# **Hawkesbury & District General Hospital**

# Conservation and Demand Management Plan



#### **DUE DATE:**

July 1, 2019



#### PREPARED BY:

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#### **EXECUTIVE SUMMARY**

This Energy Conservation and Demand Management Plan has been developed in response to Ontario Regulation 397/11 – Green Energy Act, 2009. Under the act, public agencies are required to prepare, publish, make available to the public and implement energy conservation and demand management plans or joint plans in accordance with sections 6 and 7 of the Act and with this Regulation. This is the five-year updated Energy Conservation and Demand Management (CDM) Plan for Hawkesbury & District General Hospital (HGH). The next submission is due before July 1, 2024.

The initial 2014 CDM Plan included four properties. HGH has expanded some their facilities and consolidated others as follows:

Building	Address	Modifications
Hospital	1111 Ghislain Street	Expanded facility
Admin/Clinic	352 Main Street West	Closed
Admin/Clinic	175 Main Street West	Closed
Admin/Clinic	444 McGill Street	Closed
Mental Health & Addictions	580 Spence Street	New Building
Administration	750 Laurier Street	New Rental Space

Table i - Changes to Building Portfolio

There are two properties included in this plan with the third being a rental space that is not included in the CDM Plan. The portfolio of buildings currently operated by HGH is as follows:

Building	Address	Building Area	Rent/Own
Hospital	1111 Ghislain Street	222,000 sq.ft.	Own
Mental Health & Addictions	580 Spence Street	30,000 sq.ft.	Own
Administration	750 Laurier Street	13,000 sq.ft.	Rent

Table ii – HGH Building Portfolio

The 2018 energy consumption is as follows:

Location	Natural Gas	Electricity
1111 Ghislain Street	995,498 M <sup>3</sup>	3,729,600 kWh
780 Spence Street	57,721 M <sup>3</sup>	307,680 kWh

Table ii - HGH Building Portfolio

#### SENIOR MANAGEMENT ENDORSEMENT

This conservation & Demand Management Plan has been reviewed by senior management and are in support of the program to save energy under the expansion project.

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#### 1 INTRODUCTION

This Energy Conservation and Demand Management Plan has been developed in response to Ontario Regulation 397/11 – Green Energy Act, 2009. Under the act, public agencies are required to prepare, publish, make available to the public and implement energy conservation and demand management plans or joint plans in accordance with sections 6 and 7 of the Act and with this Regulation.

This is the first five-year updated Energy Conservation and Demand Management (CDM) Plan for Hawkesbury & District General Hospital (HGH). The initial CDM Plan was issued in 2014.

# 1.1 Background

The initial 2014 CDM Plan included four properties. HGH has expanded some their facilities and consolidated others as follows:

Building	Address	Modifications
Hospital	1111 Ghislain Street	Expanded facility
Admin/Clinic	352 Main Street West	Closed
Admin/Clinic	175 Main Street West	Closed
Admin/Clinic	444 McGill Street	Closed
Mental Health	580 Spence Street	New Building
& Addictions		
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Table 1 – Changes to Building portfolio

There are two properties included in this plan with the third being a rental space that is not included in the CDM Plan. The portfolio of buildings currently operated by HGH is as follows:

Building	Address	Building Area	Rent/Own
Hospital	1111 Ghislain Street	222,000 sq.ft.	Own
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Table 2 – Hospital Portfolio

# 1.2 Hospital Building

HGH has been undergoing a major expansion and renovation. The building area id being expanded to 222,000 sq.ft. from the 118,000 sq.ft. reported in 2014. The building was designed with a high performance envelope and building systems to minimize energy consumption.

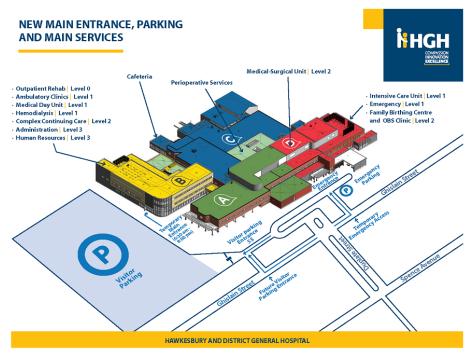


Figure 1 - Hospital Expansion Plan Rendering

The expanded facility's energy consumption in 2018 does not reflect the consumption expected from the completed facility. The project is expected to be completed in 2020 and a baseline year can be established for 2021.

# 1.3 Mental Health and Addictions Building

HGH expanded its building portfolio with a new Mental health and Addictions Regional Centre. The building was constructed in 2015-2016. The building was constructed with high performance HVAC & lighting systems and is controlled through a central building automation system. The building was commissioned by an independent third-party commissioning agent to ensure building systems are operating according the design specifications.



Figure 2 - Mental Health & Addictions Building

There are no plans to upgrade this building due to its age. The energy consumption being monitored to ensure building performance does not degrade over time.

### **2 ENERGY CONSUMPTION**

Location	Natural Gas	Electricity	Total Energy	Energy Use Intensity
1111 Ghislain Street	995,498 M <sup>3</sup>	3,729,600 kWh	14,077,802 kWh	63 kWh/ft <sup>2</sup>
780 Spence Street	57,721 M <sup>3</sup>	307,680 kWh	907,690 kWh	30 kWh/ft <sup>2</sup>

Table 2 - 2018 Energy Use

# 3 ENERGY CONSERVATION & DEMAND MANAGEMENT

Over the next five years, the hospital building will be completed, and an operational baseline can be established in 2021. The facility's building automation system and utility metering will be monitored to determine if the building's performance varies from the baseline. There no upgrades planned for this new facility upon completion.

580 Spence Street was completed in 2016 and is new condition. There are no plans to upgrade the building over the next five years.