



BOONE Community School District

A computerized energy management system and other energy improvements are saving the Boone Community School District more than \$6,000 per month on its utility bills.

According to Bill Antons, the district's Buildings and Grounds Manager, reducing energy costs was possible through the financial assistance of the Energy Bank Program. "The improvements could not have been made if it wasn't for the Energy Bank Program," he said.

Maximizing Savings

Improvements were made in Boone's junior-senior high school and six elementary schools. First, an engineering analysis, performed by an engineering firm pre-qualified by the Energy Bank Program, provided the district with strategies for maximizing savings in each building. Then a second engineering firm handled specifications and bids.

Energy Management Improvements

Improvements included:

- Replacing all incandescent lighting with fluorescent, high pressure sodium or metal halide
- Changing from four-tube to two-tube fluorescent fixtures with energy-saving ballasts
- Insulating steam piping in tunnels
- Replacing the pool circulating pump motor with a more efficient model
- Installing a smaller boiler to run at non-peak times
- Using programmable thermostats in the bus barn and storage building and
- Installing a new set of entry doors.

Numbers Tell the Story

The energy management system allows the district to not only control but also monitor its use of energy. The numbers tell the story of energy savings in the junior-senior high: December, \$2,295 saved; January, \$2,240 saved; February, \$4,333 saved.

Addressing Opportunities

"Many of these improvements were proposed in years prior, but we weren't able to finance them," said Antons. "Because of the deferred payment schedule, set by the cost savings of these improvements, we were able to address these opportunities more quickly than regular budget practices would have allowed."



This is one in a series of case studies on successful energy management projects in Iowa's public facilities. For more information, contact the Iowa Energy Bank Program, Wallace Building, Des Moines, IA 50319; (515) 281-8681.