

**Energy Management Plan**

**Township of North Kawartha**

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

# Table of Contents

Commitment .....	4
Declaration of Commitment: .....	4
Vision: .....	4
Policy: .....	4
Goals: .....	4
Overall Target .....	4
Objectives .....	4
Organizational Understanding.....	4
Our Municipal Energy Needs:.....	4
Stakeholder Needs: .....	4
Municipal Energy Situation: .....	5
How We Manage Energy Today:.....	5
Summary of Current Energy Consumption, Cost and GHGs: .....	5
Renewable Energy Utilized or Planned:.....	5
Strategic Planning .....	5
Links with other municipal plans:.....	5
Structure Planning.....	5
Staffing requirements and duties:.....	5
Consideration of energy efficiency for all projects:.....	5
Resources Planning .....	5
Energy Leader: .....	5
Energy Team: .....	6
Key Individuals: .....	6
Internal Resources: .....	6
External Consultants and Suppliers: .....	6
Energy Training: .....	6
Procurement Planning.....	6
Energy Purchasing: .....	6
Consideration of energy efficiency for all projects:.....	7

Consideration of energy efficiency of acquired equipment: .....	7
Implementation Planning.....	7
Building Standards: .....	7
Communication Programs: .....	7
Investment Planning.....	7
Internal Funding Sources: .....	7
Implementation Planning.....	7
Business Procedures:.....	7
Projects Execution .....	7
Municipal Level: .....	7
Asset Level: .....	7
Review.....	8
Energy Plan Review: .....	8
Discussion of Progress: .....	8
Evaluation Progress .....	8
Energy Consumption: .....	8

## **Commitment**

### ***Declaration of Commitment:***

The Township of North Kawartha will use existing resources and leverage outside agencies where appropriate to reduce our energy consumption and its related environmental impact.

### ***Vision:***

We will be community leaders in the efficient use of energy resources.

### ***Policy:***

We will incorporate energy efficiency into all areas of our activity including our organizational and human resources management procedures, procurement practices, financial management and investment decisions, and facility operations and maintenance.

### ***Goals:***

To continuously improve the energy efficiency of our facilities and processes in order to reduce our operating costs, our energy consumption and the concomitant greenhouse gas emissions

### ***Overall Target:***

We will reduce our consumption of fuels and electricity in all municipal operations by an average of 1.5% per year between now and 2020.

### ***Objectives:***

1. Build strong participation and support of green programs through communication and training programs.
2. Complete energy audits on two of the top five energy-consuming buildings in the municipality.
3. Reduce the energy consumption of the North Kawartha Community Centre by 7.5 %, reconciled by climate, by the 2016 fiscal year.
4. Reduce the energy consumption of the North Kawartha Roads Garage by 7.5%, reconciled by climate, by the 2016 fiscal year.

## **Organizational Understanding**

### ***Our Municipal Energy Needs:***

We need reliable, low-cost, sustainable energy sources delivering energy to the most efficient facilities and energy-consuming technology feasible

### ***Stakeholder Needs:***

Internal stakeholders (Council, CAO, staff) need to be able to clearly communicate the corporate commitment to energy efficiency, and to develop the skills and knowledge required to implement energy management practices and measures. External stakeholders (the Province, community citizens and groups) need the municipality to be accountable for energy performance and to minimize the energy component of the costs of municipal services

### ***Municipal Energy Situation:***

Energy consumption in 2012 is less than 2011 Base Year levels. GHG Emissions in 2012 is less than 2011 Base Year levels. The current energy usage by building is detailed in the Annual Consumption & Emissions Report

### ***How We Manage Energy Today:***

It is the responsibility of the management team to monitor and manage energy bills.

### ***Summary of Current Energy Consumption, Cost and GHGs:***

The total annual energy consumption in municipal operations is 2438237.3 ekWh, at a cost of 244595.04 per year and GHG emission of 398943.5 kgCO<sub>2</sub>e/year.

### ***Renewable Energy Utilized or Planned:***

The Township of North Kawartha aspires to show leadership in the promotion and development of renewable energy systems that are compatible with our asset management and land use planning objectives.

## **Strategic Planning**

### ***Links with other municipal plans:***

As an integral component of the management structure, the energy management plan is coordinated with the municipality's budget planning process, preventative maintenance plans, environmental management, and the overall asset management plan

## **Structure Planning**

### ***Staffing requirements and duties:***

We will incorporate energy efficiency into standard operating procedures and the knowledge requirements for operational jobs.

### ***Consideration of energy efficiency for all projects:***

Life cycle cost analysis will be considered in the design procedures for all capital projects

## **Resources Planning**

### ***Energy Leader:***

We will clearly designate leadership and overall responsibility for corporate energy management.

***Energy Team:***

We will appoint employees to act as departmental energy efficiency team members

***Key Individuals:***

We will identify staff members and personnel from our critical service providers who carry significant responsibility for energy performance or who can make essential input to energy management processes.

***Internal Resources:***

Energy efficiency will be incorporated into the standard operating procedures and the knowledge requirements for operational jobs.

***External Consultants and Suppliers:***

Township procurement policies will incorporate criteria and a strategy for securing external services for the implementation of energy projects.

***Energy Training:***

1. Communication programs:
  - a. Our communication strategy creates and sustains awareness of energy efficiency as a corporate priority among all employees (council, committees, volunteers, etc.), and conveys our commitment and progress to our stakeholders.
2. Energy Awareness Training:
  - a. Training focused on the energy use and conservation opportunities associated with employees' job functions will be utilized whenever possible.
3. Energy Skills Training:
  - a. Skills training for operators, maintainers and other employees that have "hands-on" involvement with energy consuming systems will be provided whenever possible, in order to improve the team's ability to achieve energy efficiency improvements

**Procurement Planning**

***Energy Purchasing:***

We will develop a procedure for the negotiation of energy purchase contracts that appropriately addresses our cost considerations, available energy services, energy quality and reliability, and other performance factors

***Consideration of energy efficiency for all projects:***

Life cycle cost analysis will be incorporated whenever possible into the design procedures for all capital projects

***Consideration of energy efficiency of acquired equipment:***

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

## **Implementation Planning**

***Building Standards:***

We will develop criteria for the design and/or acquisition of new buildings that include energy performance factors and that use as appropriate the principles embedded in performance standards such as LEED and the Model National Energy Code for Buildings

***Communication Programs:***

We will develop a communication strategy that creates and sustains awareness of energy efficiency as a corporate priority among all employees, and conveys our commitment and progress to our stakeholders

## **Investment Planning**

***Internal Funding Sources:***

We will develop criteria for determining whether internal resources can be utilized for the implementation of energy projects

## **Implementation Planning**

***Business Procedures:*** We will carry out a comprehensive review of all business processes and modify them as necessary in order to incorporate energy efficiency considerations.

## **Projects Execution**

***Municipal Level:***

We 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:***

We use department and facility energy team representatives to facilitate the implementation of facility level business procedures and communication initiatives, including energy performance reporting.

## **Review**

### ***Energy Plan Review:***

We will review and evaluate our energy plan, revising and updating it as necessary, on an annual basis within our corporate planning process.

### ***Discussion of Progress:***

We will correlate our progress towards corporate goals and objectives, and update those goals and objectives accordingly

## **Evaluation Progress**

### ***Energy Consumption:***

Our energy consumption in 2012 was reduced to 2244669ekWh/yr from our 2011 levels of 2438237ekWh/yr.