

Foster-Glocester Regional School District Ponaganset High School and Middle School Energy Savings Performance Contract (ESPC)



The Ponaganset High School and Ponaganset Middle School serve the students of the towns of Foster and Glocester, Rhode Island.

The new high school and middle school consist of north and south buildings totaling 371,000 square feet. The facilities include classrooms, science laboratories, band and chorus rooms, libraries, gymnasiums and associated locker and shower rooms, cafeterias, auditoriums, specialty multi-purpose rooms, and administrative areas that provide a variety of functions including offices, nurses areas, and counseling areas.

The overall district challenge was to reduce its energy usage, save money, and institute a reliable renewable energy initiative.



PROJECT DATA

LOCATION

Glocester and Foster, RI

CONSTRUCTION DATES

March 2007 to April 2010

CAPITAL COSTS

\$12,200,000

ANNUAL SAVINGS

Energy Savings: \$760,857

ENVIRONMENTAL BENEFITS

3,621.59 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 24.3 acres of forest from deforestation* or
- Conserving 6,932 barrels of oil*

*Sources:

- Leonardo Academy's Cleaner & GreenerSM Emissions Reduction Calculator: <http://www.cleanerandgreener.org/resources/pollutioncalculator.html>
- U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

RWE Clean Energy implemented, or advised in the implementation of, approximately \$13,000,000 in equipment and infrastructure upgrades that will result in estimated energy, operating, and maintenance savings of over \$900,000 per year through an energy savings performance contract (ESPC).

RWE Clean Energy will guarantee annual savings over the 13 year ESPC term. Tax-exempt financing was arranged.

Further, RWE Clean Energy assisted the Foster-Glocester Regional School District in obtaining nearly \$400,000 in estimated utility rebates.

The project was unique in that it included the technical, design, and funding support for the construction of a new school building as well as upgrades to existing buildings.

“We could not have chosen a better partner. The team from RWE (RWE Clean Energy) has been able to educate and guide us from the selection of ECMs through their implementation. RWE (RWE Clean Energy) was able to unravel the ESPC process for us and they have exceeded our expectations.”

Bill Abt, CPE, LEED AP
Vice Chairman, Building Committee
Foster-Glocester Regional School District

RWE Clean Energy
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PROJECT DATA

ENERGY CONSERVATION MEASURES/IMPROVEMENTS (ECMs)

Renewable Energy

- Installed two biomass-fueled boilers totalling over 10 million Btus/hour. An automatic auger woodchip delivery and storage system was also constructed.

Lighting Control Enhancements

- Installed high efficiency lamps and ballasts, luminaires, lighting control system network and standalone lighting controls.

HVAC Equipment and Controls

- Energy recovery ventilation (ERV) system proposed in all classrooms for optimal ventilation

Electrical Enhancements

- All electrical power distribution components were evaluated and installed with equipment of the highest level of efficiency.

Water Efficiency

- Installation of low-flow toilets, sinks, showers and urinals.
- Installation of automatic shutoff valves for most fixtures.

Other

- Participation in, and support of, district-wide energy education programs.