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| Energy Management Plan |

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July 1, 2014 (updated May 2015)



Energy Management Plan

CORPORATE COMMITMENT

Declaration of Commitment

The Corporation of the Town of Pelham will use existing resources and leverage outside agencies where appropriate to develop and implement a strategic energy management plan that will reduce our energy consumption and its related environmental impact.

Vision

We will incorporate energy management into all Town activities and proactively pursue optimal energy solutions that will enhance delivery of services and overall quality of life in our community.

Policy

This plan will allow energy management to be incorporated into all Town activities, including organizational and human resources management procedures, procurement practices, financial management and investment decisions, and facility capital, operations and maintenance.

Goals

The Town of Pelham's Energy Management Plan was created to help achieve the following goals:

- Reduce the environmental impact of the Town's operations
- Create a culture of conservation
- Increase the comfort, safety and overall quality of life of staff and patrons of Town facilities
- Improve the reliability of Town equipment and reduce unplanned maintenance
- Provide the guidance and leadership necessary for the adoption of a culture of sustainability



Overall Target

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

Strategic Objectives

In order to achieve the success of the strategic direction of the Energy Management Plan, there are a number of goals and objectives that align with its development and implementation. The following are the strategic objectives:


1. The creation of a culture of conservation within the Corporation will reduce greenhouse gas emissions and ensure the wise use of resources
2. Fiscal accountability through savings and cost avoidance which will lead to both direct and indirect savings
3. Demonstrate leadership within the Corporation and community as to the commitment to energy management and investigation of new and emerging technology
4. Demonstrate sound operating and maintenance practices to complement the energy efficiencies implemented through the capital asset renewal program
5. Provide a forum for discussion within the Corporation on energy management to be able to explore new ideas and trends

With the development of the Energy Management Plan, all departments will ensure energy management is a consideration in all operations and facility based decisions. The integration of operational processes, facility based infrastructure improvements and staff awareness is critical to move the Corporation towards the goal of creating a culture of conservation.

CORPORATE UNDERSTANDING

Current Energy Consumption

To be able to efficiently manage energy within the Corporation, the establishment of accurate consumption data from the base year is essential. To be able to set meaningful targets for energy reductions, an understanding of where and how the energy is consumed is critical. Starting with the baseline year of 2012 to year to date, the Corporation has a unique opportunity to monitor and trend not only consumption, but assist in bill verification,



procurement and budgeting. To further assist with this, each facility has been assigned a unique cost center for ease of data retrieval.

The 2012 baseline data provides a starting point and template for the continued tracking and monitoring of Corporate energy data. (Appendix A)

Renewable Energy Utilized or Planned

The Town of Pelham 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. As a result, we will endeavour to incorporate these systems in our current and future development opportunities.

CORPORATE PLANNING

Resources Planning

Energy Leader: Our Chief Administrative Officer has been designated as our energy leader with overall responsibility for corporate energy management.

Energy Team: We will identify staff members from our departments who carry significant responsibility for energy performance or who can provide essential input to energy management processes.

Energy Training: 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. Training focused on the energy use and conservation opportunities associated with employee's job functions will be utilized whenever possible.

PROJECTS EXECUTION

Municipal Level

The administration and implementation of this plan will be the responsibility of the Chief Administrative Officer. Since we all use energy in our daily activities, it will also be the responsibility of all Town staff to be aware of the Corporation's energy use and work towards a culture of conservation. Through staff training and web base energy management tools, staff will be able to see the results of their efforts and establish personal and corporate goals for energy reduction.

Asset Level

In order to sustain a corporate culture of conservation, staff must be engaged in an effective awareness and education program. Although facilities staff have the lead responsibility in ensuring city facilities operate efficiently, all Town staff should be familiar with and utilize energy efficient measures where possible. Energy audits will be completed for all Town owned facilities. Audits involve a technical review of a facility and its operations, the development and analysis of a baseline energy profile for the facility and identification of energy management opportunities and savings. Another important component of an energy management program is the re-commissioning of Town facilities. Over the life cycle of a facility, the mechanical systems are adjusted and the mechanical distribution or building controls is sometimes overlooked when renovations take place. Re-commissioning involves examining the original mechanical design and operating specification against any building renovations and recalibrates the settings to suit today's energy efficient standard practices. It also ensures that mechanical operating practices are current and appropriate to maximize building system efficiencies.

