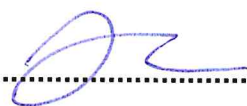


TOWN OF COLLINGWOOD

June 10, 2019

RES-206-2019

MOVED BY..... 

SECONDED BY..... 

BE IT RESOLVED:

THAT Staff Report PW2019-10 be received for information purposes and Council approve the 2019-2024 Energy Conservation & Demand Management Plan for the Town of Collingwood.

- CARRIED
- DEFEATED
- TABLED

Moved by: _____

Seconded by: _____

Deferred Until: _____



MAYOR



DEPUTY CLERK

<input type="checkbox"/> RECORDED VOTE		
COUNCIL	Yea	Nay
Saunderson		
Hull		
McLeod		
Comi		
Madigan		
Doherty		
Berman		
Jeffery		
Hamlin		
TOTAL		



STAFF REPORT PW2019-10
Standing Committee 5/28/2019
Council 6/10/2019
Amendments: N/A

Submitted to: Strategic Initiatives Standing Committee | Council
Submitted by: Brian MacDonald, Director of Public Works, Engineering & Environmental Services
Subject: Corporate Environmental Initiatives

PURPOSE

The purpose of this report is to provide Council with a preliminary look at the proposed 2019 to 2024 Energy Conservation & Demand Plan for the Town of Collingwood and update them on the ongoing environmental initiatives that are occurring in the various Town Departments.

RECOMMENDATION

THAT Council receive Staff Report PW2019-10 for information purposes and approve the 2019 to 2024 Energy Conservation & Demand Management Plan for the Town of Collingwood.

AMENDMENTS

Recommendation was changed to include Council approving the 2019 to 2024 Energy Conservation & Demand Management Plan for the Town of Collingwood.

1. BACKGROUND

Ontario Regulation 507/18 (formerly O. Reg. 377/11) was established to help public agencies better understand their energy usage, develop conservation plans to guide energy savings and demonstrate government leadership in conservation. Under the regulation, broader public sector organizations are required to report annual energy use of their facilities to the Ministry of Energy, Northern Development and Mines, and develop Energy Conservation and Demand Management (CDM) plans. The Town submitted its current plan in 2014, and the first update to this is due by July 1, 2019. Some update requirements to the 2019-2024 CDM Plan include:

- Most recent annual energy report (2017 data)
- Goals and objectives for conserving energy and managing demand
- Current and proposed measures, and revised forecast of the expected results
- Cost and saving estimates
- Estimated length of time that the energy conservation and demand measures will be in place
- Description of proposed changes to be made to assist in reaching any established or forecasted targets
- Description of any renewable energy generation facility operated by the Town and the amount of energy produced on an annual basis

The CDM plan must be approved by senior management and must be made publicly available in printed form, as well as on the website. The next update will be required by July 1, 2024.

Staff have prepared a 5-year update to the CDM plan, which will be finalized before July 1, 2019. This report summarizes the Town's annual energy consumption and greenhouse gas emissions for its facilities. It also describes previous, current, and proposed measures for conserving and otherwise reducing the amount of energy consumed by the municipality's operations and for managing the municipality's demand for energy. It includes a forecast of the expected results of current and proposed energy savings measures. In 2014, Collingwood Public Utilities and The Corporation of the Town of Collingwood each submitted separate Energy Conservation and Demand Management Plans. As part of this update, these separate plans are being combined into a single plan that will report on all qualifying facilities.

There are a number of other Town initiatives that do not specifically relate to the purpose of the CDM plan, but are worth mentioning in this report, as they are considered complimentary programs in line with the spirit of environmental sustainability and conservation.

2. INPUT FROM OTHER SOURCES

This report was circulated at Department Heads on May 21, 2019.

3. APPLICABLE POLICY OR LEGISLATION

O. Reg. 507/18

4. ANALYSIS

Energy Conservation & Demand Management Plan

The Town of Collingwood has met the challenges of monitoring and reporting its energy consumption and is driven to improve the energy efficiency of our operations due to rising energy costs, energy security, and environmental concerns.

