

2019-2023 Corporate Energy Plan

Executive Summary

The Township of Hamilton understands that energy is a valuable resource and that the efficient use of energy will help manage costs and reduce GHG emissions. The Township operates and maintains 12 facilities, over 284 km of road and 12 parks. The Township operations consume a significant amount of electricity and natural gas, with energy costs for 2018 being approximately \$550k. To manage energy consumption, related costs and greenhouse gas (GHG) emissions, the Township of Hamilton, in 2014, developed its first five-year (2014-2018) Corporate Energy Plan.

This report, the **2019-2023 Corporate Energy Plan Summary**, outlines the results of the 2014-2018 Corporate Energy Plan and the measures the Township will undertake over the next five years to reduce energy consumption, related costs and GHG emissions. The primary objective of the Corporate Energy Plan is to manage and reduce municipal energy consumption and the concomitant greenhouse gas emissions and energy consumption.

Legislative Requirements: Green Energy Act and the Electricity Act

The *Green Energy Act*, 2009, O. Reg. 397/11 required all public agencies, including municipalities, to report their energy use and GHG emissions annually, and to prepare and publish energy conservation and demand management plans (Corporate Energy Plans). The plans require senior management approval and must be updated every five years.

Township's 2019-2023 Corporate Energy Plan was presented to the Township's Senior Management Team for review and approval.

Township's Commitment to Energy Conservation

Declaration of Commitment: The Township remains committed to managing and reducing energy consumption and its related environmental impact from its buildings and operations.

Vision: We exercise stewardship in our use of finite energy resources to demonstrate leadership, optimize our delivery of services, and enhance the overall quality of life in our community.

Goals: To continuously improve the energy efficiency of our facilities and processes in order to reduce our operating costs, our energy consumption and related greenhouse gas (GHG) emissions.

Overall Target: Our target is to reduce our consumption of fuels and electricity in all municipal operations every year.

Objectives:

1. Reduce greenhouse gas emissions and ensure the wise use of resources.
2. Demonstrate leadership within the community as to the commitment to energy management and investigation of new and emerging technology.
3. Continue discussions within the Corporation on energy management to be able to explore new ideas and trends.

2014-2018 Corporate Energy Plan Results

The 2014-2018 Corporate Energy Plan laid the foundation for energy management in Township's facilities.

- Building and Bylaw departments are moving toward making administrative process completely electronic. This not only saves paper consumption but also fuel consumption for the residents of the Township who can now apply or inquire online.
- GIS upgraded for site aerial imagery comparison which eliminates some required site visits for existing conditions.
- Energy efficient heating units were installed in Baltimore Recreation Centre (Sabic Turf).
- Seasonal controllers were installed for the Ice plant to reduce energy costs in Baltimore and Bewdley Recreation Centers.
- High efficient boiler system for heating was installed in Cold Springs Memorial Hall.
- Interior lighting replacement project was completed for Cold Springs Hall, Old Camborne School House, Station 2 and Township Office.
- In Baltimore Recreation Centre, exterior building LED lighting were installed and freon dehumidifier was replaced with more efficient electric desiccant.
- Additional Projects:
 - Programmable thermostats, LED lighting throughout inside and out, new furnaces in office facilities, motion activated light switches station 1 and 3, on demand water heaters, removal of fridges/freezers not in use and replacement of all appliances within last 5 years.

Due to increased activity at our locations, our overall energy consumption did increase between 2014 and 2018. At our locations that do not depend on activity levels, such as the Municipal Office the GHG Emissions (kg CO₂e/yr) and cost decreased during this period.

2019-2023 Corporate Energy Plan Targets

- Integrate energy considerations into other plans (e.g. the asset management plan) as they are being developed.
- Track incentive availability and apply for incentives where possible to support initiatives.
- Perform walk-throughs of buildings to identify saving opportunities.
- Assess the need for additional staff training.
- Make information on energy use available to responsible staff.
- Choose high efficiency models when replacing furnaces.
- New Refrigeration Electrical Panel to provide variable speed operation and soft start up to reduce energy consumption will be installed in Bewdley Community Centre.
- Motion activated light switches will be installed in Station #2.
- Township will continue to review and evaluate energy plan, revising and updating it as necessary, on an annual basis within our corporate planning process

The recommended energy projects are estimated to reduce energy consumption by approximately 5% of the total energy consumption in 2018.

Conclusion

The Township has prepared a 2019-2023 Corporate Energy Plan as required by Ontario Regulation 507/18, under the *Electricity Act*. The primary objectives of the Corporate Energy Plan are to manage municipal energy consumption, cost and greenhouse gas emissions. The Township will achieve this through a series of recommended energy-reducing capital projects together with improved operational practices and organizational measures.

As per the requirements of the *Electricity Act*, the 2019-2023 Corporate Energy Plan Summary will be posted on the Township's website. Staff will be submitting the 2018 corporate energy consumption and GHG emissions report to the Ministry of Energy by October 2020.