

East Greenbush Central School District



“The Energy Smart Schools Program serves an important function in assisting school districts across New York State in their efforts to become more energy efficient. It not only provides incentives and assistance to school districts as they implement energy efficiency measures, but also serves as an educational tool to inform educators, school personnel, administrators, and students about the benefits of energy conservation and energy efficiency.”

*-Peter Smith
President, NYSERDA*



East Greenbush Central School District

East Greenbush, Rensselaer County

Background

The East Greenbush Central School District (EGCSD) encompasses approximately 78 square miles in New York’s Capital Region. As of 2004, about 5,000 students were enrolled in its seven schools. In addition, Adult Continuing Education and Community Education programs attract over 2,000 residents to District facilities annually. EGCSD employs 600 people on a full- and part-time basis.

The total square footage of the seven schools and the District’s bus garage is about 754,000 square feet. EGCSD buildings are varied in their design and age but are predominately one-story structures. The District spends \$816,000 for electricity and \$290,000 for boiler fuel annually.

EGCSD retrofitted the majority of its facilities with energy-efficient equipment, but sought to identify further no-cost and low-cost electricity saving measures. District officials contacted the New York State Energy Research and Development Authority (NYSERDA) and took part in the **New York Energy SmartSM** FlexTech Program.

Recommendations

EME Group, a pre-qualified FlexTech contractor, identified six district-wide low-cost, no-cost energy conservation measures that could save EGCSD an anticipated \$47,000 annually. Many of the recommendations are for periods when instructional staff and students do not occupy the buildings. The simple payback for installation of the recommendations is under one year.

Energy-saving measures quantified and recommended, along with anticipated annual savings included:

- Turning off lights in classrooms when students are not present. Cost/benefit of occupancy sensors to accomplish this task was also reviewed - a \$4,500 savings
- Setting computers to “sleep” mode when not in use - a \$1,500 savings
- Reducing the use of air conditioning when buildings are unoccupied - a \$500 savings
- Minimizing building set-point temperatures during unoccupied times - a savings of \$19,000
- Reducing the use of exhaust fans during unoccupied hours - a savings of \$2,800
- Reducing hot water boiler temperatures - a savings of \$3,300

In addition, the report provided more energy-saving measures that had a capital cost associated to them. These included replacing lighting and exit lighting fixtures with energy-efficient alternatives, replacing window air conditioning units with premium efficiency units, and boiler efficiency measures.

Results

The FlexTech study provided EGCSD a report that helped it reduce operating expenses through decreased energy consumption. Total cost of the study was \$20,500 and NYSERDA provided \$10,250. The customized report detailed how to save approximately \$50,000 in annual energy costs.