In the 2014 CDM plan, the Town of Collingwood set a target, "To reduce the Town of Collingwood's overall municipal energy intensity by 5% over the life of the CDM plan where energy consumption may be quantified without the influence of growth." In 2014 Collingwood Public Utilities set a target, "To show a total energy reduction of 5%." Staff reported that these overall targets were exceeded, as a 16% decrease in overall electricity consumption, and a 9.5% decrease in overall natural gas consumption were achieved from 2011 to 2017. These results can be seen in Table 4 of the CDM plan. Note that this reduction calculation only includes facilities there were reported on in the 2014 CDM report. The CDM plan lists a number of energy conservation and demand management measures that were implemented between 2014 and 2019 that may have contributed to the overall energy reduction of the reported facilities.

It was determined in the CDM plan that The Town of Collingwood's approach to energy conservation and demand management is continually evolving. Currently, each department implements their own energy savings measures, and reviews/approves their energy bills. Through this update, staff addressed and recognized the need to centralize the analysis of energy bills as well as support for energy conservation related projects. The analysis of energy bills and energy

related project support will become one of the functions of the new Customer and Corporate Service Department, whose staff will manage special projects, champion an environmental sustainability (“green”) function to look at ways to reduce the organization’s carbon footprint.

The CDM plan update outlines goals, objectives, and overall targets for the next five years, which remain consistent with the previous plan:

Goals

- Provide leadership on minimizing resource use to promote a culture of sustainability.
- Reduce the environmental impact of the municipality’s operations.
- Provide a forum to explore new conservation trends, technology and ideas.
- Maximize fiscal resources and avoid cost increases through energy cost savings.

Objectives

- Categorize and quantify past accomplishments in energy conservation.
- Identify future opportunities for reducing energy consumption and cost.
- Establish energy conservation champions throughout the organization.
- Identify and promote best practices to save energy.
- Strengthen partnerships with external stakeholders such as electric and gas utilities.
- Identify and implement renewable energy generation opportunities as they come available.

Overall Target

- Further reduce the Town of Collingwood’s energy consumption by an additional 10% over the life of the CDM plan.

Proposed energy conservation and demand management measures at various facilities have been listed in the CDM plan update to help achieve these goals; these have been based on recommendations from staff as well as energy audits. These proposed measures are presented in the CDM plan update. The expectation will be to implement the listed measures over the five (5) year life of this Energy Conservation and Demand Management Plan. Additional measures may be identified and will be prioritized against the known opportunities. The measures that have been identified and are under consideration shall be quantified, prioritized and assigned to individual project and facility managers for implementation. Many of the measures will require an initial investment. These investments will be included in operations and capital budget programs in the coming years. Some of the measures will require input from engineering firms or utility providers to quantify potential savings and recommend specific actions. Incentives, (when available), will be leveraged to support the implementation of energy conservation projects.

In addition to the proposed measures and the new Customer and Corporate Services Department, there are a number of other initiatives that are already underway to help reach the goals, objectives, and targets identified in the CDM plan over the next five years. These initiatives include centralizing analysis of energy consumption, electric vehicle charging stations, developing LED lighting retrofit contract, and implementation of an Energy Conservation and Demand Management Team and a Greener Collingwood team. These initiatives are explained in more detail in the CDM plan update. The Town is also looking at opportunities to partner with the private sector to pilot innovative environmental technologies that would promote sustainability.

There are a number of other ongoing Town initiatives that do not specifically relate to the purpose of the CDM plan, but are worth mentioning as they are considered complimentary programs in line with the spirit of environmental sustainability and conservation:

Greener Collingwood

Department Heads have recognized that many efforts toward environmental sustainability have been taken on by individual staff over the years. To leverage these efforts and encourage expansion of actions and understanding, a corporately internal “Greener Collingwood” group has been formed to implement consistent and beneficial practices across the corporation. Twenty two staff, representing all areas of the Town, are involved in selecting and actioning collaborative initiatives and setting an example for the community.

