



**Township of Melancthon:
Energy Reporting and
Conservation and Demand Management Plan Report
2024-2029**



The Municipal Corporation of the Township of Melancthon Conservation and Demand Management Plan Report

Figure 1 - Energy Management Plan Framework



Introduction and Background

This Report presents a comprehensive Conservation and Demand Management (CDM) Plan for the Township of Melancthon. The CDM Plan outlines strategies and measures to reduce energy consumption, optimize energy use, and improve overall energy efficiency. By implementing this CDM Plan, the Township of Melancthon aims to achieve significant cost savings, environmental benefits, and enhanced operational efficiency.

The Corporation of the Township of Melancthon, over the last several years, investigated several initiatives that include environmental planning, sustainability and conservation management, with the intention to further improve the Municipalities environmental record and enhance accountability to residents. The Township is committed to following the direction of the CDM Plan and will take the necessary steps to ensure the CDM Plan's success through continual review.

Council Commitment to Energy Conservation and Demand Management Plan

The Township of Melancthon is committed to reducing its energy consumption and managing its energy demand to achieve its sustainability goals. This Report outlines the progress in implementing its Energy Conservation and Demand Management Plan and provides recommendations for further action.

Vision and Goals

The Township of Melancthon will continue to reduce our total energy consumption through efficient use of energy and resources while maintaining an efficient and effective level of service for the general public. Energy consumables include electricity, oil, propane, gas and diesel. This vision can be achieved through operational efficiencies and encouraging energy awareness and knowledge within the municipality.

Overall Target and Goals

Facilities included in the base year reporting include the Municipal Office, the Public Works Building and the Horning's Mills Community Hall.

Based on the energy audits that have been completed on all the buildings, the Township of Melancthon is continuing to complete all retrofits that can be done. We are committed to maintaining our energy efficiency and will strive to rectify deficiencies as they become apparent. Goals that we will continue to strive for are the following:

- Improve the energy efficiency of our facilities by utilizing best practices to reduce our operating costs, energy consumption and greenhouse gas emissions.
- Implement an energy management program to reduce consumption, achieve cost savings, and meet greenhouse gas emission targets.
- Create a culture of conservation.
- Increase the comfort and safety of staff and patrons of the Township of Melancthon's facilities.
- Improve the reliability of the Township of Melancthon's equipment and reduce maintenance.
- Ensure energy efficiency throughout all municipal facilities.
- Review energy commodity procurement options to take advantage of available resources and funding for energy projects.
- Continue with Staff and Council awareness around energy efficiency to include communicating successes to both internal and external stakeholders.
- Identify and seize renewable energy generation opportunities.
- Energy Management to form part of the Township's operational decision making.

Ontario Regulation 507/18:

Ontario Regulation 507/18 was established to encourage municipalities to better understand their energy usage, develop conservation plans and to provide energy savings. The intention of the plan is to create projects to address energy management initiatives. The Township of Melancthon has been committed to energy awareness to be mindful of energy consumption, decrease operating costs and to set an example for the community. It is our intention to enhance the Township's commitments as projects develop through Council's approval.

The following are members that we have appointed to act as departmental energy efficiency team:

- CAO/Clerk
- Treasurer/Deputy-Clerk
- Administrative Assistants
- Public Works Superintendent

Continuous meetings will allow for review of the Energy Management Plan. An annual meeting will allow for the identification of new measures.

Staff Training and Communication

- **Communication programs:** Communication strategy that creates and sustains awareness of energy efficiency as a priority among all employees and conveys our commitment and progress to our stakeholders.
- **Energy Awareness Training:** Develop and deliver training focused on the energy use and conservation opportunities associated with employee' job functions wherever possible.
- **Energy Skills Training:** Develop and deliver skills training for operators, maintainers and other employees that have "hands on:" involvement with energy

consuming systems in order to improve the team's ability to achieve energy efficiency improvements.

