



York University Energy Initiative 2006 - 2011

Objectives

1. Reduce annual energy consumption
2. Comprehensive energy conservation and building renewal audit
3. Develop long term building operations and management strategy
4. Avoid significant equipment replacement costs
5. Steam and chilled water and Cogen central plant optimization
6. Address current ASHRAE 90.1 standards of comfort and air quality (IAQ)
7. Lighting retrofit and redesign
8. Equipment replacement and building renewal
9. Provide building operator training
10. Identify and implement training requirements for facility managers and operating staff
11. Implement utility submeters to ensure energy program performance tracking
12. HVAC major modification

Project

Energy Performance Contract: 7+ Million sq. ft.

Anticipated Project cost: \$39,546,000.00

Annual projected energy savings: \$5,329,000.00

Demonstrated energy savings:

Project initiated: 2006

Implementation program

- Staff/Student workshops for energy and new technology awareness
- Variable Air Volume (VAV) conversion
- Comprehensive energy and operations audit
- Central steam plant controls upgrade
- Lighting retrofit for efficiency and design improvement
- Expansion of energy management control systems for ease of systems control and monitoring
- Satellite cooling plant extensions and conversions to avoid additional equipment costs
- Systems recommissioning for operations and maintenance upgrading
- Sustained systems monitoring for guaranteed energy savings
- Operator training for energy and new technology awareness
- Constant volume to VAV conversions
- Campus electrical service upgrades and electrical submetering
- Building operations manuals for comprehensive systems documentation
- New steam and condensate campus distribution piping
- VIV to VSD conversion
- Occupancy sensors on A/C units
- Optimization of existing domestic hot water systems