

Town of Saugeen Shores

Broader Public Sector
Energy Conservation
and Demand
Management Plan

Based on O. Reg 397/11

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Energy Conservation and Demand Management Plan

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Commitment

Declaration of Commitment:

The Town of Saugeen Shores has undertaken several Energy Audits and has implemented a number of measures to reduce energy consumption over the long term. We continue to allocate resources within operating and capital budgets to develop and implement strategic energy management initiatives that should continue to reduce our energy consumption and its related environmental impact. The commitment of the Town of Saugeen Shores is to provide quality programs and services that are cost effective and environmentally responsible, while recognizing the needs of our residents and visitors.

All reasonable efforts will be taken to minimize impacts to the environment through the development and implementation of a sustainable development and environmental management system. This will maximize waste diversion and reduce energy consumption by focusing on sustainable planning, healthy community design and environmental stewardship.

Vision:

The vision of the Town of Saugeen Shores is to reduce total energy consumption through the wise and efficient use of energy and resources, while still maintaining efficient and effective levels of service for our ratepayers, seasonal visitors and program users. Our total energy consumption target includes electricity and natural gas. The Town of Saugeen Shores 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. Through the integration of energy efficient facility infrastructure, operational efficiencies, education of energy consumption, and an increased awareness of energy issues, this vision will be achieved. It is highlighted that everyone within the Corporation has a role to play in decreasing energy consumption and that this is very much a team effort where leadership is emphasized.

Policy:

The Town of Saugeen Shores will incorporate energy efficiency into all aspects of our operations wherever possible. Key areas to consider are facility operations, fleet operations and maintenance.

Goals:

The main goal of the Town of Saugeen Shores is to continue to provide quality programs and services that are cost effective and environmentally responsible, while reducing energy consumption. Managers will be striving to maximize fiscal resources through direct and indirect energy savings and reducing the environmental impact of the Town's operations. Managers will need to provide guidance and leadership that is necessary for the adoption of a culture of sustainability.

Overall Target:

The key to a successful long term energy conservation and demand management vision is a strong Energy Policy, with measurable and achievable targets. Our Energy Policy calls for a conservative targeted

reduction in energy usage or intensity of Town owned facilities. The initial target has been set at an average 1% reduction in energy per year using 2011 as our base year. The Energy Reduction Target will be applied to energy consumption overall across all town departments, with the success of the program measured over the life of the plan. It is recognized that energy reduction is a longer term goal and that energy reducing initiatives take time to implement and measure their success. It is anticipated that that town will have achieved an overall energy reduction of 5% by 2016 using 2011 as the base year, and by a further 3% by the end of the five year term of the energy management plan. It is also recognized that new facilities may be constructed or existing facilities expanded resulting in changes to our overall energy needs.

Objectives:

The main goal of the Town of Saugeen Shores is to provide quality programs and services that are cost effective, environmentally responsible, innovative and respectful of our heritage. Adding to this larger, overarching value are several smaller core values, one of which is supporting environmental initiatives. In keeping with the effort to remain environmentally responsible, all reasonable efforts will be taken to minimize impacts to the environment through the development and implementation of a sustainable development and environmental management system. The Town of Saugeen Shores focus is on sustainable planning, healthy community design and environmental stewardship. The following are among the strategic objectives of Saugeen Shores: The creation of a culture aware of its energy consumption; keeping track of greenhouse gas emissions and ensuring the wise use of resources; fiscal accountability through savings and cost avoidance leading to both direct and indirect savings; demonstrating leadership within the Corporation and community as to the commitment to energy management and investigation of new and emerging technology.

Organizational Understanding

Our Municipal Energy Needs:

The Town of Saugeen Shores needs low-cost, sustainable energy sources delivering energy to our facilities to enable us to continue to provide reliable, cost effective services to our ratepayers. Reducing our energy consumption can help to reduce our impact on the environment and will also set a good example for our ratepayers. With continually increasing energy costs, reducing our energy consumption should also enable us to better manage our municipal budgets.

Stakeholder Needs:

Internal stakeholders (Council, committees of council, CAO, staff) need:

- a. an up-to-date and relevant energy management plan with clear vision, goals, and targets in order to clearly communicate the corporate commitment to energy efficiency;
- b. timely, regular reports and information to maintain awareness of energy use and;
- c. training and support to develop the skills and knowledge required to implement energy management practices and measures.

How We Manage Energy Today:

The management of energy consumption and the energy performance of our facilities and equipment is the responsibility of Treasury (cost management), the Public Works Department (operations & facilities), the Community Services Department (operations & facilities), and Fire Services (emergency response and facilities). Treasury is the primarily responsible for tracking energy consumption and overseeing the success of the energy conservation plan, relying heavily on the support and cooperation of all Department Managers who will introduce energy conservation measures. Every staff member of the Town of Saugeen Shores has their own role to fulfil in order to ensure its success, whether it be adhering to new guidelines, or making small changes to their work stations.

