



# ***Energy Management Summary CDM Plan 2025 Update***

# Goals of HHHS CDM Plan 2024 to 2029



- Reduce energy usage by 5% over the next 5 years through both behavioural and facility improvement initiatives:
  - Staging HVAC systems for time of use and occupancy – Trials Completed
- Optimize the Geo-thermal performance per site - Complete
- Repair & Optimize the 10kW Solar Panel output per site - Complete
- Re-invest any available surpluses directly back to point of care and service – Inflation increasing energy costs
- Key measures for improvement will be:
  1. Electrical average KWh per month per facility
  2. Fuel Oil #2 consumption in Liters per month
  3. Propane consumption in Liters per month

# Energy Consumption Summary 2019 to 2025



**Table 1 – HHHS Haliburton 5-Year Energy Summary**

Energy Type	10-year Average	2021	2022	2023	2024	2025	2025 % AVG
Electricity Kilowatt Hours (KWh)	1,210,950	1,302,779	1,167,182	1,172,170	1,095,452	1,367,375	113%
Fuel Oil #2 Liters (L)	88,161	93,188	126,308	92,450	89,731	100,841	114%
Propane Liters (L)	15,698	18,143	17,201	16,916	19,006	20,473	130%

**Table 2 – HHHS Minden 5-Year Energy Summary**

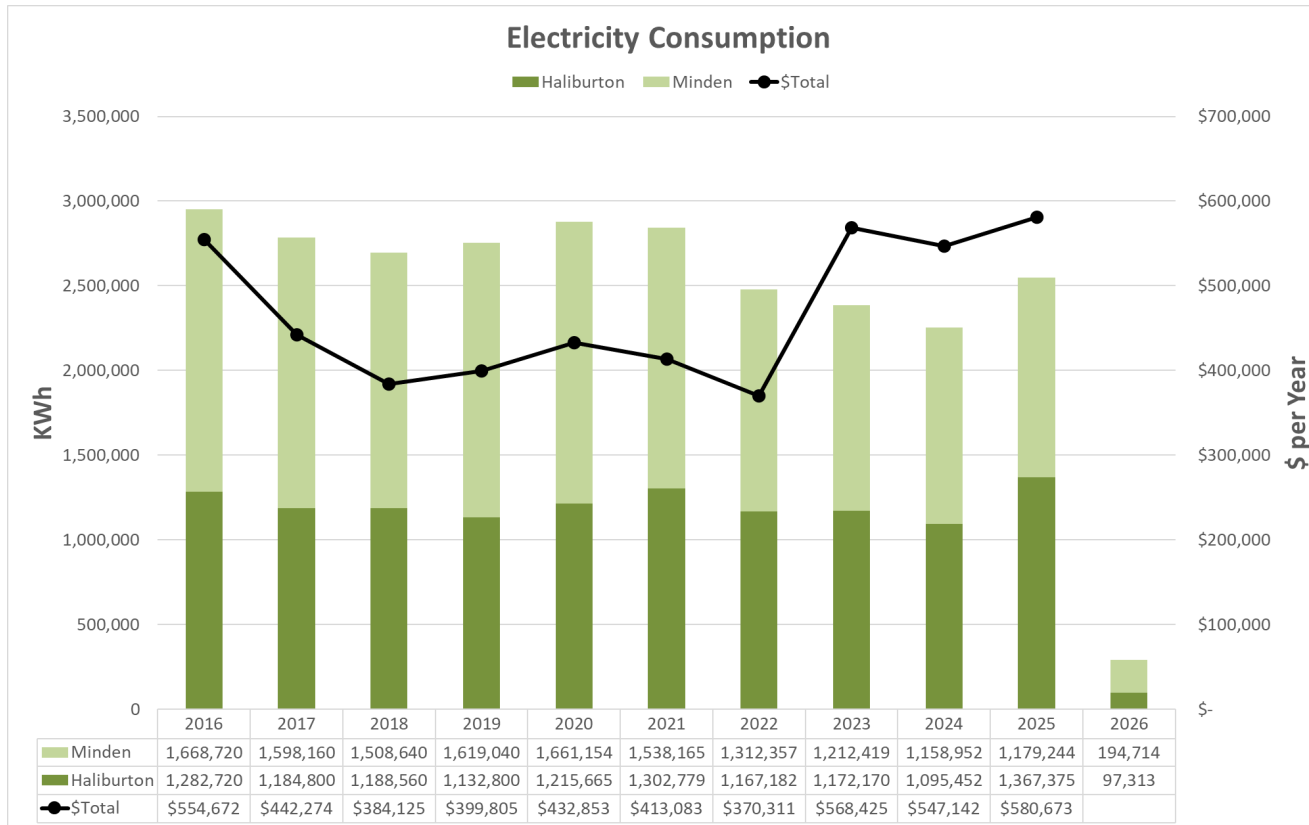
Energy Type	10-year Average	2021	2022	2023	2024	2025	2025 %AVG
Electricity Kilowatt Hours (KWh)	1,445,685	1,538,165	1,312,357	1,212,419	1,158,952	1,179,244	82%
Fuel Oil #2 Liters (L)	107,637	116,070	107,067	106,688	94,012	98,090	91%
Propane Liters (L)	14,482	18,715	16,602	14,386	15,261	16,842	116%

