



# Energy Plan

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2014 - 2019

The Township of Ear Falls' Energy Plan is for the 2014 - 2019 period. It outlines the steps that the organization will take to comply with Ontario's Green Energy Act, and improve energy use, conservation and efficiency within municipal operations.

## **I. Purpose:**

1. To assess and manage energy consumption for all facilities that are owned and operated by the Corporation of the Township of Ear Falls in a manner that maximizes the efficient and effective use of resources.

## **II. Policy Statement:**

1. The Corporation will attempt to identify and eliminate unnecessary energy use and improve operational efficiency. The Corporation will take reasonable steps to encourage and implement energy conservation measures within its operations through the use of Technical, Organizational and Behavioural Measures.

## **III. Energy Management Measures**

1. The Township of Ear Falls will utilize Technical, Organizational and Behavioural Measures to encourage and implement energy conservation.
  - a. Technical Measures
    - i. Conduct energy audits for municipal facilities or extrapolate from existing audits where facilities have similar systems in place. Not all facilities will require individual energy audits.
    - ii. Shift energy usage from times of peak demand to off-peak times through adjustments to operation schedules, shutting down unnecessary equipment or shifting to an alternate energy source.
    - iii. See Appendix 1 – Specific Practices
  - b. Organizational Measures
    - i. Implement a procurement policy and associated purchasing practices to facilitate energy conservation.
    - ii. Implement other policy and procedures as necessary to facilitate energy conservation.
  - c. Behavioural Measures
    - i. Provide information to staff about the savings associated with energy audits, the technical measures implemented (such as not adjusting the temperature in rooms, and using shades to take advantage of daylight harvesting, solar heat gain in the winter and cooling in the summer).

## **IV. Reporting**

1. The Township of Ear Falls will collect and report on quantitative energy data in accordance with the Green Energy Act, 2009. This information will be utilized to analyze trends in energy use and the effectiveness of energy conservation measures.

## **V. Evaluation and Review**

1. The Township of Ear Falls will review the quantitative energy data annually.
2. The Township of Ear Falls will review this Plan during the 2015 Strategic Planning process to ensure that it is identified in the overall Strategic Plan for the municipality.
3. The Township of Ear Falls will review and update the Energy Plan every 5 years and will include:
  - a. A description of current and proposed measures for conserving and reducing energy consumption and managing its demand for energy.
  - b. A report of the actual results achieved during the previous plan period.
  - c. A forecast of the anticipated results of proposed measures.
  - d. A description of any proposed changes to be made to assist in reaching targets.

## **Appendix 1 – Specific Technical Practices**

The following specific technical practices will be followed (subject to budget approval where applicable):

### **Lighting**

1. All exit lights will be replaced on an as needed basis with LED lights since they use about 95% less electricity and last indefinitely.
2. Controls will be put in place to keep lights off in areas with high natural light levels or where artificial lighting is not required. This may include the use of sensors to shut off lights when areas are not in use.
3. Any incandescent lights that are not dimmed and are on for substantial parts of the day will be replaced with screw in compact fluorescent lights upon replacement.
4. T-8 lamps with electronic ballasts will be installed. This will reduce the energy use of the existing T-12 strip fluorescents by about 40% and improve light quality.
5. Exterior yard floodlights will be replaced with Energy Star qualified replacement bulbs which include LED bulbs on an as needed basis.
6. All lights shall be turned off when not in use. This includes all closets, file storage areas, corridors, offices, and external lighting except where this is required as a safety feature.
7. A “lux meter” will be procured to determine proper lighting levels in municipal facilities.
8. Fluorescent tube lighting to be de-lamped, if necessary, after replacement bulbs and lux meter testing is complete.
9. Holiday lights will energy efficient and will be set on a timer to shut off when not required (day-time hours, late night)
10. Sensors will be installed and maintained for street lights to ensure they are off during daytime hours.

### **Other Electrical**

1. Power bars shall be used for all computers and all computers shall be turned off during extended absences, where possible.
2. Anything that plugs in, except for computers, must remain unplugged when not in use. This may include items such as fans, small appliances, radios, TV.

### **Windows and Doors**

1. Windows in municipal facilities will be systematically repaired and/or replaced to ensure optimum energy efficiency.
2. All doors must be in good repair, well insulated and weather-stripped.

### **Town Owned Vehicles**

1. Municipal vehicles shall not be left idling except in the case of a genuine emergency where vehicle power is required.
2. A preventive maintenance program will be utilized for vehicles and unlicensed equipment.

**Heating**

1. Thermostat setting standards for all rooms shall not exceed 20 degrees Celsius. Thermostat settings should not to be completely shut off during evening and weekend hours.

**Compliance**

1. All users of municipally owned buildings will be provided with a copy of this policy and are requested to comply with it in the interest of energy efficiency and cost savings.