

# Dual Fuel Boilers, Energy Efficient Lighting, Controls and Building Envelope Improvements

## Reduce Energy Consumption And Utility Cost



**North Syracuse Central School District** buildings are located at 5520 East Taft Road in North Syracuse, New York. It is a seventeen facility school district totaling 1,117,000 square feet. The facilities are used for the education of the local school age population from pre-kindergarten through grade twelve. The New York State Energy Research and Development Authority co-funded a comprehensive energy audit conducted by Optimized Energy Services, Inc. to help reduce building operational costs and save energy.

### Project Objectives

The objective of the comprehensive energy audit was to identify energy efficient alternatives to existing lighting, building heating, building domestic hot water production, making improvements to the existing building envelope and analyzing the existing building HVAC controls throughout the facility. Through NYSERDA's Technical Assistance program, the school district received a matching grant to have an engineering study completed for the evaluation of energy efficiency opportunities.

### Measures Recommended

NYSERDA's study concluded that through seventeen recommended energy conservation measures that included: energy efficient lighting, lighting controls, computer monitor controls, energy efficient motors, weatherization improvements, window film, walk-in cooler controls, variable frequency drives, pipe insulation, domestic hot water modifications, dual fuel burners and boilers, boiler controllers, window replacement, air handling unit replacement, air conditioning system improvements, conversion to hydronic and energy management system improvements to the facility that could reduce electrical consumption by 30% and reduce facility utility costs by over 28%.

- Cost of Recommended Measures - \$1,165,000
- Energy Savings - \$169,000
- Simple Payback Years - 9.5 years

### About the Technical Services Program

NYSERDA's Technical Assistance programs identify opportunities for New York businesses to increase competitiveness by using energy more efficiently and improving productivity. This project was funded under NYSERDA's New York Energy Smart program, which helps utility customers take advantage of opportunities to save energy that are emerging as a result of the newly deregulated, competitive utility industry. For more information about this and other NYSERDA programs, call Ms. Jaime Ritchey, Program Manager. Phone: (518) 862-1090 x3517 or visit our website at [www.nyserda.org](http://www.nyserda.org)