**Notes –**

- CT has increased electrical demand as well HVAC cooling requirements.
- Oil consumption is up due to increased Heating Degree Days in 2025-2026 heating season.
- Laundry is running 24 h, 7 days a week increasing propane consumption. This is driven by increased patient load.

- Minden electrical consumption is down driven by reduced demand.
- Fuel consumption is down due to geo-thermal running throughout the winter.

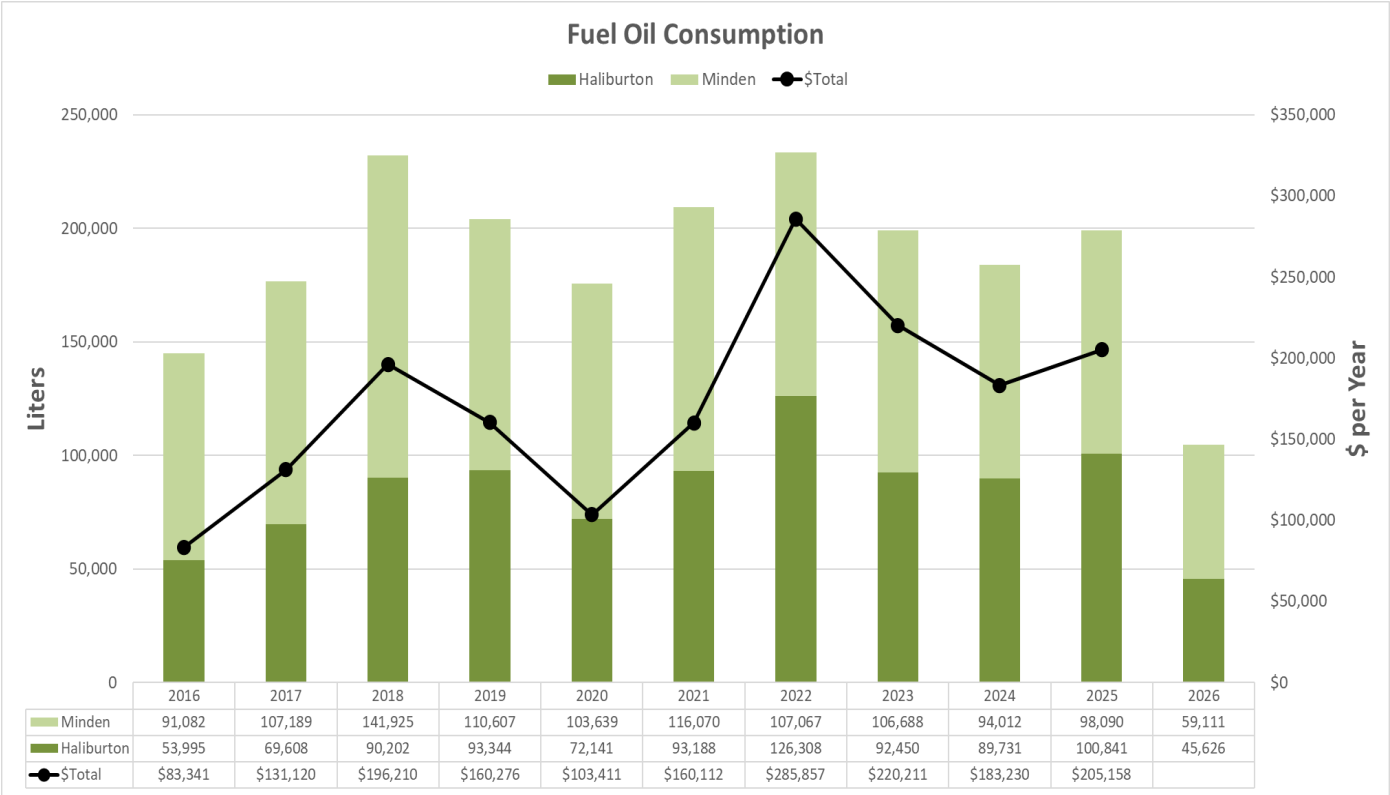
# Electrical Power Consumption



## Key Points –

1. Electrical consumption is trending down 14% for the 5-years since LED lighting conversion resulting in a 100,000 Kwhper year reduction in consumption since 2022.
2. CT Scanning has consumed the LED savings with a 10% increase over the LED savings.
3. Solar panels contributed:
  - a) 6,196 KWh (62%) in Minden
  - b) 7,296 KWh (73%) in Haliburton
  - c) Snow & ice damage resulted in 2-month of loss production in Minden. Repaired in May 2025.
4. Significant IESO increases and variation in Global Adj. Rates in 2025 as well a 1% increase in the base HOEP rate.

