



Hastings Highlands

Beautiful By Nature

**ENERGY CONSERVATION AND
DEMAND MANAGEMENT PLAN**

2024-2029

Executive Summary

The Municipality of Hastings Highlands (the Municipality) has been committed to corporate energy management since the early 2000s upon amalgamation.

In 2014, the Municipality submitted its first Corporate Energy Conservation and Demand Management (CDM) Plan to the Ontario Ministry of Energy in compliance with the former Ontario Regulation 397/11 Green Energy Act, replaced by the former Ontario Regulation 507/18 Electricity Act, and again more recently replaced by the Ontario Regulation 25/23 made un the *Electricity Act, 1998*. This regulation requires municipalities, and other various organizations, to document and report on the results of their CDM plans and update their CDM plan every five (5) years.

This report meets the regulatory requirements by:

- Documenting energy management initiatives and reporting energy and emissions throughout the Municipality; and
- Outlining the goals and initiatives to be undertaken by the Municipality over the next five (5) years.

Ontario Regulation 25/23

In February of 2023, the Provincial Government introduced Ontario Regulation 25/23 (O. Reg. 25/23) under the *Electricity Act, 1998*. This regulation requires certain public agencies –Municipalities, Municipal Service Boards, School Boards, Post-Secondary Educational Institutions, and Hospitals – to report on their energy consumption and greenhouse gas (GHG) emissions annually. This also mandates that public agencies develop, and update every five (5) years, an Energy Conservation and Demand Management (CDM) Plan.

The intent of this regulation is to help the broader public sector (BPS) organizations better understand and report their energy consumption, help benchmark, encourage energy conservation and demand management activities within their organizations, and then ultimately make this information available to its public.

In order to comply with O. Reg. 25/23 – which supersedes the previous O. Reg. 397/11 and O. Reg.507/18 – the Municipality is required to submit annual energy consumption and GHG emissions for each calendar year for facilities that the Municipality owns or leases, that are:

- a) The building or facility is heated or cooled and the public agency is issued the invoices and is responsible for making the payments for the building or facility's energy consumption; or
- b) The operation is related to the treatment of water or sewage, whether the building or facility is heated or cooled, and the public agency is issued the invoices and is responsible for making the payments for the building or facility's energy consumption.

2014 Energy Conservation and Demand Management Plan Results

The Municipality's 2014 CDM Plan covered its plan to create an energy conscientious workforce and pursue energy conservation measures and best practices across all facilities, where possible. The 2014 CDM plan included proactive monitoring and suggested forward-thinking facility and service upgrades. This plan covered a period of 2014-2019 and through reporting captured the following:

- Facilities and buildings owned and operated by the Municipality.

The 2014 CDM was developed in accordance with the Ministry of Energy's direction to provide the Municipality's annual energy consumption information to the public, and to set goals and actions for conserving energy and reducing GHG emissions. The goals set forth in the 2014 CDM are as follows:

Commitments:

- Declaration of Commitment: The Municipality of Hastings Highlands is committed to managing and reducing the energy consumption across its facilities and operations. A summary of goals and objectives are published within the plan. The Municipality, like most other public agencies, has budget constraints that must be taken into consideration during planning efforts. The Municipality takes into account proposed energy conservation measures and their estimated payback (ie. return on capital investment for upgrades/improvements, determined by operational cost savings) periods during its current and future budget reviews. In tandem, the Municipality would also be monitoring funding sources available at the time of any project planning to allow certain energy improvements to be implemented and assist in reducing the payback.
- The Municipality is open to considering renewable and/or sustainable energy projects for its facilities or as stand-alone projects.
- The Municipality's senior management confirmed their support for the CDM Plan in a public meeting.

Reporting:

- The Municipality will continue to report in accordance with requirements of the regulation in the prescribed format and made available as required.
- The Municipality will review and evaluate our energy plan, revising and updating it as necessary, on an annual basis within our corporate planning process.

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The Municipality has been tracking and providing annual reports on corporate energy consumptions and activities since 2012 which also helps towards the Municipality's Strategic Goals through asset management initiatives by Safeguarding the Municipality's Assets.

The 2014 CDM also set forth the following programs, processes, and projects that were to be worked on during that four (4) year period:

	Goals	Objectives	Outcomes
1	Reduce energy consumption and GHG emissions in Municipally owned and operated facilities	Set up an energy baseline, using the average consumption over a three-year period, with the aim of reducing consumption by a minimum of 5% by 2019	In Progress
2	Promote employee and community energy conservation when using Municipally owned and operated facilities	Provide training and guidance to municipal staff and facility end user to conserve energy, explaining the benefits both financially and environmentally to the community	In Progress
3	Monitor, measure, and manage energy consumption in the Municipally owned and operated facilities	You need to measure to manage. Appoint a staff member to monitor and report on a monthly basis the energy usage across the Municipality, compared with the baseline and previous year	In Progress
4	Explore the usage of alternative and renewable energy	Carry out studies on the feasibility of installing alternative and renewable energy in the Municipally owned and operated facilities and rolling out pilot schemes on the outcome of the studies	Not Completed
5	Promote energy efficiency in Municipally owned and operated facilities	Municipal Senior Management lead by example in their approach to energy conservation and management and purchasing	In Progress