Summary of Current Energy Consumption, Cost and GHGs:

The Town of Saugeen Shores, like most Ontario municipalities, is challenged with significant budgetary pressures due to reduced levels of funding and increasing costs. It is unknown how quickly energy prices will rise over the next several years and to what degree. Given the way energy markets tend to perform, the bigger challenge now is managing for volatility of pricing. The reality is that energy prices are now globally-driven rather than locally-driven. Ontario alone will need to invest billions of dollars, over the next decade, in utility infrastructure and new electricity generation to replace the aging supply base that exists today. It is recognized that efforts to reduce energy consumption may not necessarily translate into cost savings, however it is hoped that reductions in energy consumption will at least result in budget neutrality. Meeting our target energy consumption reductions will result in lower Greenhouse Gas Emissions. The 2013 consumption information is attached as Schedule C.

Structure Planning

Staffing requirements and duties:

The Town of Saugeen Shores will incorporate energy efficiency into standard operating procedures and the knowledge requirements for operational jobs. Staff members will be made aware of the Town of Saugeen Shores energy conservation efforts and why they're important. Staff will be encouraged to make any changes they can in their daily routines that could help reduce energy consumption, as well as keep up with operational standards. Staff will be updated about the results of energy audits and be given suggestions on how to improve their energy consumption at their jobs. Updates on their rate of success or improvement will also be given to staff members so they will be encouraged to continue their efforts.

Resources Planning

Energy Leader:

The Treasury Department is the designated leader for energy reporting requirements and holds the overall responsibility for corporate energy management. This department will be responsible for monitoring energy consumption and reporting the results to meet Ministry of Energy reporting requirements. The Public Works and Community Services departments are primarily responsible for recommending and implementing energy reducing initiatives for operations and facilities that may impact all of the municipal departments.

Procurement Planning

Consideration of energy efficiency of acquired equipment:

Our purchasing procedures will be modified where possible and as required to incorporate energy efficiency into the criteria for selection of materials and equipment. Effort will be made to purchase equipment and materials that are energy efficient and decisions will not be based solely on their short-term economic feasibility. In addition, an examination will be done of current materials and equipment to assess if it might be feasible to continue to replace some of the less energy efficient items the Town of Saugeen Shores utilizes.

Review

Energy Plan Review:

As part of any energy management strategy, continuous monitoring, verification, and reporting is an essential tool to track consumption and dollar savings and/or avoidance as the result of implemented initiatives. The Treasury Department will monitor and track energy consumption for all facilities reported to the Ministry of Energy and will provide an annual up-date of energy consumption to department heads to ensure that all departments are aware of the success of our energy reduction initiatives.

Evaluation Progress

Energy Consumption:

Annual energy consumption data will be measured against the previous year's energy consumption on a facility and overall basis with the purpose of confirming that overall the Town has achieved its goal of an average 1% reduction in energy consumption. It is recognized that the ability to meet this target relies on the allocation of resources to implement energy reducing initiatives and the assumption that the number of facilities being monitored and the facility usage remains constant year over year. The success of the program will be measured over the five year term of the plan with less emphasis placed on year-over-year reductions. It is expected that the town will have achieved an overall energy reduction of 5% over the five year term of the plan.

Attachments:

Schedule A: Energy Management Initiatives

Schedule B: Baseline Energy Consumption Data: 2011

Schedule C: Baseline Energy Consumption Data: 2012

Schedule A:

Energy Management Initiatives
Measures Implemented 2013 and prior
Ainsworth Energy Audit - completed in 2008
Programmable thermostat installations
Lighting Retrofits to LED fixtures
Occupancy sensor installations
Led Exit Sign installations
Convert HID Ice Lights at Coliseum to T-5's
Replace Oil Hot Water Heater to Gas Hot Water Heater
Ballast Replacements
Energy audit at Sewer & Water facilities
Replace baseboard heaters with high efficiency Natural Gas furnace
Window replacements
Replace original non insulated overhead doors with insulated doors
Install energy efficient LED lighting interior and exterior
Install motion detector light switches with auto shut off feature
Replace hot water heater with modern energy efficient smaller water heater
Replace original interior lighting with high efficiency Lights - Fixtures and bulbs
Measures Included in 2014 Budget
LED streetlight retrofit
Convert HID Ice Lights to T-5's at the Community Complex
DSM (Demand Side Management) Program (Union Gas)
Replace Oil Hot Water Heater to Gas Hot Water Heater at Coliseum
Remove surplus transformer at Southampton Coliseum
Ballast Replacements
Ongoing Future Projects
Continue exterior light replacement at all Facilities and Parks
Review facilities that have not been retrofitted and develop plan for implementation
Southampton Coliseum - Compressor Replacement
Continue interior light replacements to LED, converting Fluorescent and Pot Lights
Continue interior light replacement to T-5 and T-8 fixtures where appropriate
Staff Training: Develop & implement an Energy Efficiency/ Management Plan for all facilities
Investigate BAS (Building Automation System) where applicable

Schedule B

Baseline Energy Consumption Data – 2011

Schedule C

Energy Consumption Data – 2012