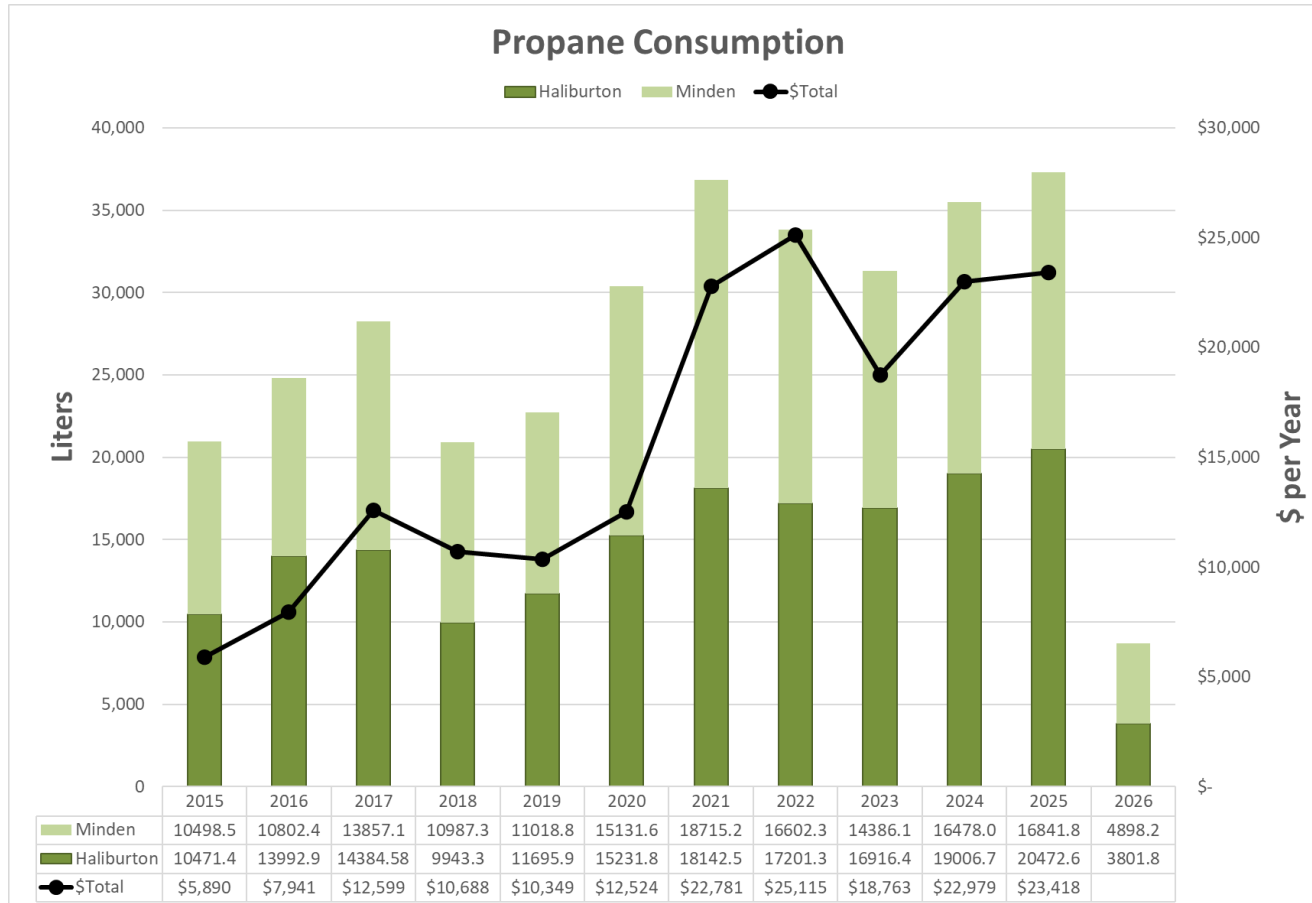
# Fuel Oil #2 Consumption



**Key Points –**

1. Total Fuel Oil consumption was up 2% in 2025 due to an increase in Heating Degree Days (HDD) of 2.5%.
2. Fuel Oil savings on the new boilers are estimated at 17,000 liters per year. This is dependent on HDD impacts.
3. Fuel Oil consumption and geo-thermal heating are most impacted the number of Heating Degree Days.
  - Heating Degree Days were up 2.5% in the heating season of 2025-26
  - Both geo-thermal systems ran 12-months of the year in 2025-26. However, Haliburton geo-thermal chillers were limited to 50% due to lake source limitations.

# Propane Consumption



## Key Points –

1. Propane is only used in Cooking and Laundry Dryers
2. Propane increases in Haliburton is driven by increase in patients. Haliburton Laundry runs 24 h, 7 days a week.

# Renewable Energy from 2019 to 2025



**Table 3 – HHHS Haliburton Renewable Energy Summary**

Energy Type	2008 Benchmark	2019	2020	2021	2022	2023	2024	2025
Solar Panels Kilowatt Hours (KWh)	0	9,285	4,455	8,941	0	0	5,018	7,296
Geothermal Fuel Oil #2 (L) reduction to benchmark year	208,133	114,789	135,992	114,945	81,825	115,683	118,402	107,292

**Table 4 – HHHS Minden Renewable Energy Summary**

Energy Type	2008 Benchmark	2019	2020	2021	2022	2023	2024	2025
Solar Panels Kilowatt Hours (KWh)	0	10,468	6,294	8,913	0	0	5,344	6,196
Geothermal Fuel Oil #2 (L) reduction to benchmark year	277,240	166,633	173,601	161,170	170,173	170,552	183,228	179,150

**Key Points:**

- Solar Panel Inverter fully operational all year.
- Snow & Ice damaged Minden Solar Array resulted in 2 months of no generation. All repairs were completed in May 2025.
- Loss 2 months of generation due to snow loads in January and December.
- Geo-thermal chillers ran the full winter.
  - Minden achieved consistent 10% fuel oil reduction in 2024 & 2025.
  - Haliburton did not achieve any reduction due to lack of lake heat exchange and running at 50% capacity.
  - Heating degree days were up only 2.5% in 2025-26 versus the 10-year average.

