

Paul Smiths College Residence Hall

Paul Smiths, NY, Franklin County

Background

Paul Smiths College has completed the construction of a 35,000 square foot state of the art student housing facility featuring 23 four bedroom residences, multipurpose rooms, and laundry facilities. The college is seeking a LEED Certification of Silver.

Novus Engineering, PC was retained by NYSERDA to evaluate electric energy efficiency opportunities for the new building under the New York Energy Smart New Construction Program (NCP).

Recommendations

BBL Construction, having brought numerous applicants into NCP, brought this project into the program. Novus provided a whole building model evaluating energy efficient measures and their integrated effects on the building energy use.

Among the energy efficiency improvements implemented in the building were:

- High Performance building envelope including wall and roof insulation
- Enhanced glazing
- High efficiency (HE) interior and exterior lighting with controls
- Heat recovery ventilation
- HE domestic hot water boiler and low-flow faucet and shower fixtures
- HE HVAC system including a geothermal system with HE heat pumps and variable frequency drives on the pumping systems.

Incentives and Results

NYSERDA's incentive of \$77,171 helped the Paul Smiths College defray a portion of the implementation cost to install the efficiency improvements and LEED Certification. In total, the college's investment could result in:

- Annual Energy savings of more than 87,272 kWh
- Peak demand savings of 44.3 kW annually
- Annual Fossil fuel savings of 489 MMBtu
- Annual Energy Cost savings for electrical and fossil fuel of almost \$15,034
- Simple payback (after incentive) of 1.7 years for project

The **Paul Smiths College Residence** is 36% above the **ASHRAE 90.1 2007 Energy Code**.



“We had such great success working with NYSERDA and SAIC on our Research Center we have partnered again. This time on this significantly larger student housing project.”

-Steven McFarland