

Senior Management will be responsible for the overall execution of the Energy Management Plan, particular to their respective facilities. However, all staff must also recognize the significance of energy management and that an overall culture of energy efficiency. All staff have ownership in the success of this Plan.

A communication, awareness and training program is a key element in the overall energy management program and will be commenced where needed including communication and awareness approaches and policies.

Energy Plan Review

The energy management plan will be reviewed annually in conjunction with the annual budget process and energy consumption reporting activities. This plan will be updated with any new initiatives and most recent consumption figures.

Last Revision 2019-06-19