# CDM Energy Initiatives 2024 to 2029



## 1. Re-initiate Environmental Committee starting Q2 2024

- a) Become a member of The Canadian Coalition for Green Health Care.
- b) Increase awareness of the Green Hospital Score Card.
- c) Pursuit of smaller individual behavioural ideas,
  - i.e. turning computer monitors off, signage to turn lights off, closing windows during heat of the day, etc.

## 2. Building Automation Optimization targeting 5% KWh reduction

- a) Investigate extended “Free Cooling” conditions for the hospital and common areas. LTCH is restricted to 100% supply air limiting options.
- b) Investigate fans & pump shut down or slow down during night operation where practical.
- c) Investigate Energy Monitoring Module & Devices to monitor area consumption to identify opportunities (requires capital)
- d) Turning off re-heat coils in common areas, i.e. offices, meeting rooms, corridors & utility areas

## 3. EV Charging Stations for Revenue

- a) Capital intensive and requires Engineering & Hydro One analysis of loads, and infrastructure upgrades

## 2025-26 Update

## 1. Starting Environmental Committee in 2025

- a) Term of Reference approved
- b) Started Committee in September 2025.
- c) Completed Accreditation Canada Environmental pre-assessment survey.
- d) Committee to focus on landfill waste.
- e) Landfill waste and Recycling Tender completed in January-February 2026. Awarded to Waste Connections located in Bracebridge, Ontario.

## 2. Building Automation Optimization targeting 5% KWh reduction

- a) All air-handling units (AHUs) are running on static pressure feed back.
- b) Heat Recovery wheels are in full operation.
- c) Glycol pumps running a 90% setting on VFD to lower electrical consumption.
- d) Need to investigate:
  - Trial extending “Free Cooling” and occupancy scheduling of AHUs.
  - Trial occupancy scheduling of re-heat coils in service corridors and service offices. AHUs provide 16 to 17 deg-C air.

## 3. EV Charging Stations for Revenue –

- a) One EV Charging Station implemented in May 2025. – Completed
- b) Expansion would require Engineering & Hydro One analysis of loads, and infrastructure upgrades