REVIEW

Energy Plan Review

The Corporation will review and evaluate our Energy Management Plan, revising and updating it as necessary, within our Strategic Planning process.

EVALUATION

Energy Consumption

The results of our energy management plan will be evaluated by monitoring our energy consumption and overall progress towards our goals. The evaluation process is ongoing and provides the critical feedback that leads to continuous improvement.

KEY INITIATIVES

The development of the Energy Management Plan is intended to be a living document that provides a roadmap for building the foundation for successful energy management through various initiatives, including the development of policies, procedures, processes and energy management knowledge.

The key initiatives that are being proposed within the Energy Management Plan fall within three key initiative categories:

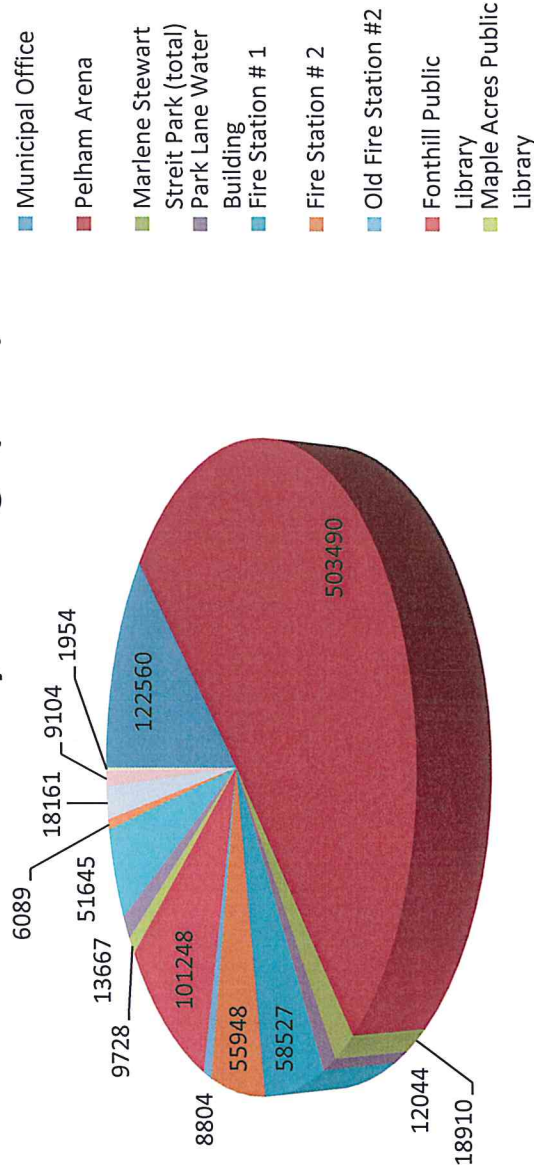
Process Improvements	Improvements or alternatives to current process based operations that are quicker and more straightforward with lower costs
Program Implementation	Improvements that take longer to implement with moderate costs
Projects	In general these are capital projects to upgrade equipment and facilities and are usually more costly to implement with detailed planning required.

The process improvements, program implementation and projects contained within the Energy Management Plan are high level actions that encompass more specific goals. These initiatives and strategies provide the foundation to increase energy efficiency and eliminate energy waste within corporate operations and facility based infrastructure decisions. (See Appendix B)

