

# TOWNSHIP OF EAST ZORRA-TAVISTOCK



## ENERGY MANAGEMENT PLAN

2016

**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.

**Prior Commitment to Energy Savings**

In the past East Zorra-Tavistock 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
- 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
- GHG reduction
- Cost savings
- Investigate options to incorporate renewable energy installations at Township facilities

**Overall target**

To reach the previously stated goals, EZT will attempt to lessen our fuel and electricity consumption by an average of 1% per year until 2019, which will yield cost savings and reduce emissions.

	<b>2012 Base</b>	<b>Current Annual Average</b>	<b>2019 Targets</b>
Electrical Consumption (kWh)	1,095,248	1,057,674	1,004,790
Natural Gas Consumption (m3)	94,341	97,081	92,227

**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.

**Summary of Current Energy Consumption**

	<b>2012</b>	<b>2013</b>	<b>2014</b>
Electrical (kWh)	1,095,248	1,069,992	993,268
Natural Gas (m3)	94,341	103,482	122,411
GHG Emissions (kg)	283,551	276,978	276,997
Energy Intensity (ekWh/sq ft)	168	178	206

**Factors which influence Energy Consumption**

Special events, such as those listed below, 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

**Staff Resources**

The department heads will be responsible for the overall execution of the energy management plan, particularly, in their respective facilities.

It is important that all staff recognizes the significance of energy management and that an overall culture of energy efficiency is developed. All staff should 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.

**Action Plan**

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

**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 2016-05-24