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6	Secure funding to implement energy efficiency savings	Prior to budgeting and implementing an energy conservation measure, check and secure funding available for a Municipality on local, provincial, and federal levels	In Progress
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Figure A – Total Energy Use – By Reported Category, 2016-2023

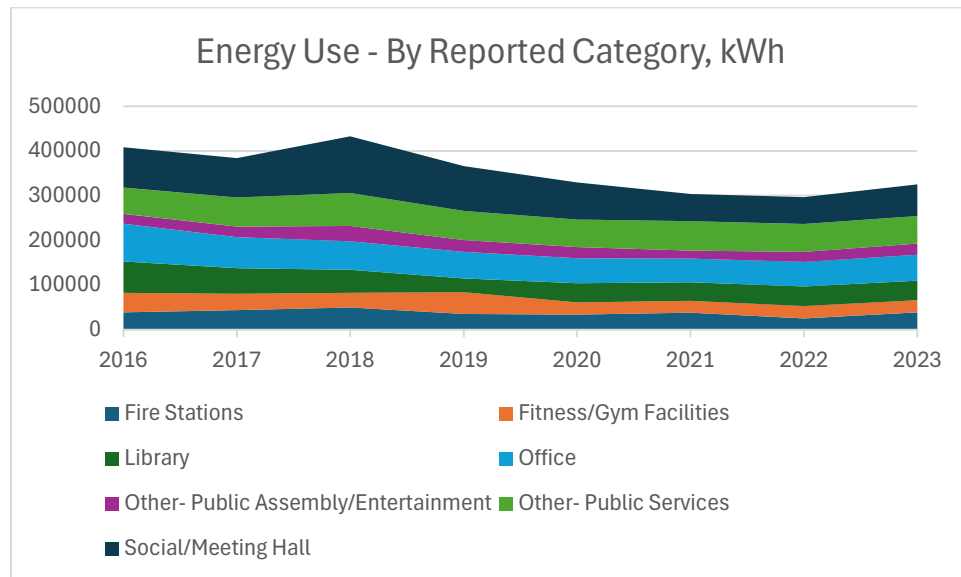
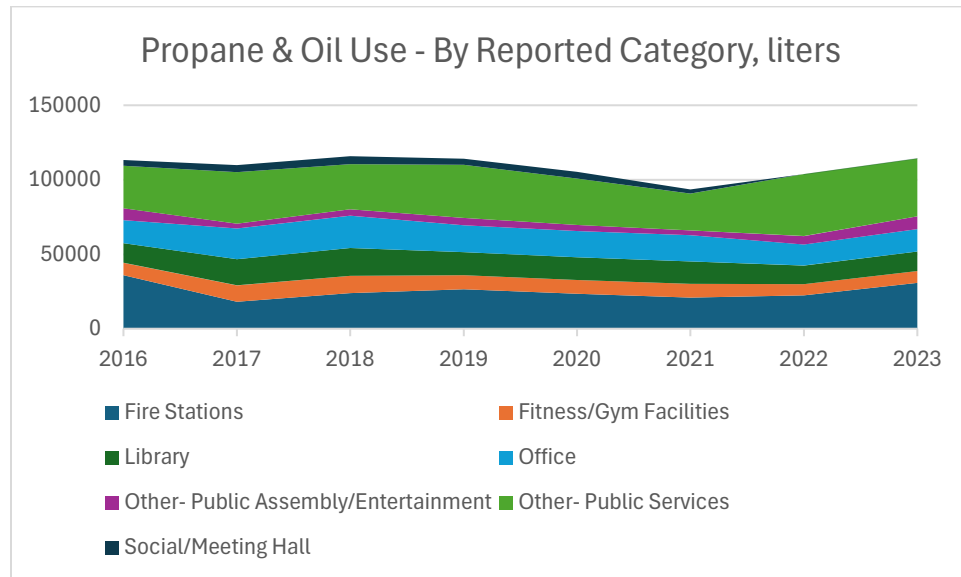


Figure B – Total Fossil Fuel Use – By Reported Category, 2016-2023



For full coverage between 2016 to 2020, as reporting until O. Reg. 25/23 was on a two (2) year reporting lag, the following Figure A and Figure B detail energy and natural gas usage results that shows a general reduction over time (noting that reporting requirements changed over this duration).

2024-2029 Energy Conservation and Demand Management Plan

This 2024-2029 CDM is built upon the foundation laid by the 2014 CDM Plan. The goals set forth in this CDM were developed by inter-department consultation, reviewing those actions undertaken as part of the 2014 CDM, and analyzing energy use and costs in the last five (5) years. The 2024-2029 CDM proposes the following key initiatives, energy standards, and achievable measures and commitments:

- Improving energy efficiency within Municipality owned and operated facilities where possible;
- Reducing GHG emissions and energy consumption in day-to-day operations where possible;
- Extending the lifecycle of Municipal assets where possible;
- Maximizing fiscal resources through direct and indirect energy cost avoidance;
- Continually monitoring energy consumption and utility usage for Municipality owned and operated assets;
- Demonstrating leadership and awareness within the Municipality by creating a culture of conversation and designating overall leadership for corporate energy management; and
- Setting achievable measures and targets to reach.

