RWE

Peekskill City School District

Energy Savings Performance Contract (ESPC)



After determining that major components of their facilities had exceeded their useful life, Peekskill City School District (School District) administrators established the twin goals of revitalizing the School District's facilities and making the School District as energy-efficient as possible.

The capital budget for the School District was extremely tight, as with most other school districts, so a contracting method that preserves their capital budget while not requiring a bond referedum, or lengthy budgetary approvals was highly desirable. The process chosen by the School District was the issuance of a Request for Proposal (RFP) for a comprehensive Energy Savings Performance Contract (ESPC).

RWE Clean Energy's reponse to the School District RFP successfully addressed the projects which had been identified as "scope and priority items." RWE Clean Energy then verified its proposed implementation of energy effiency projects through a Comprehensive Energy Audits (CEA) which was ultimately submitted to the School District. RWE Clean Energy was awarded the energy savings performance contract.



LOCATION

Peekskill, NY

SIZE

8 Sites

542,093 total square feet

CONSTRUCTION DATES

September 2016 to October 2017

CAPITAL COSTS

\$4,765,830

ANNUAL SAVINGS

\$265,563 in energy and O&M savings

ENVIRONMENTAL BENEFITS

310 tons of harmful greenhouse gas emissions reduced annually

*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 worked closely with the School District's facility management and third-party engineering and architectural firms to develop the most comprehensive solution that offered the greatest cost benefit to the entire School District.

The RWE Clean Energy team visited each of the School's District's sites, met with facilities management and staff to discuss areas of concerns, and reviewed available plans and drawings to verify existing conditions. RWE Clean Energy then developed constructability plans for the proposed improvements while maintaining the required financing term of 15 years. The simple payback period was determined to be less than 18 years.

The School District's all-inclusive ESPC project encompasses more than 542,000 square feet across eight properties:

Middle School

• Woodside Elementary School

• Hillcrest School

Administration Center

•Oakside School

• Peekskill High School

Urigh Hill School

Maintenance Building

Ultimately, RWE Clean Energy developed a comprehensive energy conservation program that enabled the School District to achieve more than \$265,000 in annual energy savings while obtaining nearly \$4.8M in facility upgrades without the use of capital funds. This was very beneficial to the School District because facility upgrades such as insulating roofs, replacing windows and doors, and replacing boilers are usually very capital-intensive.

Additionally, the School District eliminated 310 tons of GHG emissions annually.

PROJECT HIGHLIGHTS		ENERGY CONSERVATION MEASURES (ECMs) BY SCHOOL DISTRICT SITE							
ECM Number	Energy Conservations Measure	(New) Middle School Ookside School Urigh Hill School Administration Center Moodside National Reports Administration Center Mointenance Building							
1	Replace Exterior Lighting	Х	Х	Х	X	Х	X	Х	X
2	Switch Heating to Natural Gas		Х	Х	Х	Х	Х		
3	Replace Steam Boiler						Х		
4	Add Condensing Boiler		Х	Х	Χ	Х	Х		
5	Replace Windows and Doors		Х			Х	Х	Х	
6	Convert Heating from Electric to Gas					Х			
7	Add Gas Fired Rooftop Unit for Gym/Cafeteria				Х				
8	Insulate Roof and Provide New Coating			Х		Х			
9	Provide Variable Frequency Drives for Gym Air Handling Units	Х							Х
10	Asbestos Abatement		Х		Х	X	Х	Х	