# Conservation and Management Energy Plan 2024-2028



Passed by Council: November 26, 2024

Resolution 2024-272

<u>Ontario Regulation 25/23</u>: Broader Public Sector: Energy Reporting and Conservation and Demand Management Plans requires Broader Public Sector (BPS) organizations to develop an Energy Conservation and Demand Management (CDM) plan and update it every five years. Our updated CDM plan was developed in compliance with the regulation and covers the period from 2024 to 2028.

Our updated CDM plan builds on the municipality's previous conservation and demand management efforts. This updated plan also continues to build on experience gained in energy conservation and demand management over the last five years.

Hard copies of the CDM plan are available at the Township Office located at 2847 Chiswick Line.

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# 1.1.1 STATEMENTS OF THIS PLAN

#### Commitment

The Council of the Township of Chisholm is committed to allocate the necessary resources to develop and implement a strategic energy management plan that will reduce the Township's energy consumption and its related environmental impact.

#### Vision

The Township of Chisholm will exercise stewardship in its use of finite energy resources to demonstrate leadership, optimize its delivery of services, and enhance the overall quality of life in our community.

## **Policy**

The Township will incorporate energy efficiency into all areas of its operations.

#### Goals

To continuously improve the energy efficiency of the Township's facilities and processes in order to reduce its operating costs, energy consumption and associated greenhouse gas emissions.

# **Overall Target**

The Township will attempt to reduce its consumption of fuels and electricity in all municipal operations each year between now and 2027.

## **Objectives**

The creation of a culture of conservation within the Corporation will accomplish the following objectives:

- Greenhouse gas emissions and ensure the wise use of resources.
- Fiscal accountability through savings.
- Demonstrate energy management leadership and commitment within the community.
- Demonstrate sound operating and maintenance practices.
- Provide discussion within the Corporation on energy management, ideas and trends.

"This document is a living document that will be reviewed annually by staff and Council and updated as required. It has been prepared by the Corporation of the Township of Chisholm to achieve compliance with Ontario Regulation 397/11 of the *Green Energy Act 2009*. Under this regulation municipalities and other public service bodies must prepare a five-year plan identifying strategies on how they will conserve energy and optimize consumption patterns." This plan includes 2023 data usage and outlines measures that could be taken by the municipality to achieve objectives, goals and targets.

## 1.1.3 LOCATION AND GEOGRAPHY OF TOWNSHIP OF CHISHOLM

Chisholm Township is located in Northern Ontario approximately 3 ½ hours north of Toronto via Highways 400 and 11 North, and approximately 4 hours' drive west of Ottawa via Highways 17 West and 11 South.

The Township is a rectangle approximately 18 kilometers long and 13 kilometers wide. The length does not run due north, but slightly to the northwest. It is bordered on the east by Boulter and Bonfield Townships, on the west by the Municipality of Powassan, on the north by East Ferris Township and on the south by Ballantyne Township and Algonquin Park.

The Township is divided into 18 concessions which run east and west, and 29 lots which run north and south. These concessions and lots are long strips of land that run the entire width and length of the Township. They are split up into individual lots that are usually 100 acres, being approximately one kilometer long and 2/5th of a kilometer wide. The township has approximately 122km of Roads, 9 Bridges and 10 Large Culverts.

# 1.1.4 ECONOMIC CHARACTERISTICS OF TOWNSHIP OF CHISHOLM

The township economy does not rely on any single employer or industry. The local economy does, however, rely on several broad income streams including:

- Agriculture;
- Cottaging, tourism and outdoor recreation, including hunting, fishing, snowmobiling, ATV operation, equine activities;
- Commuting to jobs, services, and shopping in nearby communities;

### 1.1.5 SOCIAL AND DEMOGRAPHIC CHARACTERISTICS

Statistics Canada listed 1,312 residents in the 2021 census. Twenty-four per cent of the population is under 19 (compared to 21 per cent of the Ontario population as a whole). Twenty percent is over 65 (compared to 17.6 of Ontario.) There is an increase of 3% of the population being over 65 from the 2016 census (17%).

Average household size is 2.6 (versus 2.9 for Ontario).

Median household income in 2020: \$78,000. (Ontario: \$81,000.) Broken down by individuals, 37 % earn \$29,999 or less per year, 32% earn \$30,000 to \$59,999 per year and 31% earn more than \$60,000 per year.

Majority of the residents speak English with German second and French third in ranking.

## 1.1.6 CHALLENGES:

The Corporation of the Township of Chisholm is a single tier Municipality that has always exercised prudent financial practices and attempted to control electricity and fuel consumption. Some of the challenges of this are:

- Funding
- Aging population and infrastructure
- Minimal assessment growth (0.8% to 2.8% per year over the last 5 years)
- Few commercial properties and industries
- Suppliers are limited cost of travelling is incorporated in rates
- The unpredictability of the fuel and hydro costs as they fluctuate and continue to increase, and it makes it difficult to find cost savings.