Portfolio Description

The Township has a small inventory of buildings. The following portfolio description provides consistent with Ontario Regulation 507/18 reporting requirement.

Municipal Building & Council Chambers

157101 Highway 10, Melancthon, Ontario

The Municipal Building is a 3870 square foot building owned by the Township of Melancthon. The building was built in 1993 at 2700 square feet and an addition added in 2015 to provide the municipality with extra administration spaces making it 3870 square feet. The single-story facility consists of a kitchen, staff offices, Council Chambers, meeting spaces, washrooms and storage vaults. The Office is heated by propane. Numerous energy efficiency measures are present in the facility. The facility is open to the public from 8:30 am – 12:00 pm and 1:00pm - 4:30 pm, Monday to Friday.

Public Works Building

157101 Highway 10, Melancthon, Ontario

The Operations Yard is a year-round public works operations facility consisting of two main sections; office space, and six truck bays that house a portion of the fleet of maintenance. The operations yard has another building with three extra truck bays. Heating is provided to the Yard building with radiant overhead heating structures by propane. Operational hours during the winter months can be affected by variations of weather conditions resulting in potentially 24-hour operation of the facility. This facility is not open to the general public.

Horning's Mills Community Hall

11 Mill Street, Melancthon, ON

The Horning's Mills Community Hall is a two-storey building for the purpose of holding community events and is also available for the public to rent for private events. It was built in 1938 and has had many upgrades including windows and insulation. It is approximately 4,500 square feet and is heated by natural gas.

Energy Supply

The types of energy used in the operation of the Township of Melancthon facilities and delivery of services include:

- Electricity – provided by Hydro One.
- Natural Gas – provided by Enbridge.
- Propane – provided by Sparlings Propane.

Summary of Current Energy Consumption

Energy consumption baselines have been established in conformance with the Regulation using 2021 data.

Previous and Current Environmental and Energy- Related Initiatives

The Township of Melancthon is developing and implementing policies relating to the environment and energy.

- A diverse and sustainable economy with the updating of the Official Plan.
- A thriving natural environment that is a valued community asset to be protected, maintained and enjoyed through our naturalized zones in parks and open spaces.
- A philosophy of energy conservation and demand management through the energy conservation measures for the facilities.

Our Evaluation

The results of our Conservation and Demand Management Plan (CDM) are evaluated regularly by monitoring our progress towards our targeted performance, and by reporting the findings to our various stakeholders. We will continue to review and update the CDM Plan as needed. The CDM Plan will be in effect for a maximum of 5 years. The plan will be amended accordingly should a facility use change.

Monitoring Progress

Ongoing monitoring of consumption will be maintained as a component of our management information system.

Energy Conservation Measures (ECMs)

Assessments for all our facilities were completed. A number of common and categorized Energy Conservation Measures were identified since the last Conservation and Demand Management Plan Report. The below table indicates what measures have been identified for each facility.

Year	Location	Measure	Description
2019	Municipal Office	Electricity	Replace furnace
	Garage	Electricity	Replace energy efficient light bulbs
2020	Garage	Electricity	Replace energy efficient light bulbs
2021	Municipal Office	Paper reduction	iPads for Council
	Garage	Electricity	Replace shop heater
	Horning's Mills Community Hall	Electricity	Replace roof vents
2022	Garage	Electricity	Replace roof
2023	Municipal Office	Water reduction & Electricity	New dishwasher
	Municipal Office	Water reduction	Replace faucets pipes & sinks
	Municipal Office	Electricity	Replace hot water heater
	Horning's Mills Community Hall	Electricity	Chimney removal
	Horning's Mills Community Hall	Electricity	Replace hot water heater
	Horning's Mills Community Hall	Electricity	Replace AC unit
	Horning's Mills Community Hall	Electricity	Light Smart Thermostat installation
	Garage	Electricity	Replaced Lights on Shed
2024	Municipal Office		New energy efficient fridge
	Horning's Mills Community Hall	Electric	Stucco exterior building