



# **Conservation and Demand Management Plan 2019 - 2024**

### *Introduction:*

The Winchester District Memorial Hospital (WDMH) energy conservation and demand management (CDM) plan targets performance improvements in natural resource management for the main hospital site (WDMH), the Harvey S. Dillabough Building (HDB), as well as the Community Care Building (CCB). The CDM encompasses improvement strategies in energy consumption, systems and equipment upgrades, as well as environmental education while remaining consistent with WDMH's Commitment Statement and Strategic Objectives. WDMH will remain compliant with the new Electricity Act, O-Reg 507/18 and the Green Energy Act 2009, O-Reg 397/11.

### *Goals and Objectives:*

WDMH continually strives to improve the efficiency of energy consumption and reduce Greenhouse Gas emissions (GHG). The 2019 to 2024 Strategic Plan states WDMH "will demonstrate accountability in all relationships and ensure responsible stewardship of all resources". WDMH plans to leverage financial incentive programs like the Hospital Infrastructure Renewal Fund (HIRF) and Hospital Energy Efficiency Program (HEEP) to achieve equipment and efficiency upgrades. Some opportunities may require alternative funding programs and will be addressed on a case by case basis utilizing a cost and benefit analysis.

#### *1. Awareness*

WDMH will "practice environmental responsibility" through establishing the Environmental Sustainability Committee (ESC). The ESC will provide input and guidance on initiatives relating to waste stream management, construction and product consumption, energy conservation efforts, as well as education and research initiatives.

Further actions must be undertaken to provide education to everyone from Senior Management to Front Line Staff regarding the reduction of GHG and actions individuals can take while at work. This was identified in the 2014 CDM and remains a target for the 2019 CDM.

#### *2. Building Innovation*

Several infrastructure projects will be undertaken to improve the overall energy consumption of WDMH. Upgrades to Plant Engineering services that generate heating and cooling will have a direct impact to the consumption of electricity and natural gas. These projects will be long term due to the significant financial outlay for equipment and installation.

Smaller scale projects will be evaluated and implemented to reduce consumption. Technology such as Power Factor Correction (PFC) devices can control ramp up power demand on large energy consumption medical equipment. The implementation of Variable Frequency Drives (VFD) on fans will reduce energy consumption by regulating

motor speeds instead of the typical on/off motor. Lighting management systems and upgrades can provide reduction in energy consumption by reducing usage in off peak or low activity times.

### 3. Consumption

WDMH’s consumption of resources is measured for all three sites; WDMH, CCB, HDB. The data provided reflects total annual consumption of electricity and natural gas.

<b>FACILITY</b>	<b>ADDRESS</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>COMMODITY</b>
<b>WDMH</b>	566 Louise St	654919	734942	680067	Gas (m3)
<b>CCB</b>	530 Fred St	16433	14531	18230	Gas (m3)
<b>HDB</b>	550 Louise St	7108	6777	7160	Gas (m3)
<b>WDMH</b>	566 Louise St	3641330	3582707	3524038	Power (kWh)
<b>CCB</b>	530 Fred St	418312	409623	469261	Power (kWh)
<b>HDB</b>	550 Louise St	72432	81695	81719	Power (kWh)

Two initiatives will be undertaken to review total consumption of energy. Firstly, an updated energy audit will be scheduled to include all three sites (WDMH, CCB, HDB). Secondly, peer benchmarking will take place to compare efficiencies and look for best practices from other facilities in Ontario.

#### *Summary:*

WDMH remains committed to environmental sustainability and all associated regulations supporting reduction of GHG. Through continued focus on strategic priorities and in alignment with our commitment, WDMH will reduce the carbon footprint of all three facilities by applying the “ABC’s” (Awareness, Building Innovation, & Consumption) of the plan. Continual engagement with improvement programs such as HIRF and HEEP, along with focus support with the Environmental Sustainability Committee will provide positive measurable outcomes.