## 1.1.7 ENERGY USE IN FACILITIES

## **Process Improvement**

With the implementation of the BPS website and updating the energy use, the management team can better track efficiencies and identify problem areas. Building component assessment tracking sheets will help identify infrastructure condition and efficiencies.

# **Equipment Efficiency**

Ongoing maintenance and replacement of inefficient mechanical equipment, including existing systems and consider replacement with energy efficient equipment.

# **Baseline Energy Use**

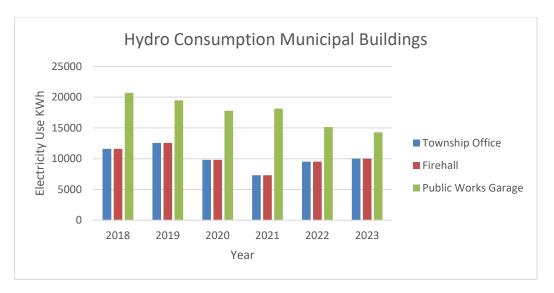
Our fuel consumption cannot be reduced without jeopardizing the health and safety of our workers or doing some major retrofits which this small municipality cannot afford.

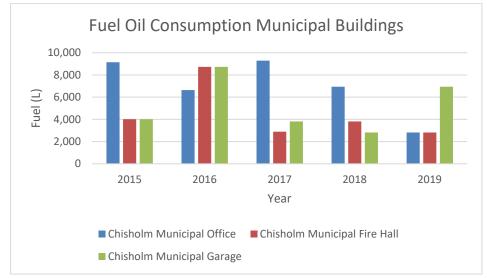
#### **Program Implementation**

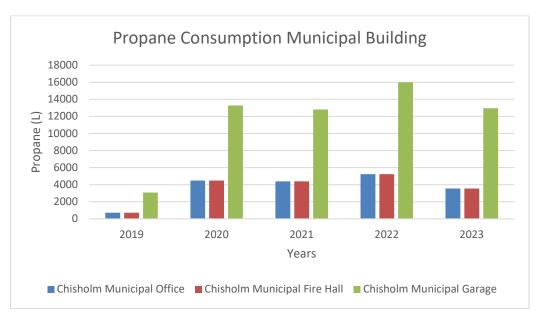
- Develop a communications plan to promote the municipality's successes and initiatives as it pertains to energy savings to the community and implement a preventative maintenance program on the website.
- Continue to update and maintain our Corporate Energy Management Plan
- Begin building component condition tracking.
- Develop and implement operating procedures throughout the facility encouraging turning down the heat when facilities not in use.
- Provide ongoing energy training for municipal staff.

#### **Projects**

• Review building components and recommend retrofits, or system upgrades.







# 1.1.8 FIVE YEAR PLAN

Prior to the Province of Ontario mandating energy conservation, the staff of the Township of Chisholm has always practiced with a limited measure of cost control. Minor upgrades to Energy efficient light bulbs, newer computer systems and other equipment have been purchased with the reduction of energy consumption in mind. Use of the Air conditioning unit has also been minimized and office lights are turned off when not needed.

#### **Levels of Success Achieved To Date**

- The Township Office has done upgrades to: Windows, replace boiler with on demand tank and has changed the fuel use oil to propane.
- The firehall has upgraded the lights to LED in most of the firehall. The fire hall also benefits from the upgraded boiler with on demand.
- The Township Garage replaced their heating system with a more efficient propane model. All lights have been upgraded to LED.

#### **Initiatives**

- Upgrade internal lighting in buildings with LED lighting.
- Staff awareness programs, posters, turn off lights, computers.
- Aging appliances be replaced with energy efficient products.
- New buildings be built with efficiencies.
- Inform the community and staff of energy consumption goals.
- Over the next five years the Township will continue with current practices in order to control energy consumption while investing into reserve funds to maintain and upgrade the existing infrastructure.

#### 1.1.9 CONSERVATION DEMAND MEASURES

Goals and Measures are the actions that are taken to save energy and to help achieve the goals and objectives of the municipality. The Township of Chisholm is committed to implementing organizational and behavioral measures that can produce energy savings and raise awareness on conservation and efficiencies.

GOALS and MEASURES	ACTIONS	PERFORMANCE MEASURES
Install occupancy sensors in storage cupboards and staff rooms and offices	As upgrades are needed change to sensory lights	Reduced cost Less staff monitoring
Set goals and objectives to consider efficiencies when replacing aging infrastructure	Investigate existing heating/cooling systems	Reduce cost and increase efficiencies
Continue to implement mechanical and building system upgrades	Continue to investigate savings through betterment or replacement	Reduce costs, extend life of system, find cost savings

Over the next five years the Township will continue to use best practices in order to control energy consumption while finding funding to assist with goals of achieving efficiencies. The staff and Council will work diligently to ensure they are fiscally responsible to their residents and are mindful of the health and wellbeing of their citizens.