This CDM will be a live document that is continually monitored and updated, providing a roadmap to continue to develop and improve the Municipality's approach to energy conservation and demand management, all while continuing to comply with the requirements of O. Reg 25/23 and any future revisions.

Part of development of these goals was benchmarking the Municipality's 2014 CDM results, in addition to other surrounding entities results, to understand whether the goals and targets were on par with others, to understand if there were any industry innovations that are worth considering, and to capture lessons learned for continuous improvement.

As such, the Municipality is looking to implement the proposed measures while continuing to promote successful conservation practices. The Municipality is aiming to reduce its energy consumption within its facilities by 1-4% between 2024 through to the end of 2029. Proposed measures to support this are as follows and are ongoing:

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Programs	
Energy Awareness	Provide awareness training and guidance to municipal staff and facility end user to conserve energy, explaining the benefits both financially and environmentally to the community
Employee Participation Program	Staff are invited to engage in providing comments on existing processes or bring forward new ideas. Municipal Senior Management lead by example in their approach to energy conservation and management and purchasing
Monitoring Program	Monitor, measure, and manage energy consumption in the Municipally owned and operated facilities You need to measure to manage. Appoint a staff member to monitor and report on a regular basis the energy usage across the Municipality, compared with a baseline and previous year. As part the CDM Plan, the implemented processes improvements, program implementation and projects will continue to be documented and reviewed annually to update consumption savings. By monitoring and reporting consumption and dollar savings and/or avoidance to Departments, the outcomes of their participation in energy management initiatives can be demonstrated, and feedback can be obtained for any new ideas.
Explore Renewable Energy	Carry out studies on the feasibility of installing alternative and renewable energy in the Municipally owned and operated facilities and rolling out pilot programs on the outcome of the studies. Consider installing various solar or ground source technology when replacing end of service life equipment
Processes	
Energy Reporting	Energy consumption reports would be created and distributed to department heads on a regular basis to allow appropriate action to be taken. Annual reporting to occur as per O. Reg 25/23 via the Portfolio Manager to the Ministry of Energy
Continuous Improvement	Encourage staff to look at new/existing continuous improvement tools and processes for potential areas of improvement
Funding Readiness	Prior to budgeting and implementing an energy conservation measure, check and secure funding available for a Municipality on local, provincial, and federal levels
Projects	
LED Streetlight Replacement Program	Complete remaining streetlight LED conversions
LED Lighting Conversions	Utilize AMO's LAS Facility Lighting Program to review sites where conversion is required, while balancing financial

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	resources. Continue lighting fixture replacements with new energy efficiency lighting systems
Energy Efficient Outdoor Lighting	Continue utilizing energy efficiency LED outdoor lighting with control sensors
Doors & Windows	Ensure weatherstripping around doors (including garage doors) & windows are in fair condition, replace & repair as required
Programmable Thermostats	Continue to utilize programmable thermostats to control indoor temperatures and control night/weekend setbacks. These settings are to be reviewed on a regular basis
Low-Flow Toilets & Automatic Lavatory Faucet & Flushing Equipment	Continually install low-flow toilets at all facilities (when end of life installations are required), and install automatic faucet controls and urinal flushing in public washrooms
Appliances	Replace end of service life equipment (ie. refrigerators, kettles, ovens, etc.) with new Energy Star rated appliances

The proposed measures will be reviewed during annual budget review and discussions. These measures may change as priorities of the Municipality are altered, better opportunities come forward, or technologies become available that could be an improvement.

Plan Preparation, Approval, and Energy Leader

This plan was prepared and will be maintained by the Municipality’s Leadership Team. The Leadership Team is designated as the Energy Leader, having the overall responsibility for corporate energy management.

The administration and implementation of this plan will be the responsibility of the Chief Administrative Officer (CAO). Since we all use energy in our daily activities, it will also be the responsibility of Department Heads and all municipal staff to be aware of their energy use and work towards a culture of conservation.

The Municipality of Hastings Highlands Council and Staff are committed to energy conservation and demand management. This plan was adopted by the Municipality’s Senior Leadership Team July 11, 2024.

Public Availability

This CDM Plan will be made available to the public on the Municipal website, www.hastingshighlands.ca.

Physical copies can be made available at the main municipal office located at 33011 Highway 62, Maynooth, ON K0L 2S0 by requesting a copy in-person, by calling ahead to 613-338-2811 ext. 0, or emailing info@hastingshighlands.ca.

Conclusion

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The 2024-2029 Energy Conservation and Demand Management Plan for the Municipality of Hastings Highlands will assist the Municipality in meeting energy related goals, reporting requirements per O. Reg 25/23, and striving for continuous improvement related to both industry best practices and internal practice improvements. These goals will be established and executed annually through Council's approved budget.