Appendix A

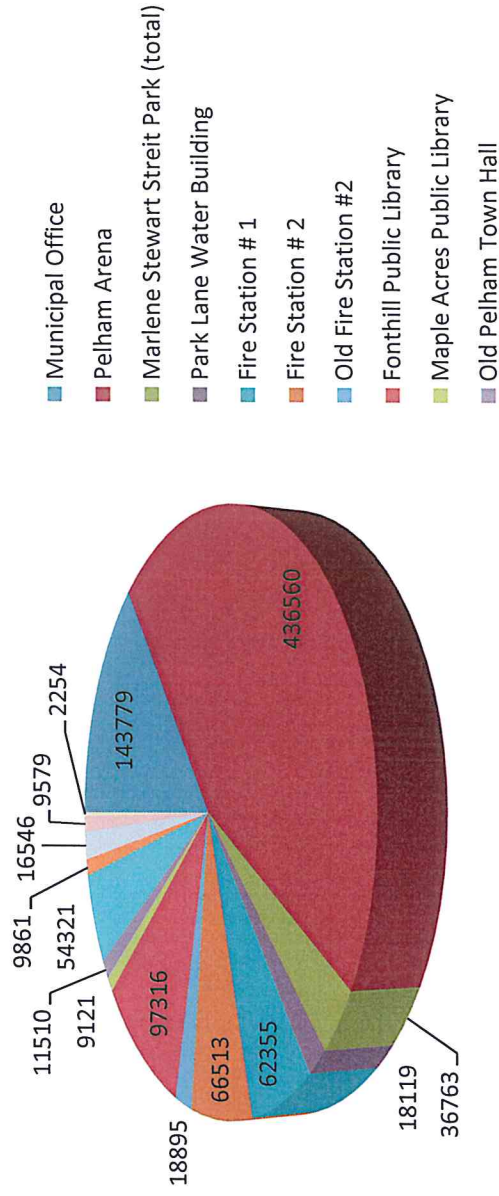
Operation Name	Total Usage (kWh) 2012
Municipal Office	122560
Pelham Arena	503490
Marlene Stewart Streit Park (pool house)	5347
Marlene Stewart Streit Park (pool)	13563
Marlene Stewart Streit Park (total)	18910
Park Lane Water Building	12044
Fire Station # 1	58527
Fire Station # 2	55948
Old Fire Station #2	8804
Fonthill Public Library	101248
Maple Acres Public Library	9728
Old Pelham Town Hall	13667
Tice Road Operations Centre	51645
Fonthill Cemetary	6089
Centennial Park	18161
Harold Black Park	9104
Peace Park	1954
Fire Station #3	991879