In addition to corporately led initiatives, such as the transition of all printers to more energy efficient models, the reduction of paper use, and policies limiting the use of colour ink, the Greener Collingwood staff group will implement internal environmental actions. The initial list includes the following:

1. Single Use Plastics: The reduction or elimination of single use plastics in the work environment.
2. Recycling: The development of consistent recycling practices by staff across the organization with a focus on education to perfect sorting and increase beneficial collection.
3. Composting: The development of a composting plan, again focusing on sorting education and providing consistent facilities to ensure success.
4. Battery disposal: Working with Simcoe Solid Waste Management to develop a plan for the proper disposal of single use batteries and divert these from landfill.

Water Conservation: Irrigation Contractor Meeting

The Water and Parks Department staff met with Irrigation companies, property managers and Condo Corporations representatives this spring to discuss water conservation efforts associated with their irrigation programs. Attendees were informed about the every other day watering restriction and Parks staff discuss the opportunities for watering less and how much watering was enough. They were made aware of our new metering systems that will collect data every day on their specific water use. Attendees were encouraged to consider the environmental and cost benefits of using less water.

Water Conservation: Water Pricing

This year we will be reviewing our water and wastewater fees. Part of that exercise will be to look at ways to balance our fixed rate to our consumption portion of the bill such that we find the appropriate balance but at the same time look at ways to promote water conservation. An escalating consumption rate may be considered.

Anti-Idling Bylaw

The Town continues to enforce an Idling Control By-Law. Again, this is another measure the Town has taken to reduce GHG emissions, but we are unable to provide an estimate as to how much of a reduction this has had.

Stormwater Management

The ultimate goal of stormwater management (SWM) is to maintain the health of our streams, lakes and aquatic life as well as provide opportunities for human uses of water by mitigating the effects of urban development. Every new development must incorporate SWM into their design. The Town has assumed a number of these SWM facilities. These include quantity and quality SWM ponds as well as in some applications oil grit separators (stormceptor). These facilities are

inspected and tested regularly. Most are inspected annually however in some cases they are inspected several time a year.

A detailed inventory of all inspection, testing and maintenance is kept on all of the Town owned facilities. It is imperative that the maintenance is kept up on these facilities as it is a requirement of the Ministry of Environment approval as well as it is good for the environment.

Salt Management

The Town of Collingwood has a salt management plan that is currently under review by staff and will be presented to Council sometime later this year. The currently plan must be reviewed in conjunction with our level of service standards to ensure that we can effectively deliver our winter maintenance services and manage the use of road salt, as outlined in Environment Canada's Code of Practice for the Environmental Management of Road Salts. Our current plan is very effective however we will be looking for opportunities for improvement.

Fleet Initiatives

The town recently purchased four (4) chargeable hybrid vehicles as part of its vehicle replacement program. This was made possible through the town's current vehicle replacement policy. This policy has provisions for considering live cycle fuel cost as well as incentives for hybrid vehicles. This policy has regard for more fuel efficient vehicles and encourages hybrid vehicles where possible.

The vehicle purchase are chargeable hybrids that have an approximate range of 40 km on one charge. The vehicle will be deployed in the Public Work, Water, By-law and Building Departments. In is anticipated that they will be able to work under the electrical motor option for the most part of their service life as the daily mileage will not exceed the 40km range.

In addition to the road fleet the town recently purchased two (2) electric ice resurfacing vehicle for its rink maintenance. These vehicles will replace two gas powered machines and add to our carbon reduction measures.

We have also look at ways to reduce our vehicle use. The By-law department has two bicycles that they use to do road patrols. This reduces the amount of use on the gas powered vehicles.

5. EFFECT ON TOWN FINANCES

6. APPENDICES & OTHER RESOURCES

Appendix A	2019-2024 Energy Conservation & Demand Management Plan
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SIGNATURES

Department Head: <i>Brian MacDonald, Director of Public Works, Engineering and Environmental Services</i> Town of Collingwood	Department Head: <i>Dean Collver, Director of Parks, Recreation and Culture</i> Town of Collingwood
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