## OISE Building Energy Reduction Project — Occupancy Sensor Driven HVAC Control System

### Project Stats at a Glance

| Building HVAC Usage Before (2012/13 Base Year) | 61,046 GJ |
| Building HVAC Usage After (34% Reduction) | 40,501 GJ |

## Current and Cutting-Edge Technology Employed

- **Customized Occupancy Sensors** (provides real-time occupancy levels)
- **New BAS** (Building Automation System)
- **VSDs** (Variable Speed Drives)
- **Wireless Room Level Thermostatic Control System**

## Project Details

- **$520K** Project Annual Savings to OISE
  - Verified by M&V program and sub-meters
- **1.6 Years** Simple Project Payback
- **$780K** Total Project Cost
  - 35% incentives received from Toronto Hydro & Enbridge represents 35% percent of total project cost ($420K)
  - Net Project Cost: $780K

## Energy and Environmental Impact

- **20,545 GJ** Total Building Annual Energy Saved per Year
  - Compared to the base year based on metered data
- **920 tonnes eCO2** Total GHG Avoidance for this Project
  - Based on annual electricity and thermal energy saved

CO₂ emissions from the annual electricity use of 127 average household