

Township of Enniskillen

| From: 2014-01 | -01 to: 2018-12-31 | |
|---------------|--------------------|--------|
| Mayor | | |
| Clerk | | |
| Dated this | day of | . 2014 |



Township of Enniskillen

From: 2014-01-01 to: 2018-12-31

Table of Contents

| Commitment | 3 |
|--|----|
| Vision | 4 |
| Goals – Overall Target, Objectives | 5 |
| Organizational Understanding | 6 |
| Renewable Energy Utilized or Planned | 6 |
| Structure Planning | 7 |
| Resources Planning | 7 |
| Procurement Planning | 7 |
| Projects Execution | 8 |
| Review | 9 |
| Evaluation Progress | 9 |
| Appendix A – Energy Consumption Charts | 10 |



Township of Enniskillen

From: 2014-01-01 to: 2018-12-31

Commitment

Declaration of Commitment

The Township of Enniskillen will allocate the necessary resources to develop and implement a strategic Energy Management Plan that will reduce our energy consumption and its related environmental impact.



Township of Enniskillen

From: 2014-01-01 to: 2018-12-31

Vision

The Corporation of the Township of Enniskillen will continue to reduce energy consumption and mitigate costs through the wise use of energy. This will involve a collaborative effort to increase the education, awareness and understanding of energy management within the Corporation. Total energy consumption includes electricity and natural gas used at Township owned facilities. This vision can be achieved through the integration of operational efficiencies and by building the foundation for a culture of energy awareness and knowledge within the corporation. Commitment from Council and Senior Administration will demonstrate the leadership and commitment required to ensure the fulfillment of the Municipal Energy Management Plan.



Township of Enniskillen

From: 2014-01-01 to: 2018-12-31

Goals

The Township of Enniskillen's Energy Management Plan was completed to help achieve the following goals

- * To continuously improve the energy efficiency of our facilities and processes
- * To reduce our operating costs
- * To reduce our energy consumption and greenhouse gas emissions
- * To provide the guidance and leadership necessary for the adoption of a culture of sustainability

Overall Target

The Township of Enniskillen will attempt to reduce our consumption of natural gas and electricity in our municipal operations.

Objectives

The primary objective of this plan is to improve the management of the Township of Enniskillen's energy consumption in municipal facilities. It is also the objective of this plan to improve the Township's understanding of energy consumption which is essential to meet the energy management goals.



Township of Enniskillen

From: 2014-01-01 to: 2018-12-31

Organizational Understanding

Summary of Current Energy Consumption, Cost and GHGs

** See Appendix A

Renewable Energy Utilized or Planned

The Township of Enniskillen currently does not have any renewable energy projects planned.



Township of Enniskillen

From: 2014-01-01 to: 2018-12-31

Structure Planning

Staffing requirements and duties

The Township of Enniskillen will incorporate energy efficiency into standard operating procedures and the knowledge requirements for operational positions.

Resources Planning

Energy Leader

The Township of Enniskillen will designate leadership and overall responsibility for corporate energy management. A Municipal Energy Conservation Officer (MECO) will be appointed by Council. The MECO will be the primary point of contact for Council and staff on all energy related operations.

Energy Training

The Township of Enniskillen will develop and deliver energy training for relevant staff and Council members. This training will be offered to employees with involvement with energy consuming equipment and employees who make decisions affecting consumption of energy.

Procurement Planning

Consideration of energy efficiency of acquired equipment

The purchasing procedures will be modified as required to incorporate energy efficiency into the criteria for selection of materials and equipment.



Township of Enniskillen

From: 2014-01-01 to: 2018-12-31

Projects Execution

Municipal Level

The Township of Enniskillen will carry out the required development of business procedures and communication programs and implement them methodically according to the planned time lines within the resources constraints that apply.

Asset Level

In order to sustain a corporate culture of conservation, staff must be engaged in an effective awareness and education program. Although public works staff have the lead responsibility in ensuring municipal facilities operate efficiently, all staff should be familiar with and utilize energy efficient measures where possible.



Township of Enniskillen

From: 2014-01-01 to: 2018-12-31

Review

Energy Plan Review

The MECO, in collaboration with Council and staff will review and evaluate the Municipal Energy Plan, revising and updating it as necessary.

