

ST VINCENT HOSPITAL

Ottawa, Ontario, Canada



BENEFITS

- ▶ 30% reduction in boiler natural gas consumption
- ▶ Recovery and reuse of up to 90% of flue gas exhaust heat
- ▶ Economical in-house electrical power generation
- ▶ Significant reductions in greenhouse gases and other emissions

FLU-ACE® Boiler & Cogen Heat Recovery

Thermal Energy designed and implemented an integrated FLU-ACE® heat recovery system with cogeneration unit for efficient electrical power generation and overall reduction in energy consumption.

The installation is comprised of a natural gas fueled engine with a 425 kW generator, waste heat boiler, and FLU-ACE® waste heat recovery system processing combined flue gas streams from existing steam boilers and the cogeneration unit. The system was designed to recover 6.0 MMBtu/h of waste heat to be utilized for fresh air heating, dehumidification and boiler make up preheating of the "B-Wing" part of the facility. The system provides 95% of the hospital's heating requirement during the summer months replacing the existing summer boiler operation.

"The FLU-ACE® heat recovery and pollution control system has been very reliable with a minimum of maintenance," said Paul Fortier, Chief Operating Engineer at St. Vincent Hospital. *"In the last five years, the electrical rates stabilized while the gas rates have been increasing every year making the installation of such a system even more interesting. If reducing energy consumption while also contributing to the limitation of harmful environmental emissions is part of your mandate, then the installation of a FLU-ACE® system should be considered."*



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An Innovative Technology Company Providing
Custom Energy and Emission Reduction Solutions

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