



HURON PERTH HEALTHCARE ALLIANCE STRATFORD GENERAL HOSPITAL

COMPLETION DATE

JUNE 2021

HIGHLIGHTS

Annual Electricity Reduction =
411,300 kWh/yr

Annual Natural Gas Reduction =
0 m3/yr

Annual Energy Reduction =
411,300 ekWh/yr

Annual GHG Reduction =
16.452 tons/yr

EQUIVALENCY RESULTS

CO₂ Emissions From

5.03
Passenger Vehicles

3.85
Homes' Energy Use for One Year

11
Homes' Electricity for One Year

CHILLER PLANT UPGRADES

Stratford General Hospital (SGH) has upgraded the central water-cooled chiller and associated cooling tower. The chilled water and condenser pumps were also replaced with variable speed pumping. The chilled water distribution system was revised from a primary-secondary pumping approach to a primary-variable pumping system. This makes sure that the water-cooled chiller sees the warmest return water temperature and improves the temperature difference between supply and return chilled water. This change also reduces the quantity of pumps in the system to improve how pumping energy is applied in the cooling plant.

ENERGY & CARBON SAVINGS

The new 600 ton water-cooled chiller includes a variable-speed centrifugal compressor for excellent load matching whenever the water-cooled system is available. Pump operation is improved by revising the chilled water system to be primary-variable. The overall chiller plant is fully optimized and a new sequence of automation allows all system components to operate to allow the system to achieve its best system efficiency. A significant amount of energy and carbon is reduced for SGH because of this project.