Evaluation Progress

Energy Consumption

The Township of Enniskillen will recommend processes and projects that will reduce energy consumption. To date, examples of completed projects include the changing of T12 to T8 light bulbs at the Municipal Office, Public Works garage and the Water Reservoir which concluded in 2013. The disposal/sale of the Shiloh Community Centre took place in September of 2013 which will eliminate energy consumption for this facility. Future projects that will assist with energy consumption reduction include the upgrade of the heating units at the Water Reservoir in 2014. The current heating units are electric and will be switched to natural gas units. In 2015, there is the potential closure of the LaSalle pumping station. Another potential future project includes the updating of the Marthaville and Oil City street lighting to LED bulbs to assist with energy reduction and reduce operating costs of the street lighting.

Appendix "A"

<u>2011</u>

| Facility Type | Total Area | Avg Hours/ Day | Fuel Type | Consum ption | Cost (\$) | Energy (ekWh/y r) | GHG Emissions (kgCO2e/yr) | GHG Intensity (kgC)2e/ m2) | Energy Intensity (ekWh/m2) |
|-------------------------------|---------------|----------------------|--------------|-----------------|--------------|-------------------------|---------------------------------|-------------------------------------|----------------------------------|
| Recreational | | | | | | | | | |
| Facilities | 425 | 3.5 | NG | 7643 | 1766 | 81228 | 14450 | 171 | 961 |
| | | | Electricity | 7094 | 1265 | 7094 | 695 | 5 | 46 |
| | | | Oil | 1483 | | 15983 | 4056 | 18 | 72 |
| Municipal | | | NG | 5521 | 1429 | 58676 | 10438 | 25 | 138 |
| Office | 425 | 6 | | | | | | | |
| | | | Electricity | 28263 | 3737 | 28263 | 2771 | 7 | 67 |
| Public Works Facilities | 914 | 78 | NG | 7318 | 1747 | 77774 | 13836 | 20 | 111 |
| | | | Electricity | 127917 | 35468 | 127914 | 12541 | 49 | 90504 |

<u>2012</u>

| Facility Type | Total Area | Avg Hours/ Day | Fuel Type | Consum ption | Cost (\$) | Energy (ekWh/y r) | GHG Emissions (kgCO2e/yr) | GHG Intensity (kgC)2e/ m2) | Energy Intensity (ekWh/m2) |
|-------------------------------|---------------|----------------------|--------------|-----------------|--------------|-------------------------|---------------------------------|-------------------------------------|----------------------------------|
| Recreational | | | | | | | | | |
| Facilities | 425 | 3.5 | NG | 5337 | 1570 | 55516 | 10166 | 103 | 578 |
| | | | Electricity | 7399 | 2220 | 7399 | 725 | 5 | 47 |
| | | | Oil | 1216 | 1346 | 13106 | 3326 | 15 | 59 |
| Municipal | | | NG | 3758 | 893 | 39939 | 7105 | 17 | 94 |
| Office | 425 | 6 | | | | | | | |
| | | | Electricity | 25894 | 3602 | 25894 | 2547 | 6 | 61 |
| Public Works Facilities | 914 | 78 | NG | 4594 | 1091 | 48824 | 8686 | 12 | 70 |
| | | | Electricity | 136787 | 22464 | 136787 | 13411 | 606 | 105073 |

2013

| Facility Type | Total Area | Avg Hours/ Day | Fuel Type | Consum ption | Cost (\$) | Energy (ekWh/ yr) | GHG Emissions (kgCO2e/yr) | GHG Intensity (kgC)2e/ m2) | Energy Intensity (ekWh/m2) |
|-------------------------------|---------------|----------------------|--------------|-----------------|-----------|-------------------------|---------------------------------|-------------------------------------|----------------------------------|
| Recreational | | | | | | | | | |
| Facilities | 425 | 3.5 | NG | 7183 | 1997 | 76339 | 13580 | 130 | 730 |
| | | | Electricity | 7614 | 2307 | 7614 | 746 | 5 | 47 |
| | | | Oil | 1897 | 1269 | 20445 | 5189 | 23 | 92 |
| Municipal Office | 425 | 6 | NG | 4030 | 863 | 42830 | 7619 | 18 | 101 |
| | | | Electricity | 24882 | 4113 | 24882 | 2439 | 6 | 59 |
| Public Works Facilities | 914 | 78 | NG | 4926 | 1055 | 52352 | 9313 | 13 | 75 |
| | | | Electricity | 143891 | 24411 | 143891 | 14107 | 572 | 113423 |