



HURON PERTH HEALTHCARE ALLIANCE STRATFORD GENERAL HOSPITAL

CONSTRUCTION YEAR

2022-2023

HIGHLIGHTS

Variable frequency drives (VFD's) were provided on the AHU supply and exhaust fan with airflow sensors for better airflow control to match design requirements. VFD's were also provided on the heating system pumps to modulate flow based on the varying heating loads year-round.

Annual Natural Gas Reduction =
10,000 m³/yr

Annual Energy Reduction =
101,000 ekWh/yr

Annual GHG Reduction =
19 tons/yr

EQUIVALENCY RESULTS

CO₂ Emissions From

5.8
Passenger Vehicles

4.4
Homes' Energy Use for One Year

12.7
Homes' Electricity for One Year

WEST BUILDING LAUNDRY RENOVATION

Huron Perth Healthcare Alliance (HPHA) – Stratford General Hospital undertook a transformative project in the basement of the West building, renovating an area to establish a modernized laundry facility. The initiative encompassed the integration of a new air handling unit, designed to efficiently cater to both the newly established laundry room and the cafeteria. The system was meticulously engineered to offer precise reheat temperature control, ensuring optimal operational conditions. This endeavor aimed to enhance hospital infrastructure, promoting streamlined laundry services while concurrently bolstering environmental comfort within the cafeteria, symbolizing a commitment to progressive facility improvements meeting diverse operational needs.

ENERGY & CARBON SAVINGS

The HPHA - Stratford General Hospital's project introduced eco-friendly innovations focusing on energy conservation and carbon reduction. Implementing a 4500cfm air handling unit with an energy recovery wheel marked a significant stride towards efficient air handling. Coupled with a steam to water heat exchanger and terminal reheat coils, the system ensured enhanced zone temperature control while minimizing energy consumption. Integration of new building control system bolstered operational precision, optimizing resource usage. These features collectively spearheaded sustainable practices within the laundry facility, fostering substantial energy savings and a notable reduction in the hospital's carbon footprint, aligning with a commitment to environmentally conscious healthcare infrastructure.

GLOSSARY OF TERMS

VFD

Variable frequency drives

ERV

Energy Recovery Ventilator

AHU

Air Handling Unit

DDC

Direct Digital Controls

BAS

Building Automation System

M3/yr

Cubic meters of natural gas per year

ekWh/yr

Equivalent kilowatt hours per year

tons/yr

One metric ton of carbon dioxide per year

GHG

Greenhouse Gases