

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

## Reduce Energy Consumption And Utility Cost



**Hendrick Hudson Central School District** buildings are located at 61 Trolley Lane in Montrose, New York is a seven facility school district totaling 603,000 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 twelve recommended energy conservation measures that included: energy efficient lighting, lighting controls, energy efficient motors, variable frequency drives, pipe insulation, domestic hot water modifications, dual fuel burners and boilers, boiler controllers, window replacement, air handling unit replacement, steam heating system conversion to hydronic and gas fired kitchen equipment improvements to the facility that could reduce electrical consumption by 30% and reduce facility utility costs by over 28%.

- Cost of Recommended Measures - \$778,829
- Energy Savings - \$85,905
- Simple Payback Years - 8.5 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 Mr. Gregory Lampman, Program Manager. Phone: (518) 862-1090 x3372 [ggl@nyserdera.org](mailto:ggl@nyserdera.org), or visit our website at [www.nyserdera.org](http://www.nyserdera.org)