



DATE: 5/28/2024
SUBJECT: Energy Conservation and Demand Management Plan
CONTACT: Katharine Middleton, Manager of Finance
REPORT NUMBER: 2024/06/13-04

RECOMMENDATION:

1. **THAT** the report titled: Energy Conservation and Demand Management Plan, to the Council meeting of June 13, 2024, be received; and
2. **THAT** Council approve the 2024-2023 Energy Conservation and Demand Management Plan as required in Ontario Regulation 25/23 attached as Appendix A.

EXECUTIVE SUMMARY:

- **As part of Ontario Regulation 25/23 – Broader Public Sector: Energy Reporting and Conservation and Demand Management Plans, the Town of Wasaga Beach is required to complete and post its Energy Conservation and Demand Management Plan by July 1, 2024.**
- **The Town hired an energy consultant to complete facility audits and the Plan to ensure compliance with the regulation.**
- **Several initiatives were identified within the Plan, ranging from \$0 to over \$1M, which could lead to reductions in energy consumption and greenhouse gas emissions. A full listing can be found in the attached Appendix A.**
- **While there is no intention to use unbudgeted funds in 2024 to complete any initiatives identified that require use of funds, the initiatives will be items that are considered in future years during the budget process, providing funding is available.**

BACKGROUND:

As part of Ontario Regulation 25/23 – Broader Public Sector: Energy Reporting and Conservation and Demand Management Plans (O. Reg. 25/23) every public agency, which includes municipalities, is required to prepare an Energy Conservation Demand Management (ECDM) Plan, and on or before July 1, 2024 shall publish this plan on its website.

The Town of Wasaga Beach hired an energy consultant, Internat Energy Solutions, to complete several facility energy audits and prepare the Towns ECDM Plan. Within the plan, the consultant identified the current energy and greenhouse gas (GHG) emissions of the Town facilities, potential

energy saving projects and the costs associated with those projects, and an action plan on how to reduce the GHG emissions from current levels. The types of projects identified included:

- No Cost Conservation Measures;
 - which included initiatives such as adjusting the thermostat schedule and lowering the domestic hot water set point;
- Energy Conservation Measures;
 - which included initiatives such as interior and exterior lighting retrofits, installation of timers for bathroom fans and lights, purchasing air-source heat pumps at various locations, and addressing infiltration levels through envelope sealing measures on the exterior doors;
- Water Conservation Measures;
 - which included the initiative of domestic hot water fixture and toilet retrofits;
- Building Renewal Measures;
 - which included initiatives such as upgrading roof insulation during any upcoming roof replacements, replacing heating furnaces with air-source heat pumps, upgrading appliances to energy star appliances upon turnover, and replacing aluminum framed windows with energy efficient windows;
- Renewable Energy Measures;
 - which included the initiative of installing roof-mounted photovoltaic systems (hydro panels).

These projects all came in at various prices ranging from no cost to over \$1,000,000, and were suggested to be implemented at various times in the future depending on upcoming renovations or appliance/heat source turnover.

DISCUSSION:

The facilities that were selected to have energy audits completed were in line with the requirements of O. Reg. 25/23 for facilities that are owned or leased by the Town and that are heated or cooled which results in the Town being responsible for payment of those utility costs. These audits show the energy consumption and GHG emissions from hydro and natural gas or oil bills from the period of January 1, 2021 to December 31, 2021, which provides the baseline consumptions to use in order to identify the reduction in energy and GHG emissions resulting from future projects completed. The facilities audited were Town Hall, Public Works, Archives, Fire Halls 1&2, the old Library, Oakview Woods Complex, Recplex, Wasaga Sports Park, the old Wasaga Stars Arena, and the Youth Centre. As these facilities range in age and use, the energy that is consumed by them can be quite different, so each building was rated based on GHG intensity per square foot. The 5 highest ranking buildings were:

- Wasaga Sports Park
- Oakview Woods Complex
- Fire Hall #2
- Archives
- Old Wasaga Stars Arena

The 3 lowest ranking building were:

- Recplex
- Town Hall
- Fire Hall #1

Highlights taken from the plan on various pages:

The purpose of the ECDM Plan is to develop a framework for the Town of Wasaga Beach to understand the historical impact of its operations on Green House Gas (GHG) emissions, and to take action by setting GHG reductions targets.

The ECDM Plan will form the foundation and guide the Town towards conducting business more sustainably with energy conservation, energy efficiency and renewable resources top of mind.

The plan is a guideline to helping achieve the goals of the Town but it will be reviewed and remain flexible to ensure it will stay current with industry and municipality development.

By implementing this ECDM Plan, and achieving the milestones set forth in this plan, the Town of Wasaga Beach will successfully contribute to the critically important goal of reducing energy consumption and GHG emissions across its building portfolio.

It is worth noting that the Town has already started taking on energy consumption and GHG emissions reduction initiatives such as installing high efficiency mechanical equipment on items requiring replacement, converting street lights and traffic lights to LED, and replacement of lighting fixtures to LED equivalents.

CORPORATE IMPLICATIONS:

Financial Implications:

For 2024, staff are not suggesting use of unbudgeted funds to complete any of the initiatives identified within the Energy Conservation and Demand Management Plan. Going forward, the Town will seek to identify opportunities to complete some of the identified initiatives and build them into the Town budget where available funding provides the opportunity to do so.

Term of Council Priorities:

This report establishes the TOCP's 83 – Undertake a Conservation and Energy Management Plan

CONCLUSION:

The Town of Wasaga Beach understands the importance of reducing energy consumption and GHG emissions. The Town is aiming to use this Plan as a means of identifying projects that will allow Wasaga Beach to be responsible with its environmental impacts and in turn reduce energy consumption and GHG emissions.

Authored by:

Katharine Middleton
Manager of Finance

Appendices:

Appendix A: Town of Wasaga Beach 2024-2034 Energy Conservation and Demand Management Plan