2012 Hydro Usage (kWh)

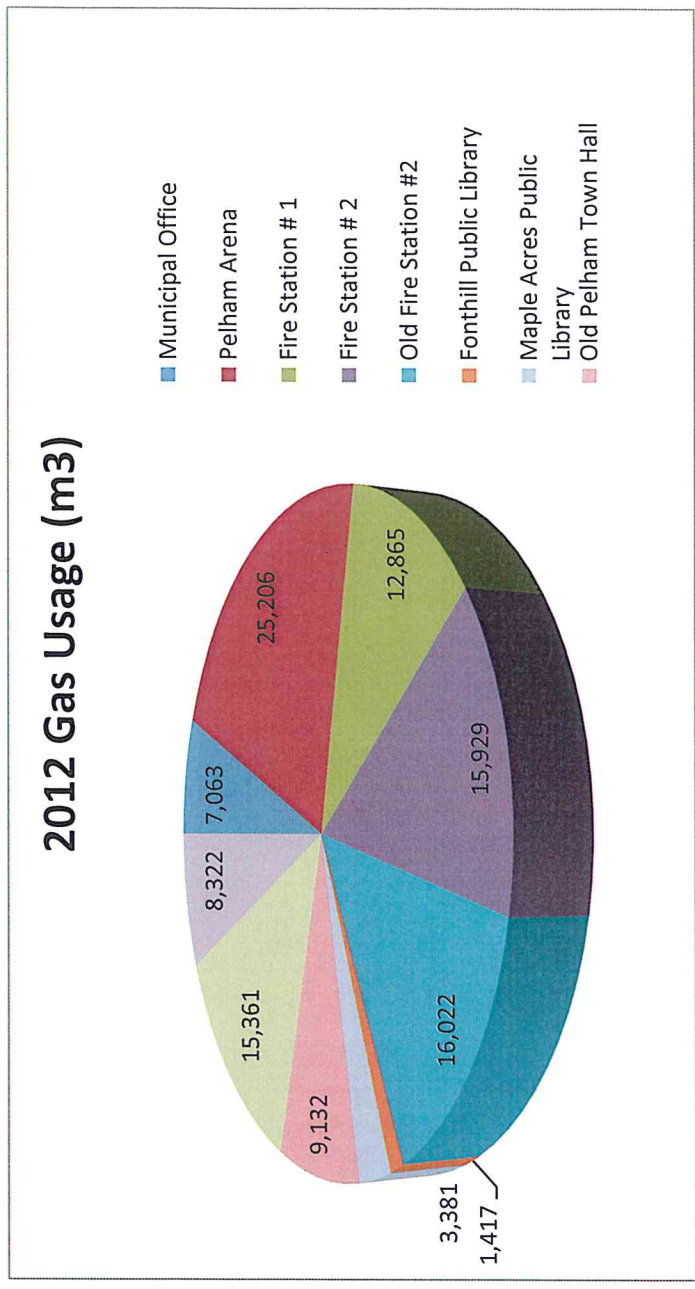


Operation Name	Total Usage (kWh)
Municipal Office	143779
Pelham Arena	436560
Marlene Stewart Streit Park (pool house)	21234
Marlene Stewart Streit Park (pool)	15529
Marlene Stewart Streit Park (total)	36763
Park Lane Water Building	18119
Fire Station # 1	62355
Fire Station # 2	66513
Old Fire Station #2	18895
Fonthill Public Library	97316
Maple Acres Public Library	9121
Old Pelham Town Hall	11510
Tice Road Operations Centre	54321
Fonthill Cemetary	9861
Centennial Park	16546
Harold Black Park	9579
Peace Park	2254
Fire Station #3	0
	993492

2013 Hydro Usage (kWh)

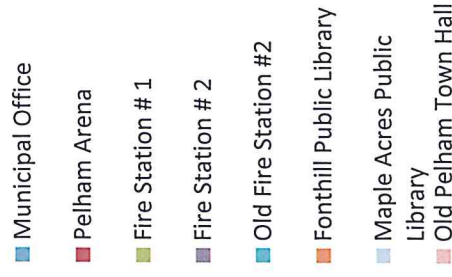


Facility Name	Total Usage 2012
Municipal Office	7,063
Pelham Arena	25,206
Fire Station # 1	12,865
Fire Station # 2	15,929
Old Fire Station #2	16,022
Fonthill Public Library	1,417
Maple Acres Public Library	3,381
Old Pelham Town Hall	9,132
Tice Road Operations Centre	15,361
Pool	8,322
	121,360



Facility Name	Total Usage 2013
Municipal Office	6,267
Pelham Arena	39,113
Fire Station # 1	12,493
Fire Station # 2	17,123
Old Fire Station #2	11,190
Fonthill Public Library	1,582
Maple Acres Public Library	3,848
Old Pelham Town Hall	9,008
Tice Road Operations Centre	25,438
Pool	11,824
	147,017

2013 Gas Usage (m3)



Appendix B – Key Initiatives

Key Initiative Category	Focus Area	Action	Objective
Process Improvement	Energy Use in Facilities	Facility Standards	To develop operational standards for building controls within facilities using industry standards (eg. office temperatures)
Process Improvement	Equipment Efficiencies	Energy Efficient Procurement	To develop policy for standards for the purchase of energy efficient equipment (eg. Energy Star)
Process Improvement	Energy Data Management	Energy data analysis and tracking	To develop operational standards for bill verification, optimization and consumption data analysis.
Program Implementation	Energy Use in Facilities	Customer Awareness	To develop a program to increase energy conservation awareness for customers ie. Users of Town facilities
Program Implementation	Equipment Efficiencies	Lighting Upgrades	To develop standards for lighting system upgrades, interior and exterior, with consideration for appropriate lighting levels and usage. Include feasibility for occupancy sensors, photocells and timers.

Key Initiative Category	Focus Area	Action	Objective
Projects	Energy Use in Facilities	Commissioning and Re-Commissioning	To develop comprehensive testing to verify that systems and equipment perform to specifications
Projects	Equipment Efficiencies	Standards	Develop policy for energy efficient guidelines, sustainable design principles and equipment specifications for major renovations and new construction projects.
Projects	Equipment Efficiencies	Capital Asset Renewal Program	To develop a strategy and sustainable funding model to ensure energy efficiency is incorporated within the asset renewal program
Projects	Organizational Integration	Energy Management Training	To incorporate energy management training into employee orientation and future training opportunities offered through Human Resources.
Projects	Equipment Efficiencies	Lighting Upgrades	To research and determine feasibility of LED streetlight technology
Projects	Energy Use in Facilities	Energy Audit	To conduct an energy audit of all facilities and incorporate these findings into our EMP.