

Haldane Central School District

Energy Savings Performance Contract (ESPC)



The overall challenge for the Haldane Central School District was to reduce its energy usage, save money, and institute a reliable renewable energy initiative while remaining good stewards of the available budget for the taxpayers. Haldane wished to reduce energy consumption and its impact on the environment while improving the learning and working conditions for both students and teachers. Having an annual energy budget of almost \$270,000, Haldane's portfolio of five facilities, some dating back to 1936, included one elementary/middle school, a high school, an educational annex and modular classrooms. In addition to the four K-12 facilities, improvements were needed in the district's administrative and transportation offices. The district's building area totaled over 131,338 square feet.

To meet the challenge, the district's board of education decided on an Energy Savings Performance Contract (ESPC) in 2010. In May 2010, RWE Clean Energy conducted initial energy audits which focused on sources of energy consumption and preliminary savings calculations. After the initial energy inspections, RWE Clean Energy conducted a comprehensive engineering and economic analysis to determine life cycle costs, guaranteed savings calculation, environmental benefits, and metering and verification of equipment operations.



PROJECT DATA

LOCATION

Cold Spring, NY

CONSTRUCTION DATES

Completed on time

CAPITAL COSTS

\$2,073,000

ANNUAL SAVINGS

\$118,516

ENVIRONMENTAL BENEFITS

607 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 4.1 acres of forest from deforestation* or
- Conserving 1,165 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>

In 2012, RWE Clean Energy helped the district implement a wide variety of energy savings projects. These projects included: basic lighting and building envelope infrastructure upgrades, heating upgrades including new boilers, replacement of failed steam traps, ventilation/air conditioning upgrades, and building control improvements. The projects installed by RWE Clean Energy resulted in energy, operating and maintenance savings of more than \$118,00 annually, all guaranteed through an ESPC, enabling Haldane in achieving all of its goals.

“I highly recommend RWE Clean Energy. They managed multiple buildings in the district as well as multiple contractors skillfully and professionally. The communication between RWE Clean Energy and me was fantastic. Anytime I had a question, I was answered almost instantaneously. The district has saved a substantial amount of money and they were also valuable in closing out the project to the satisfaction of Haldane Central School District.”

Michael C. Twardy
Director of Facilities, Operation, Maintenance,
and Transportation
Haldane Central School District



PROJECT DATA

ENERGY CONSERVATION MEASURES

- Lighting systems & lighting controls
- Energy management system
- Boiler systems and ventilation controls
- Heating, ventilation and air conditioning upgrades
- Steam traps
- Water conservation/efficiency
- Domestic water heating
- Pumping systems
- Building envelope